

ACUITAS

The Journal of Management Research

Volume V

Issue-II

July 2014–December 2014

Patron:

H.E. Hon'ble Shri R.S. Gavai

Governor Kerala and Chairman, P.P. Dr. BabasahebAmbedkarSmarakSamiti, DeekshaBhoomi, Nagpur

Shri. S.J. Fulzele

Secretary, P.P. Dr. BabasahebAmbedkarSmarakSamiti, DeekshaBhoomi, Nagpur

Advisory Board:

Dr. Vilas Chopde, Vice-Principal, Dr. Ambedkar College, Nagpur

Capt. C.M. Chitale, Dean, Faculty of management, SavitribaiPhule Pune University

Dr. BabanraoTaywade, Dean, Faculty of Commerce, RTM Nagpur, University, Nagpur

Editorial Board:

Dr. SudhirFulzele, Director, Dr. BabasahebAmbedkar Institute of Management Studies and Research, Nagpur

Dr. S.G. Metre, Professor, Dr. BabasahebAmbedkar Institute of Management Studies and Research, Nagpur

Dr. Charles Vincent, Professor, Centrum Catolica, Pontificia Universidad Catalica de Peru, South Africa

Dr. S.S. Kaptan, Head of the Department and Research Centre, SavitribaiPhule Pune University

Dr. V.S. Deshpande, Professor, Department of Business Management, RTM Nagpur University,

Dr. D.Y. Chacharkar, Reader, SGB Amravati University

Dr. S.B. Sadar, Head of the Department, Department of Business Management, SGB Amravati University

Dr. J.K. Nandi, Associate Dean, IBS, Nagpur

Dr. Anil Pathak, Assistant Professor, MDI, Gurgaon

Mr. Sangeet Gupta, Managing Director, Synapse World Wide, Canberra, Australia

Ms. Sanchita Kumar, GM-HRD, Diffusion Engineering Ltd.

Editorial Committee:

Dr. Nirzar Kulkarni	Executive Editor
Dr. RuhiBakhare	Co-Editor
Dr. VivekPimplapure	Co-Editor
Prof. Sachin Panchabhai	Member
Prof. PallawiSangode	Member
Prof. SushantWaghmare	Member
Prof. PallaviBadre	Member

ACUITAS-The Journal of Management Research is published twice a year in January and June.

©March 2010. All Rights Reserved

DISCALIMER: Acuitas shall not be liable for the present opinion, inadequacy of the information, any mistakes or inaccuracies. The views and opinions presented in the research paper/articles published in Acuitas are solely attributable to the authors of the respective contributions, if these are contradictory to any particular person or entity. No part of this publication may be reproduced or copied in any form by any means without prior written permission. DAIMSR holds the copyright to all articles contributed to its publications. In case of reprinted articles, DAIMSR holds the copyright for the selection, sequence, introduction material, summaries and other value additions. All efforts are made to ensure that the published information is correct. DAIMSR is not responsible for any errors caused due to oversight or otherwise.

From the EDITOR IN CHIEF's Desk.....

“You don't write because you want to say something; you write because you have got something to say”, ruminating on these words I am proud to present to you the second issue of the fifth volume of our Bi-Annual management journal ACUITAS. Our objective is to provide platform to all those authors who would like to share their research work on varied aspects of management.

I duly acknowledge the support, proper assistance, motivation received from our patrons, advisory board and editorial board. I also duly acknowledge all the contributors of research papers included in the journal.

Our motive is to publish the most excellent research papers in management and we wish to provide 'ACUITAS' as a vehicle for the same. Your suggestions for further improvement of our journal are always welcome. We strive for increased accountability and all concerns and suggestions can always be directed to me.

Looking forward for a long term association with you all!

Thank you.

Warm Regards,

Dr. Sudhir Fulzele

Director, DAIMSR

FOCUS

It gives me immense pleasure to articulate that our journal-ACUITAS is well adorned by the internationally acclaimed academicians, industrialists, researchers, scientists and academic administrators as members of the Editorial advisory board.

We present the second issue of the fifth volume of our bi-annual management journal 'ACUITAS' with great joy. This issue consists of four papers and one case study. The papers are from the fields of Financial Management, Marketing Management and a case study from Operations Management.

The first paper is authored by, '**Dr. Prabhakar N. Ladhe and Prof. Abhinav D. Jog**' titled '**Comparative Analysis of Car Loan Products of Leading Commercial Banks**' a succinct study that identifies how State Bank of India (SBI) can evolve appropriate strategies to enhance its market share in the highly competitive market.

Our second paper has been authored by, '**Dr.B.Angamuthu, PhD**' titled '**Passenger Car Market: It's Growth and Owners' Perception**' which analyzes the growth of passenger car market according to its production and sales of domestic and export market and studies the owners' perceptions.

The third paper authored by '**Prof. Namratha Sharma**' is titled '**PradhanMantri Jan-DhanYojana**'; an in-depth analysis of the PMJDY policy and its impact since inception.

Our fourth paper is authored by '**Dr. P. Paramshivaiah**' and is titled '**Women Entrepreneurs: Problems and Prospects: A Study of Tumkur District, Karnataka**' which discusses the perception and issues faced by women in the Tumkur District of Karnataka.

And lastly '**Dr.SanjeevaniGogavale and Prof.Vijaya Hake**' present the case study titled '**Kaizen- Carbon Foot print calculator promotion**' a study that helps measure environmental impact and means to improving it.

CONTENTS

Comparative Analysis of Car Loan Products of Leading Commercial Banks By Dr. Prabhakar N. Ladhe and Prof. Abhinav D. Jog	
Passenger Car Market: It's Growth and Owners' Perception By Dr.B.Angamuthu, PhD	
Pradhan Mantri Jan-DhanYojana By Prof. Namratha Sharma	
Women Entrepreneurs: Problems and Prospects: A Study of Tumkur District, Karnataka By Dr. P. Paramshivaiah	
Kaizen- Carbon Foot print calculator promotion By Dr. SanjeevaniGogavale and Prof. Vijaya Hake	

COMPARATIVE ANALYSIS OF CAR LOAN PRODUCTS OF LEADING COMMERCIAL BANKS

Dr. Prabhakar N. Ladhe

Prof. Abhinav D. Jog

Abstract

This research paper seeks to make a comparative study of car loan products of leading commercial banks in India. The research methodology relies upon collection and analysis of secondary data. The results and findings show that the product features of State Bank of India (SBI) are among the best and most attractive. SBI should leverage its competitive advantage and enhance its market share in the car loan segment. The findings would be useful for SBI in evolving appropriate strategies to enhance its market share.

Key Words: Retail lending, interest rates-fixed &floating, collateral security, foreclosure

1.1 Introduction

Retail lending by banks, comprising home loans car loans and personal loans, have been growing at a rapid pace over the past decade or so. Declining interest rate, less paper work, fast processing time, rebate on income tax, flexibility to repay and attractive schemes have contributed to the retail lending boom. Post the 2008 crisis, however, banks and financial institutions have become more cautious and have reduced their exposure to unsecured debt such as credit cards and personal loans. There is a marked preference among banks for secured loans for automobiles, two wheelers and housing.

As per data released by RBI, auto loans have grown at a CAGR of over 20% since FY11. Further, the average size of auto loans has also increased by a robust 20 per cent, according to a study by Credit Information Bureau (India) Limited. This indicates consumers' preference for more premium vehicles.

Outstanding car loans have for the first time crossed the Rs 1-lakh crore mark to Rs 1, 00,600 crore as of July, 2012, making it the only trillion-rupee secured loans category in personal lines apart from housing.

Auto Loan dependency is high for banks such as Kotak Mahindra Bank, HDFC Bank and Indus Ind bank (14-18% of loans) in that order followed by State Bank of India, ICICI Bank and Axis Bank (<5% of loans) as per report compiled by Prabhudas Lilladher dated 9th July 2013.

1.2 Scope of the Study

In this study, the car loan products of seven major commercial banks-four from the public sector & three from the private sector- have been compared.

1.3 Data Collection

For the purpose of this study, secondary data has been collected from the Bank's Annual Reports, Journals and Publications and their websites.

Results and Discussion

Parameter		State Bank of India	HDFC Bank	ICICI Bank	Axis Bank
		1	2	3	4
Max age at the end of loan tenure	1) Salaried	70 Years	60 Years	58 Years	70 Years
	2) Self employed (Proprietor)	70 Years	65 Years	65 Years	75 Years
Age for eligibility-Salaried	Minimum	21 years	21 Years	25 Yrs	21 Years
	Maximum	65 Years	Max age for repayment - 60 Yrs	Max age for repayment - 58 Yrs	Max age for repayment - 70 Yrs
Age for eligibility-Other	Minimum	21 years	21 Years	28 Yrs	21 Years
	Maximum	65 Years	Max age for repayment - 60 Yrs	Max age for repayment - 65 Yrs	Max age for repayment - 75 Yrs
Min Income	Salaried	NAI - Rs.3.00 Lacs	Rs.1.80 Lacs	Rs.2.50 Lacs	Rs.2.40 Lacs
	Others	Rs.4.00 Lacs (Detailed in scheme)	Rs.60,000/ (for lower segment car); Rs.1.00 Lacs for mid size & above	Rs.2.00 Lacs	Rs.1.80 Lacs
Job Criteria	Salaried	2 Years (it may be relaxed by 1 year)	ear 2 Years (minimum 1 year under current employment)	More than 2 years & current employment minimum 1 year.	Minimum 1 year of continuous employment
	Others	2 Years (it may be relaxed by 1 year)	2 Years	More than 3 years.	Minimum 3 yrs in same line of business.
Loan amoun	Salaried	48 times of NMI	36 times of NMI	--	--

t	Others	4 times NAI (for other than agriculturist); For Agriculturist: 3 times NAI.	6 times NAI (conditional)	--	--
Max Ceiling of loan Amt		No upper limit	Rs.1.50 Crore	---	--
Margin calculated on		Road price (NAI up to Rs.10.00 Lacs); NAI above Rs.10 lac-optional (rfr - scheme)	Ex showroom price	Ex showroom price	Ex showroom price
Parameter		Punjab National Bank	Bank of Baroda	Canara Bank	
		5	6	7	
Max age at the end of loan tenure	1) Salaried	65 Years	Max retirement age	Not stipulated	
	2) Self employed (Proprietor)	65 Years	65 Years	Not stipulated	
Age for eligibility-Salaried	Minimum	No stipulation	21 Years	Not stipulated	
	Maximum	Max age for repayment - 65 Yrs	Max retirement age	Not stipulated	
Age for eligibility-Other	Minimum	No stipulation	21 Years	Not stipulated	
	Maximum	Max age for repayment - 65 Yrs	Max age for repayment - 65 Yrs	Not stipulated	
Min Income	Salaried	Net income - Rs.2.40 Lacs	No stipulation	Rs.4.80 Lac p.a.	
	Others	Net income - Rs.2.40 Lacs	No stipulation	Rs.4.80 Lac p.a.	
Job Criteria	Salaried	No stipulation	No stipulation	Not stipulated	

	Others	No stipulation	No stipulation	Not stipulated
Loan amoun	Salaried	25 times of NMI	2 times gross annual income	Max EMI/NMI ratio - 40%
	Others	25 times of NMI	3 times gross annual income	Max EMI/NMI ratio - 40%
Max Ceiling of loan Amt		Rs.25 lacs	Rs.15.00 Lacs (Rs.1.00 Crore for HNI, having min monthly salary of Rs1.25lac)	No upper limit
Margin calculated on		Road Price	Road price	Road price

Parameter	State Bank of India	HDFC Bank	ICICI Bank	Axis Bank
	1	2	3	4
Margin	15% (10% for customers having NAI up to Rs.10 Lac under salary package/tie up categories)	25% to 10%	10%	5% (conditional)
Interest- Floating or Fixed	Floating	Fixed	Fixed	Fixed

Interest Rate	10.75% (0.75% above Base Rate)	11.50% to 13.75%	Repayment Period up to 23 months : 15.75% to 16.50%; 24 months to 35 months: 13.75% to 15.50%; 36 months to 60 months: 11.50% to 14.25%	11.50%
Repayment period	Max 84 months	12 to 84 months	1 to 5 years	1 to 7 years
Processing Charge	0.51% of loan amount max Rs.10,200/- (Presently - Rs.500/- up to 31.01.14); Nil in case of tie up (Sal Package etc)	Max - Rs.5,150/-	Max - Rs.5,000/- Plus Documentation charge - Rs.350/- (Ser Tax extra)	Max - Rs.5,500/- Plus Documentation charge - Rs.300/-
Other/Post disbursement Charges	Nil or nominal	Heavy charge on each & every service	Heavy charge on each & every service	Heavy charge on each & every service

Parameter	Punjab National Bank	Bank of Baroda	Canara Bank
	5	6	7
Margin	15% (10% under tie up)	15% (for loan up to 15 lac); 20% (for loan above 15 lacs)	10%
Interest- Floating or Fixed	Floating	Floating	Floating
Interest Rate	Repayment period :- Less than 3 Yrs - 11.25% (1% above Base Rate); 3 Yrs & above - 11.75% (1.50% above Base Rate)	10.50% (0.25% above Base Rate)	Minimum 10% margin & repayment period of more than 36 months- 10.95% (0.75% above Base Rate); Minimum 10% margin & repayment period of 36 months or less - 10.70% (0.50% above Base Rate); Minimum 50% margin, irrespective of repayment tenure - 10.70% (0.50% above Base Rate)
Repayment period	Max 84 months	Max 84 months	Max 84 months
Processing Charge	1% of loan amount max Rs.6,000/- (Ser Tax extra)	Loans up to Rs. 15/- Lacs : 0.75% (Maximum Rs 10000/-); Loans above Rs 15/- Lacs : 0.50% (Minimum Rs 10000/-); Ser Tax extra	0.25% on the loan amount – MINIMUM Rs.1,000/-; and maximum Rs.5,000/-

Other/Post disbursement Charges	Nil or nominal	Nil or nominal	Nil or nominal
--	----------------	----------------	----------------

Parameter	State Bank of India	HDFC Bank	ICICI Bank	Axis Bank
	1	2	3	4
Collateral Security	Nil	Nil	Nil	Nil
Part Pre- payment permitted?	Yes; No restriction, No penalty.	Yes but with heavy penalty - allowed after 12 months & only twice during whole loan tenure.	No (only full pre payment or foreclosure with heavy penalty allowed.)	Allowed after 6 months but with heavy penalty.
Fore closure permitted ?	Yes; No restriction, No penalty.	Yes, after 6 months with heavy penalty (detail in scheme)	Yes but with heavy penalty (detail in scheme)	Allowed after 6 months but with heavy penalty (detailed in scheme)
Penalty range in case of Part Pre payment	Nil	3% to 5%	N A	5% to 10%
Penalty range in case of Foreclosure	Nil	3% to 6%	5% of principal outstanding or Interest outstanding for unexpired period of the loan, whichever	5% to 10%

Special requirement/ Extra paper formalities	The papers required is the bare minimum. All the Banks demand the same.	Telephone/Post paid mobile connection is mandatory.	Signature Verification Proof; Insist for Address Proof as per ICICI Bank norms.	Signature Verification Proof
Parameter	Punjab National Bank	Bank of Baroda	Canara Bank	
	5	6	7	
Collateral Security	Required in case of borrowers other than SALARIED CLASS WHERE EX – showroom cost of the car is below Rs.6 lakh.	Nil	Nil	
Part Pre- payment permitted?	Yes, No penalty if paid from own sources.	Yes, No penalty	Yes, No penalty	
Fore closure permitted ?	Yes, No penalty if paid from own sources.	Yes, No penalty	Yes, No penalty	
Penalty range in case of Part Pre payment	No penalty if paid from own sources.	Nil	Nil	

Penalty range in case of Foreclosure	No penalty if paid from own sources.	Nil	Nil
Special requirement/ Extra paper formalities	--	--	Sanctioning loan for more than 2 vehicles to Individuals during currency of the existing loans to be permitted by Credit Approval Committees headed by Circle Heads.

1.4 Findings:

Paper formalities:

The documents required by SBI are bare minimum which are also being obtained by all other banks. In addition, some banks like ICICI and Axis require signature verification proof. HDFC Bank insists for Telephone /Post paid mobile connection. Further, In SBI, there is provision for relaxing the minimum number of Form16/ITR.

♦ **Maximum Age of borrower at the end of loan tenure**

SBI is one of the very few Banks which fixes repayment up to the maximum age of 70 years, whereas it is 60 years and 58 years in HDFC Bank and ICICI Bank respectively. Axis Bank allows repayment up to the age of 75 years in case of other than salaried class borrowers, which is an exception.

♦ **Repayment period**

Repayment period of SBI Car loan is 7 years which is longest repayment allowed in this segment. On the other hand, ICICI Bank still offers maximum repayment period of 5 years and HDFC Bank restricts the repayment tenure to 3 years in financing a super premium car.

♦ **Type of Interest - Floating or Fixed**

All the three private Banks - HDFC Bank, ICICI Bank and Axis Bank offer Car loan on Fixed rate whereas all the public sector Banks including SBI offer the same on floating rate, linked to Base rate. Though fixed rate of interest entails more transparency, Private Banks charge higher rate of interest and discourage part pre payment/ foreclosure by imposing heavy penalty up to 10%. Further borrower does not get the benefit of downward movement of interest rate.

♦ **Interest Rate**

SBI offers loan at 10.75% whereas all the three private banks charge much higher rate ranging from 11.50% to 16.50%. However, some of the Public sector banks like Bank of Baroda have slashed their interest rate to the level of 10.50%.

♦ **Loan amount/maximum Ceiling**

SBI offers highest loan amount which is 48 times NMI in case of salaried borrowers as compared to other major competitors. Further, unlike others, there is no upper limit fixed in SBI. The maximum loan is restricted to 36 NMI in HDFC and 25 NMI in PNB.

♦ **Margin**

Margin is hovering around 15 % in all the banks. Public sector Banks consider margin on Road price but all three major private players calculate margin on ex-showroom price. The concessionary margin of 10% in case of customers under salary package/ tie-up with annual net income up to Rs.10 lakhs only is available in SBI.

♦ **Pre Payment /Foreclosure**

No restriction /No penalty in Public Sector Banks including SBI. All the three private banks impose heavy penalty in case of pre payment and allow foreclosure only after a minimum lock in period with penalty. The prepayment penalty ranges between 3 to 10%.

♦ **Processing charges/other charge**

Though regular processing charge is more or less similar in all banks, SBI levies nominal charge in larger part of the year in view of continuous ongoing campaigns/bonanzas. Private banks are charging heavily on post disbursement servicing of the loan like charges for statement/swapping of cheque/chequeretun /amortization schedule etc.

1.5 Recommendations:

SBI has a clear competitive advantage in the parameters of margin, loan eligibility, age criteria and repayment period. It must redouble its marketing efforts through tie-ups with dealers and deployment of an aggressive outbound marketing teams to enhance its market share.

References:

State Bank of India, Annual Report 2013-14.
ICICI Bank, Annual Report 2013-14.
HDFC Bank, Annual Report 2013-14
Axis Bank, Annual Report 2013-14
Punjab National Bank, Annual Report 2013-14
Bank of Baroda Annual Report 2013-14
Canara Bank Annual Report 2013-14

Websites:

www.rbi.org.in
www.cibil.com
www.sbi.co.in
www.hdfcbank.com
www.icicibank.com
www.axisbank.com
www.pnbindia.in
www.canarabank.in
www.bankofbaroda.co.in

AUTHOR DETAILS
Dr. Prabhakar N. Ladhe

Associate Professor,
Janata Kala VaniyaMahavidyalaya,
Malkapur, Dist BULDHANA
Email: prabhakarladhe@gmail.com

Prof. Abhinav D. Jog
Associate Professor,
Indira School of Business Studies,
Wakad,Pune
Email: abhinav.jog@indiraisbs.ac.in
Abhinav.jog@gmail.com

PASSENGER CAR MARKET: ITS GROWTH AND OWNERS' PERCEPTION

Dr. B. Angamuthu

ABSTRACT

The present empirical and analytical research studied the impact of passenger car market in India. In order to analyze the growth of passenger car market according to its production and sales of domestic and export market. Further, this study involves to analyzing the owners' perception towards brand preference of car, responsible factors on buying decision of preferred brand and satisfaction level among various groups. Both secondary and primary data were used. This study reported that the Compound Annual Growth Rate (CAGR) of production, domestic and export sales of passenger car market shows that 15.1%, 10.8% and 34.52 respectively during the study periods. Most of the respondents has been preferred Maruti Suzuki branded cars because of price and brand image is the dominant factors for buying decision of preferred brand of car compared with other factors like resale value, availability of spare parts, after sales service and so on. The personal factors like gender, age group, educational qualification, occupation, monthly income of the respondents significantly associated with their brand preference.

Keywords: Automobile Industry, Passenger car, Market Growth, Owners' perception, Satisfaction level

I. INTRODUCTION OF THE STUDY

1.1 Introduction

The automobile industry went aboard on a new journey in 1991 with de license of the sector and subsequent opening up for 100 percent FDI through automatic route. The automobile industry is one of India's major sectors and contributing 7% of Gross Domestic Product (GDP) in Indian economy but accounting for 22% of the country's manufacturing GDP. Since then, almost all the multinational corporations have set up their facilities in India influenced to increase the production level from 9.74 million in March'2006 to 20.37 million in March'2012 with the growth engine of 109%. This is followed by CAGR of domestic and

export sales in the automobile industry during the five years period from 2007-2008 to 2011-2012 shows 15.82% and 23.81% respectively. Automobile Sector expected by 2016 that the output of the India's automotive sector will be €115 billion and it contributing to 10% of India's GDP and providing employment to 25million persons additionally. Further, past performance of automobile sector shows that the two-wheeler segment contribute highest percent of the domestic market share then the passenger & commercial vehicles, three-wheelers. Now-a-days, India is emerging as one of the world's fastest growing passenger car markets because car market urbanized after liberalization through entering the multinational companies from Japan, America, German, Europe, and USA etc. The world's top – 5 leading car manufacturers are Toyota, General Motors, Volkswagen, Hyundai and Ford.

1.2 Statement of the problem

The large domestic market with population of more than a billion, fast urbanization, changing life style among the public, increasing the double income families have responsible to growth of passenger car market in India. Now-a-days, peoples are more attention to buying car for their personal use because of improvement in the living standards of the middle class families and increase in their disposable incomes, availability of credit facilities etc. So, the car manufacturers needed to the more number of market research. Hence, the present research is intended to study the impact of passenger car market through its growth and car owners' perception.

1.3 Objectives of the Study

The objectives of the study are

To analyze the growth of passenger car market in India

To study the car owners' perception towards brand preference and influencing factors on buying decision of preferred brand.

To analyze the owners' satisfaction level of preferred brand of passenger car

1.4 Hypotheses of the study

Ho₁: There is slow growth of passenger car market in India

Ho₂: There is no significant association of brand preference of passenger car among the various groups of the owners.

Ho₃: There is no significant association of satisfaction level among the various groups of car owners.

II. REVIEW OF LITERATURE

Sudalaimuthu&Angamuthu (2012) conclude that technical, external and cost factors influenced to buying decision of Two-Wheeler. Monga& Chaudhary (2011) opined that price of bike and second hand car is the similar. Hence, consumers took decision for buy second hand car replaced their two-wheeler because the second car fulfills the more requirement than the bike. NasrinSulthana&SakthivelMururgan (2011) in their empirical study tries to find the factors determining the customers' preference for LG products in Madurai City. Natarajan and Thiripurasundari (2010) report that consumers who possessed global car brands, preferred their car brands due to global presence, worldwide reputation and quality of being a foreign made such as superior quality,technical advancements, modernization etc. Consumers who owned a local brand evaluated the local brand in a favourable manner, wherein they tend to associate the brand to India's strong automobile sector that makes quality and technically efficient cars. Suresh and Raja (2006) in their study measure to customer satisfaction of small cars in Bangalore City. In this study, identified sales support, vehicle design, purchase support, cost of ownership, and delight features is the most important factors of customer satisfaction. In addition, compare the difference of customer satisfaction among various demographics. According to Ravichandran and Narayanarajan (2004) advertisement, price, quality, performance, availability of spares, and after-sales service plays a vital role in the decision- making process of the brand preference of television. White (2004) reported that factors that affect car-buyers' choices and comments that people expect to haggle with dealers over price and to receive incentives as well as low-interest payment plans.

III. RESEARCH METHODOLOGY

This analytical and empirical research used to both secondary and primary data. The secondary data collected from report published by Society of Indian Automobile

Manufacturers (SIAM) which helps to measure the growth of passenger car market. Further, the primary data were collected from 178 car owners through the questionnaire as regards their brand preference as well as factors consider for buying decision of car. The annual data from 1st April to 31st March collected for ten study periods and the primary data collected from various places in Coimbatore District of Tamil Nadu state, India. The primary data collected during the month December'2013 to May'2014. The questionnaire has two different parts. The first part covers personal factors (Gender, Age group (in years), Educational qualification, Occupation, Monthly Income (Rs. Per month) and the second part includes possession of car brand i.e. brand preference (Open-ended), twelve parameters with preference form towards responsible factors on buying decision of particular brand and satisfaction level measured through three-point scaling technique. Purposive sampling method is suitable for the study and the inference draw from application of Descriptive statistics like Percentage analysis, Mean, Annual Growth Rate (AGR), Standard Deviation (SD), Co-efficient of Variation (CV), Compound Annual Growth Rate (CAGR), Least trend method, Garret ranking approach and Chi-square test (χ^2).

IV. ANALYSIS AND DISCUSSIONS

This part analyzes the overall impact of passenger car market (production and sales growth as well as owners' perception) with the help of both secondary and primary data.

4.1 Growth of Passenger Car Market in India

The marketgrowth of passenger car with respect to its' production and sales are given in the table – 1.

Table - 1: Passenger Car Market in India						
Year	Production		Sales (Domestic Market)		Sales (Export Market)	
	Production (Nos. in '000s)	AG R (%)	Sales (Nos. in'000s)	AGR (in %)	Sales (Nos. in'000s)	AGR (in %)
1999- 2000	533.149		NA		Not Available	
2000- 2001	517.957	-2.85	NA		23.271	

2001- 2002	654.557	26.3 7	345.34	-	22.913	-1.54
2002- 2003	703.948	7.55	411.305	19.10	50.108	118.69
2003- 2004	907.968	28.9 8	417.72	1.56	70.263	40.22
2004- 2005	1178.354	29.7 8	409.951	-1.86	125.32	78.36
2005- 2006	1264.000	7.27	638.815	55.83	160.677	28.21
2006- 2007	1473.000	16.5 3	590.647	-7.54	175.572	9.27
2007- 2008	1713.479	16.3 3	570.473	-3.42	198.452	13.03
2008- 2009	1846.051	7.74	591.491	3.68	218.401	10.05
2009- 2010	2175.220	17.8 3	696.153	17.69	335.739	53.73
2010- 2011	NA		819.918	17.78	NA	
2014- 2015*	2869.211		939.017		441.705	
2015- 2016*	3038.244		984.880		473.666	
2016- 2017*	3207.277		1030.743		505.628	
Mean	1178.88		549.181		138.072	
SD	569.65		150.6		100.015	
CV (%)	48.32		27.42		72.44	
Source: Society of Indian Automobile Manufacturers						
* forecast; NA = Not Available						

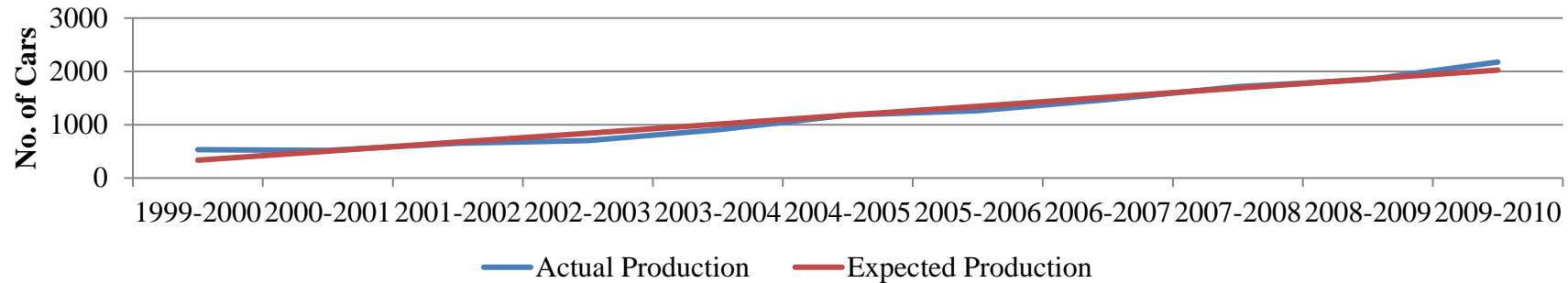
It could be collected from the table -1 that the production growth of passenger cars during 2009-2010 was at 2175.22 vehicles compared to 1846.051 during the previous year (2008-2009) indicating an increase of 17.83 % over the year of 2008-2009 but 27% over the year of 2007-2008. The production of passenger cars in India has grown at an impressive pace at a CAGR of 15.1% during eleven years study period from 1999-2000 to 2009-2010. This is followed by average production of passenger car shows that 1178.88 with SD of 569.65 and its CV is 48.32% during the study periods. Moreover, AGR shows over a period of eleven years are depicted in Table - 1. It can be seen from the table- 1 that growth was found to be maximum (29.78%) in the year 2004-2005 and the negative growth rate (2.85%) was noticed in the year of 2000-2001. The production growth of passenger car market expected to 3207.277 in the year of 2016-17 with a growth of 47% over the year of 2009-2010.

It is observed from the table -1 that the sales growth of passenger cars in domestic market during 2010-2011 was at 819.918 vehicles compared to 696.153 during the previous year (2009-2010) indicating an increase of 17.78 % over the year of 2009-2010 but 38.69% over the year of 2008-2009. The average sales of passenger cars in domestic market shows that 549.181 vehicles for the ten years study period from 2001-2002 to 2010-2011 with SD 150.600 cars and CV is 27.42%. The sales of passenger car in domestic market have grown at a CAGR of 10.08% from the fiscal year 2001-2002 to 2010-2011. Further, It can be seen from the table - 1 that growth of domestic sales was found to be maximum of 55.83% in the year 2005-2006 and the least positive growth (1.56%) was noticed in the year of 2003-2004. The growth of domestic sales of passenger car expected to reach around 1000 vehicles in the year of 2016-2017 with growth of 26% over the fiscal year of 2010-2011.

Table -1 shows that the sales growth of passenger cars in the export market during 2009-2010 was at 335.739 vehicles compared to 218.401 during the previous year (2008-2009) indicating an increase of 53.72% over the year of 2008-2009 but 69.18% over the year of 2007-2008. This is followed by export sales of passenger cars has grown at an impressive pace at a CAGR of 34.52% during ten years study period from 2000-2001 to 2009-2010 whereas the average sales of passenger cars in the export market shows that 138.072 with SD of 100.015 cars and CV is 72.44%. The AGR, over a period of ten years reported that growth was found to be maximum (118.69%) in the year 2002-2003 and the least positive growth rate (9.27%) was noticed in the year of 2006-2007. The sales growth of passenger cars in the

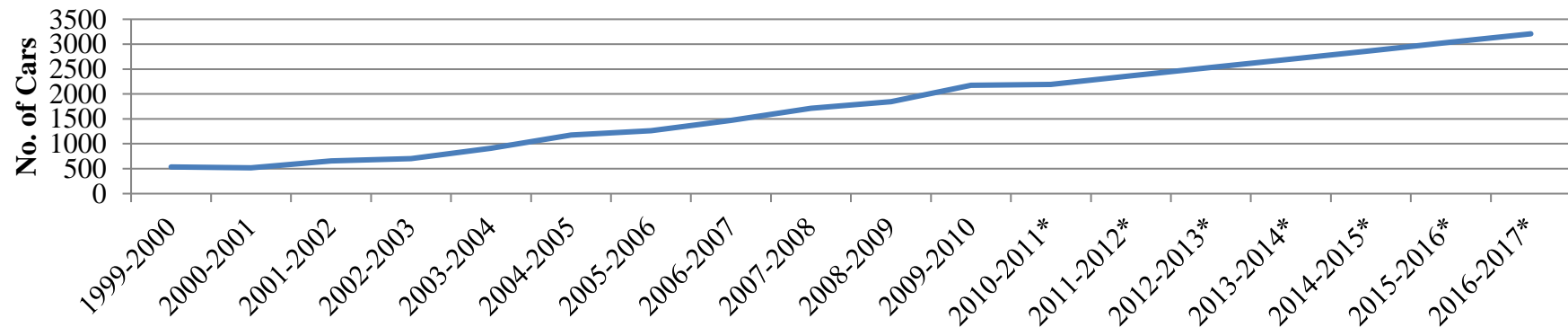
export market predicts which will reach 505.628 vehicles in the year of 2015-2016 with growth rate of 51% over the year of 2009-2010.

Figure - 1: Comparison of Actual & Expected Production of Passenger Cars (In '000s)

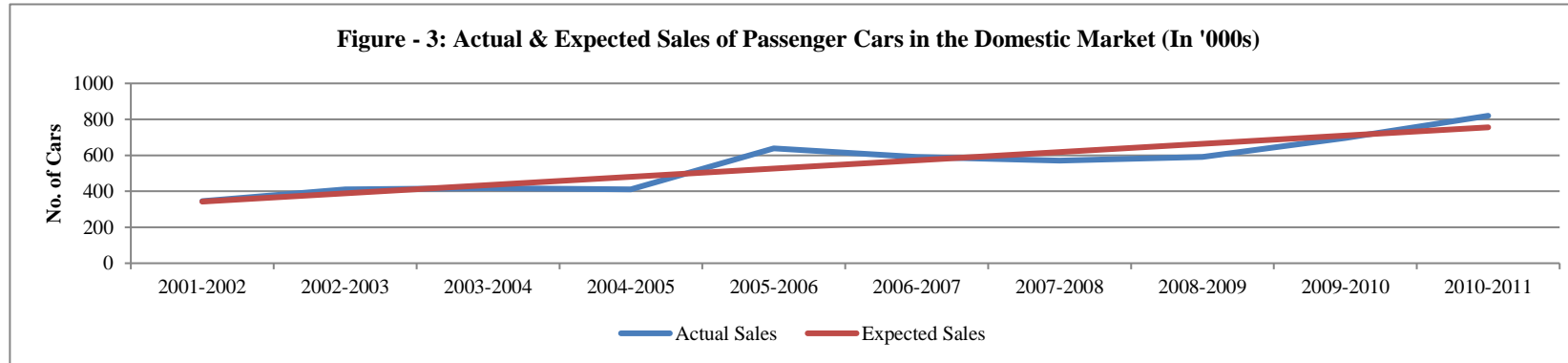


Source: Society of Indian Automobile Manufacturers

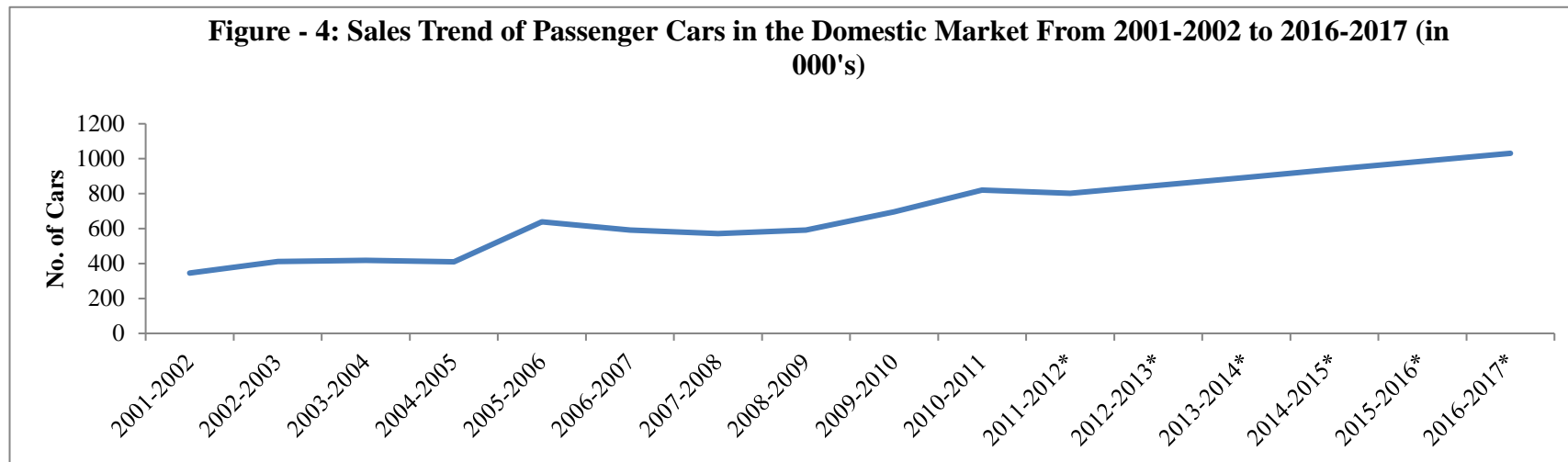
Figure - 2: Production Trend of Passenger Cars (in 000's)



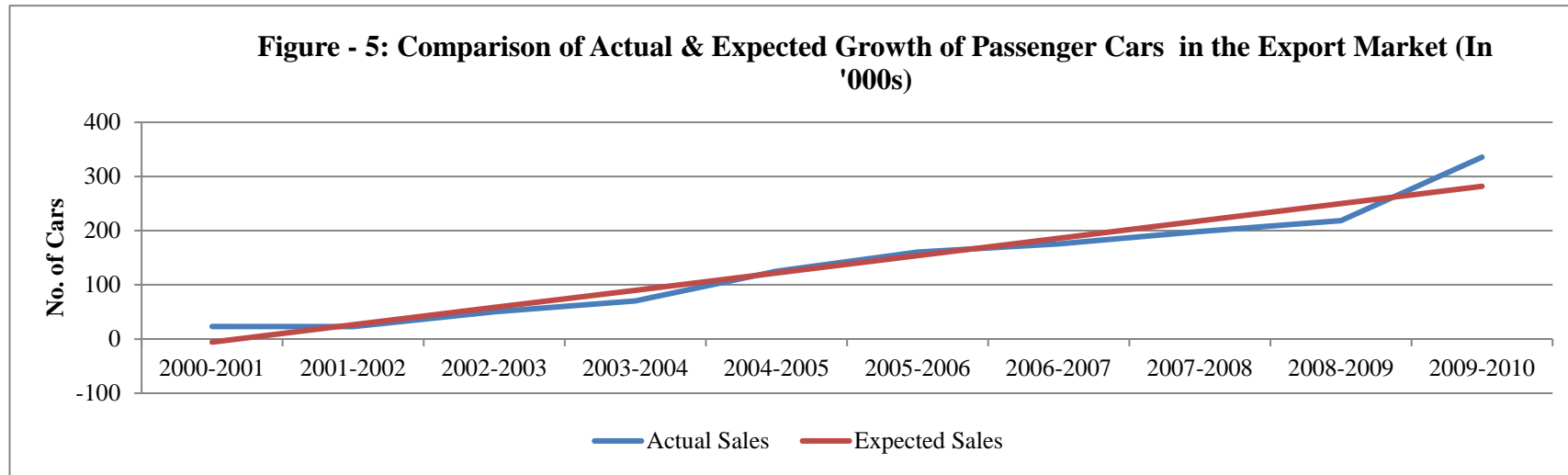
Source: Society of Indian Automobile Manufacturers



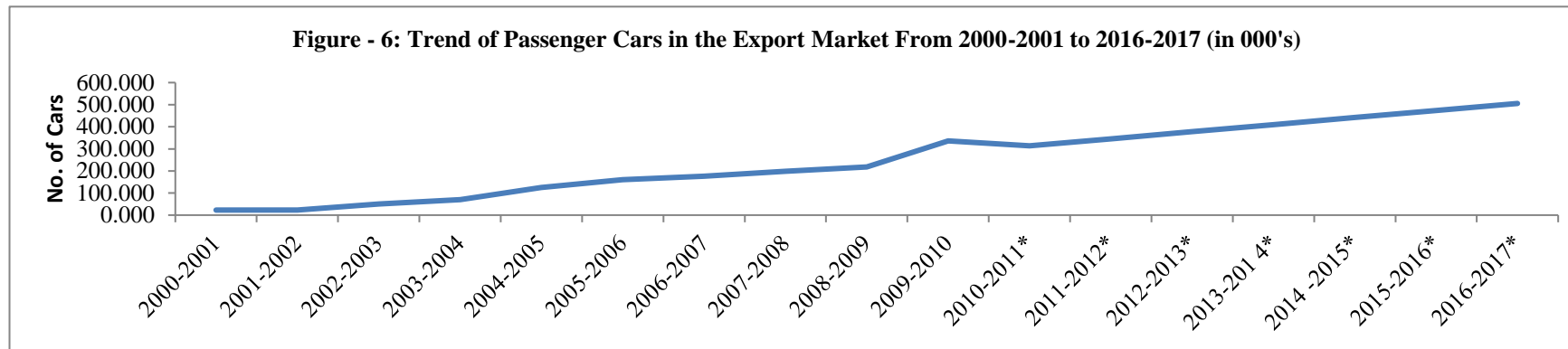
Source: Society of Indian Automobile Manufacturers



Source: Society of Indian Automobile Manufacturers



Source: Society of Indian Automobile Manufacturers



Source: Society of Indian Automobile Manufacturers

4.2 Personal Factors of the Car Owners

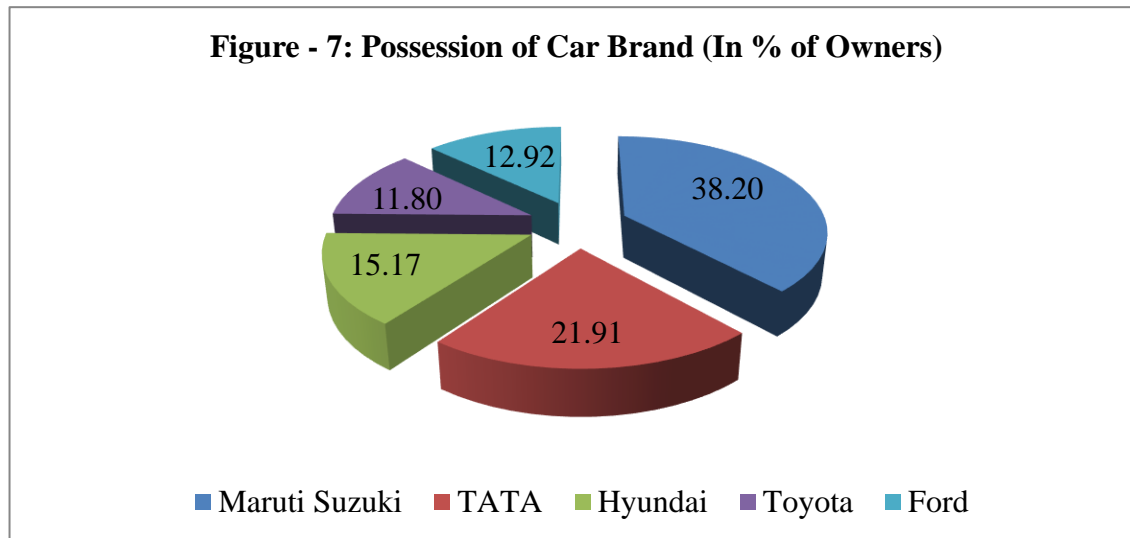
The distribution of the owners of passenger car based on their gender, age group, educational qualification, occupation and monthly income is given in the table -2 and it is found that the 67.98% male owners, majority (57.87%) of the car owners belonging to the age group of 26-40 years. This is followed by the study has considered 55.62% of the owners have higher level educational qualification, 35.96% of the car owners working in government sector and 2/5th of the owners belonging to the income group of below Rs. 30,001 to Rs. 40,000.

Table - 2: Personal Factors of the Car Owners			
Factor	Character	No. of Owners	%
Gender	Male	121	67.98
	Female	57	32.02
Age Group (In years)	Upto 25	32	17.98
	26-40	103	57.87
	41-55	6	3.37
	Above 55	37	20.79
Educational qualification	No formal education (I-VII)	15	8.43
	School level (VIII-XII)	64	35.96
	Higher education	99	55.62
Occupation	Private employee	26	14.61
	Government employee	64	35.96
	Businessman	22	12.36
	Professional	45	25.28
	Agriculturists	21	11.80
Monthly income (Rs. per month)	Upto Rs.20,000	31	17.42
	Rs. 20,001- Rs.30,000	53	29.78
	Rs.30,001-Rs.40,000	71	39.89

	Above Rs.40,000	23	12.92
Source: Primary data			

4.3 Brand Preference of Passenger Car

Classification of the car owners based on their possession of car brand is given in the figure – 7.



Source: Primary data

It is observed from the figure – 7 that 38.20% of the car owners possess maruti suzuki branded products. This followed by 21.91% of the respondents have TATA cars, 15.17% of the respondents have Hyundai cars, 12.92% have Ford cars and 11.80% of respondents have Toyota cars.

4.4 Influencing Factors on Buying Decision of Passenger Car

This part attempts to study the most and least responsible factors on buying decision of passenger car among the owners. In order to Garrett's Ranking Technique was used. The objective of this technique is to find out foremost influence factors on buying decision among the several factors through the rank base.

Table – 3: Owners' Perception towards Influencing Factors on Buying Decision of Preferred Brand of Car

Factor	Garrett's Score	No. of Owners	Mean	Rank
--------	-----------------	---------------	------	------

Resale value	8778	178	49.31	6
Driving comfort	8628	178	48.47	8
Price of the car	10039	178	56.40	1
Prestige symbol	9460	178	53.15	3
Fuel economy	9443	178	53.05	4
Brand image	9513	178	53.44	2
Latest technology	8222	178	46.19	11
Availability of spare parts	8706	178	48.91	7
After sales service	8490	178	47.70	10
Maintenance cost	8925	178	50.14	5
Attractive model	7974	178	44.80	12
Credit facility	8622	178	48.44	9
Source: Primary data				

It is observed from the table – 3 based on the ranks towards most responsible factors of buying decision of car. Price of the car is most responsible factors on buying decision with the highest mean score of 56.40. This is followed by brand image (53.44) is the second responsible factors on buying decision and prestige symbol is third important factors on buying decision of car with mean score of 53.15.

4.5 Relationship of Personal Factors of Car Owners and Brand Preference

Ho: There is no significant association of brand preference of passenger car among the various group of gender, age group, educational qualification, occupation and monthly income of the owners.

Ho₁: There is a significant association of brand preference of passenger car among the various group of gender, age group, educational qualification, occupation and monthly income of the owners.

Table - 4: Relationship of Personal Factors of Car Owners and Preferred Car Brand

Personal Factor	χ^2	df	Result
Gender	20.831**	4	Accept Ho ₁ & Reject Ho
Age Group (In years)	40.85**	12	Accept Ho ₁ & Reject Ho
Educational qualification	24.002**	8	Accept Ho ₁ & Reject Ho
Occupation	64.301**	16	Accept Ho ₁ & Reject Ho
Monthly Income (Rs. Per month)	56.012**	12	Accept Ho ₁ & Reject Ho
* Sig. @ 5% level & ** Sig. @ 1% level			
Source: Primary data			

Gender & Brand Preference of Passenger Car: It is observed from the table – 4 that the calculated value of $\chi^2 \{ \Sigma (O - E)^2/E \}$ comes out 20.831 which is greater than 9.49 & 13.23 @ 5% & 1% level of significant with 4 df respectively. For that reason, Accept Ho₁ & Reject Ho. Further, it is concluded that there is a significant association of brand preference of passenger car between male and female.

Age group & Brand Preference of Passenger Car: It could be collected from the table – 4 that the calculated value of $\chi^2 \{ \Sigma (O - E)^2/E \}$ is 40.85 which is greater than 21.03 & 26.22 @ 5% & 1% level of significant with 12 df respectively. So, Accept Ho₁ & Reject Ho. It is reported that there is a significant association of brand preference of passenger car among various age groups.

Educational Qualification & Brand Preference of Passenger Car: It is inferred from the table – 4 that the calculated value of $\chi^2 \{ \Sigma (O - E)^2/E \}$ is 24.002 which is greater than 15.51 & 20.09 @ 5% & 1% level of significant with 8 df respectively. So, Accept Ho₁ & Reject Ho. It is reported that there is a significant association of brand preference of passenger car among various educational qualifications.

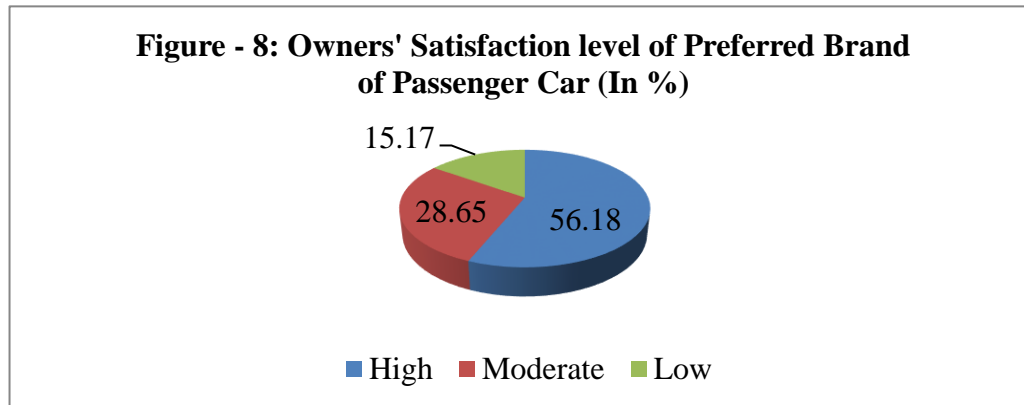
Occupation & Brand Preference of Passenger Car: Table – 4 explains that the calculated value of $\chi^2 \{ \Sigma (O - E)^2/E \}$ is 64.301 which is greater than 26.30 & 32.00 @ 5% & 1% level of significant with 16 df respectively. So, Accept Ho₁ & Reject Ho. Here, it says that there is a significant association of brand preference of passenger car among various occupations.

Monthly Income & Brand Preference of Passenger Car: Table – 4 shows that the calculated value of $\chi^2 \{ \Sigma (O - E)^2/E \}$ is 56.012 which is greater than 21.03 & 26.22 @ 5% & 1% level of

significant with 12 df respectively. So, Accept H_{01} & Reject H_0 . Here, it says that there is a significant association of brand preference of passenger car among various monthly incomes.

4.6 Satisfaction level of the Car Owners

Distribution of the owners of car based on their satisfaction level towards preferred brand of car is shown in the figure – 8. It is concluded that majority (56.18%) of the car owners are highly satisfied about their preferred brand.



Source: Primary data

Figure – 8 reports that 56.18% of the car owners are highly satisfied about their preferred brand, 28.65% of car owners have moderately satisfied and then 15.17% of the owners have less satisfaction of preferred brand of car.

4.7 Relationship of Personal Factors of Car Owners and Satisfaction level

H_0 : There is no significant association of satisfaction level among the various group of gender, age group, educational qualification, occupation and monthly income of the owners.

H_0 : There is a significant association of satisfaction level among the various group of gender, age group, educational qualification, occupation and monthly income of the owners.

Table - 5: Relationship of Personal Factors of Car Owners and Satisfaction level

Personal Factor	χ^2	df	Result
Gender	0.54	4	Accept H_0 & Reject H_{01}
Age Group (In years)	12.125	12	Accept H_0 & Reject H_{01}
Educational qualification	1.117	8	Accept H_0 & Reject H_{01}
Occupation	8.452	16	Accept H_0 & Reject H_{01}

Monthly Income (Rs. Per month)	7.919	12	Accept Ho & Reject Ho1
* Sig. @ 5% level & ** Sig. @ 1% level			
Source: Primary data			

Gender & Satisfaction level: It is observed from the table – 5 that the calculated value of $\chi^2 \{ \Sigma (O - E)^2/E \}$ comes out 0.54 which is lesser than the tabulated value of 9.49 @ 5% level of significant. So, Accept Ho & Reject Ho₁. Further, it is concluded that there is no significant association of satisfaction level between male and female.

Age group & Satisfaction level: It could be collected from the table – 5 that the calculated value of $\chi^2 \{ \Sigma (O - E)^2/E \}$ is 12.125 which is lesser than the tabulated value of 21.03 @ 5% level of significant. So, Accept Ho & Reject Ho₁. It is reported that there is no significant association of satisfaction level among various age groups.

Educational Qualification & Satisfaction level: It is inferred from the table – 5 that the calculated value of $\chi^2 \{ \Sigma (O - E)^2/E \}$ is 1.117 which is lesser than the tabulated value of 15.51 @ 5% level of significant. So, Accept Ho & Reject Ho₁. It is reported that there is no significant association of satisfaction level among various educational qualifications.

Occupation & Satisfaction level: Table – 5 explains that the calculated value of $\chi^2 \{ \Sigma (O - E)^2/E \}$ is 8.452 which is lesser than the tabulated value of 26.30 @ 5% level of significant. Hence, Accept Ho & Reject Ho₁. It is reported that there is no significant association of satisfaction level among various occupations.

Monthly Income & Satisfaction level: Table – 5 shows that the calculated value of $\chi^2 \{ \Sigma (O - E)^2/E \}$ is 7.919 which is lesser than the tabulated value of 21.03 @ 5% level of significant. Hence, Accept Ho & Reject Ho₁. It is reported that there is no significant association of satisfaction level among various monthly incomes.

V. CONCLUSION

The completed research work report that the passenger car market in India went to increasing trend in the 21st century according to its production, domestic and export sales except in the year of 2000-2001. The production of passenger cars expected to 32 Lakhs in 2015-2016, out of which the demand of export market is over 5 Lakh cars and the remaining in domestic market. Moreover, majority of owners preferred Maruti Suzuki branded cars because price and brand image of the car has responsible to buying of preferred brand. Gender, age group,

education, occupation and income have association with brand preference. 56.18% of the car owners have highly satisfied about their preferred brand of car whereas the personal factors of the car owners not significantly associated with their satisfaction level.

REFERENCES

1. Monga, N., & Chaudhary, B., (2011). "To study Consumer Decision making process for Second Hand Car as a replacement of Two Wheeler (Bike)", *International Journal of Marketing and Technology*, Vol.1(3), pp. 146-161
2. Nasrin Sulthana, M., & Sakthivel Murugan, M., (2011). "A Study on Consumer Buying Behaviour of Home Appliances with Reference to LG Products", *Indian Journal of Marketing*, Vol. 41 (12), December.
3. Natarajan, P., & Thiripurasundari, U., (2010). "Local brand vs. Global brand syndrome – A study with reference to Indian car industry", *Advances in Management*, Vol. 3, (10)
4. Ravichandran, K., & Narayanarajan, S., (2004). "Factors determining the brand preference Of TV with special reference to Thoothukudi District in Tamil Nadu", *Indian Journal of Marketing*. Vol.34(4), April
5. Sudalaimithu, S., & Angamuthu, B., (2012). "Factors Influencing Buying decision of Two-wheeler: Owners' Perception", *Journal of research, extension and development*, Vol.1(2), pp.91-102
6. Suresh, A.M., & Raja, K.G., (2006). "Measuring customer satisfaction for small Cars- An empirical study", *Indian Journal of Marketing*, Vol. 36(2), pp. 3-8.
7. White, R. (2004). "How people buy cars", *Admap Journal*, Vol. 39(3), pp. 41-43.

WEBLINKS

<http://economictimes.indiatimes.com/>

<http://www.thehindu.com/>

<http://www.rediff.com/>

<http://www.globalfueleconomy.org/>

<http://www.ibef.org/> and other websites

AUTHOR DETAILS

Dr.B.Angamuthu M.Com, MPhil, PhD

Assistant Professor of Commerce, KovaiKalaimagal College of Arts and Science,
Vellimalaipattinam, Narasipuram (Po), Thondamuthur (via),Coimbatore – 641 109,
Tamilnadu, India

E-mail: muthuanga82@gmail.com

PRADHAN MANTRI JAN-DHAN YOJANA (PMJDY)

Prof. Namratha Sharma

ABSTRACT

The paper covers the study on PradhanmantriMantri Jan DhanYojana(PMJDY) scheme , started by the present prime minister of India ,which in an outcome of India's biggest financial Inclusion drive, which helps to examine how many accounts were opened throughout the India according to the scheme launched with the basic intention of opening an account with zero balance where it covers both Urban and rural places and the study also helps to find out the involvement of Telangana region to the whole of India.

INTRODUCTION:

PMJDY scheme was announced on Independence Day at red fort in the year 2014, where the current Prime minister Mr. Narendra Modi talk about the ambitious project of Financial Inclusion via Pradhan Mantri Jan DhanYojanaschme which ensure access to financial services, namely banking/saving Accounts, credits, insurance and pension in an affordable manner .PMJDY is different from the earlier financial inclusion called “swabhimaan” where it targeted only village population into consideration where PMJDY cover whole country as it look after the coverage of household rather than village. Under this scheme, government plans to bring in, all those under privileged sections of the society within the ambit of financial sector, with which so far they have been left untouchable.

The scheme was launched on 28th Aug 2014, with the thumping response from the public; under the scheme around 15 million bank accounts were opened on the same day, the scheme covers:

- ❖ Basic Savings Bank Deposit Account (BSBDA)
 - There is no minimum balance required to open an account
 - The services includes deposits and withdrawals at any bank branch
 - They are facilitated with ATM-cum-Debit card which is provided without any extra cost and allowed with maximum 4 withdrawals a month
- ❖ Rupay Debit card provides a special advantage of accidental insurance which covers uptoRs-1.00 lakhs

- ❖ It also provides the overdraft facility of RS- 5000, Only after 6 months of satisfactory conduct of account, at present the interest charged is 12% and it is provided only to any one member of the house (preferably lady of the house).
- ❖ Life insurance of RS-30000 will be provided to all its customers.

*Guest Faculty, Nizam College, Hyderabad

The subject of credit worthiness is provided to the account holder, with the new technology introduced by National Payments Corporations Of India (NPCI), a person can transfer funds, check balance through normal phone which was earlier limited to smart phones only. This scheme will also substantially mitigate the problem over money remittances by those working in unorganized sector with no access to banks. The ultimate objective of this scheme is to provide every Indian with a bank account so that whatever initiative the government takes in the form of subsidiaries and incentive, which must reach to the beneficiaries directly with a definite route. The government also hopes that this will fill up the loopholes within the system and will be very effective in our fight for corruption. The corporate sector has also welcomed this scheme as they believe this scheme will not only infuse liquidity in the system but at the same time it will make the role of banks even more prominent. The priority and small enterprise borrowers will be largely benefitted with this scheme as this will allow them for credit availability at cheaper rates with more flexibility of repayment which will give them relief from venal moneylenders. The other aspect of this scheme is to make the banking facilities available across regions which will make the banking sector more strong and robust.

REVIEW OF LITERATURE:

- ❖ FM ArunJaitley. "The report reveals that the project, will help provide a bank account for every Indian household is widely seen as the first comprehensive financial inclusion scheme in the country, the scheme's objective was to eradicate poverty and eliminate the "financial untouchability" that exists in the country and a big step towards women empowerment as they can now save their money in a safe place." Business Standard August 28, 2014.
- ❖ Atmadip Ray. "A survey has to be done at the rural level to identify the financially excluded population." State Bank of India deputy managing director Sunil Srivastava said there could be some duplication of financial inclusion accounts, but it would be difficult to put a number to it. Even if there is 5-10% repetition, still 90% people have received new accounts.." The Economic Times September 01, 2014
- ❖ IshamBakshi, NitinSethi&SurabhiAgarwal. "Jan Dhanyojana-Many question Remain, The government heralded its achievement of clocking 15 million new bank accounts under the scheme by Thursday and looked ahead to the target of achieving 75 million accounts by January 2015, He said the scheme will be carried out on a "mission mode" and hopes to rope in 7.5 crore accounts by Jan 26th, 2015." Business Standard August 30, 2014
- ❖ Rangarajan C (2008), "Report of the Committee on Financial Inclusion" Reserve Bank of India -"Annual Reports and „Report on Trend and Progress of Banking in India", various issues. Sarma, M. (2008), Index of Financial Inclusion, ICRIER Working Paper, August

2008.

NEED OF THE STUDY:

- ❖ To study how many accounts got opened under the scheme.
- ❖ To make a comparative study on Rural and Urban area.
- ❖ To assess Public sector banks. Private Banks and Regional Rural banks contribution towards the scheme.
- ❖ To evaluate how many accounts opened in Telanganaregiom.

IMPORTANCE OF STUDY:

The study is extent to the boundaries of India, which helps analyse the India biggest financial Inclusion drive “jandhanyojana” scheme and its benefits each individuals who have participated under the schmeas Financial literacy would be an integral part of the Mission as it will help each recipients to make finest use of the financial services by getting account opened with zero balance and get rupay debit card. This will remove untouchabilty from financial service sectors as it is made available for all the inviduals residing in India. Specially, it covered rural region as they are the important part of the drive. The study even helps to acknowledge banks contriubution and even helps to study the contribution of Telangana region under the scheme.

RESEARCH METHODOLOGY:

The study is made on descriptive base, so for this paper secondary data have been used. The relevant secondary data have been collected from the main site of PMJDY. The study requires variety of datatherefore<http://pmjdy.gov.in> have comprehensively researched.

TOOLS USED FOR ANALYSIS:

Graphical representation of data analysis is done

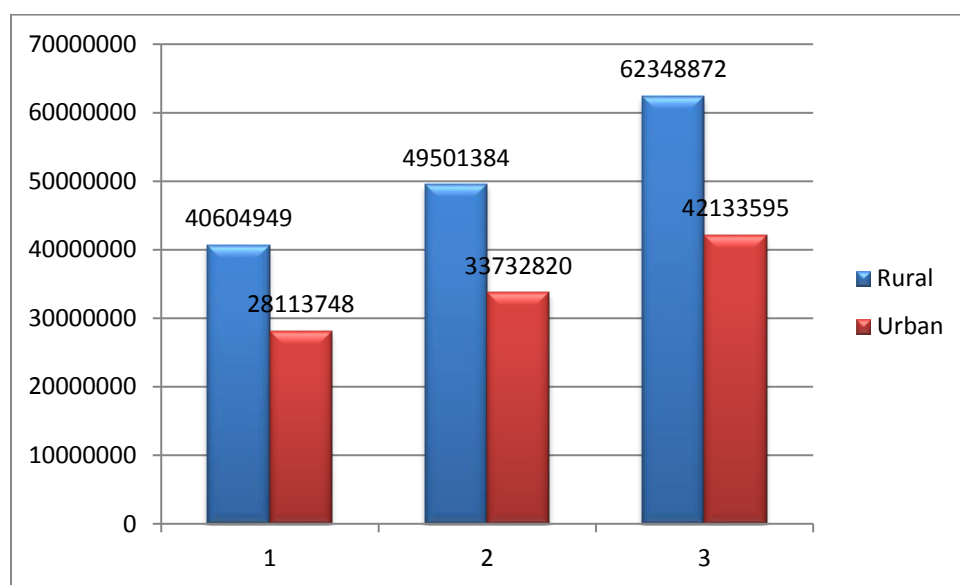
- ❖ Pie chart
- ❖ Line chart
- ❖ Bar chart

01.Total number of accounts opened in India as on 31/12/2014.

Number of no opened in India (cummulative)

SRL NO	Month	Rural	Account opened in rural area (%)	Urban	Account opened in urban area (%)	No.of Accounts (Cumulative)
1	October	40604949	59.08864803	28113748	40.91135197	68718697
2	November	49501384	59.47240632	33732820	40.52759368	83234204
3	December	62348872	59.67400444	42133595	40.32599556	104482467
			59.41168626		40.58831374	

Source :

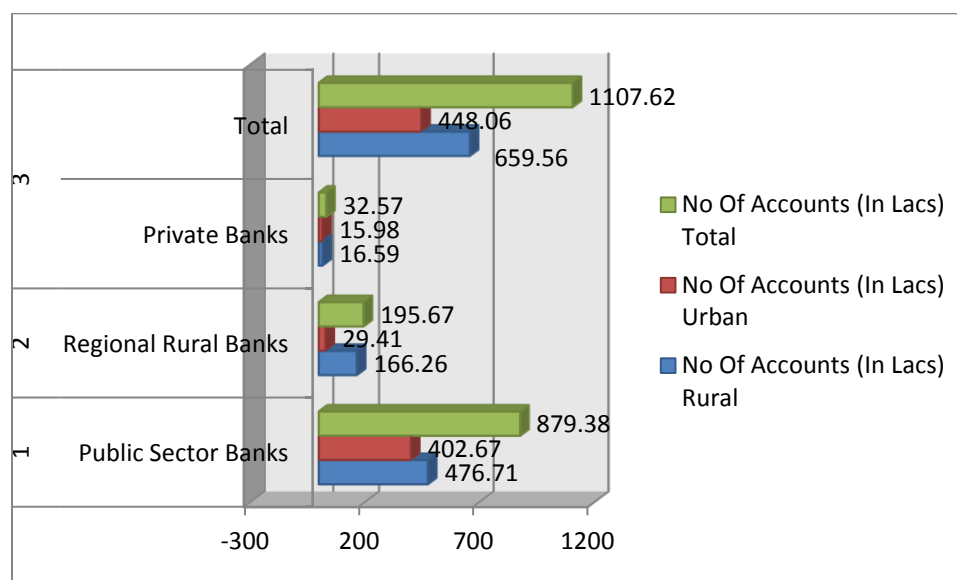
Source: www.pmjdy.gov.in

Total number of accounts opened as on 31/12/2014 was 10.4 crores comprising 6.8, 8.3 and 10.4 crores up to the month of October, November and December respectively, which is approximately 9% of the total GDP according to (**Government of India Population Census 2011**- only 58.7% of households are availing banking services in the country. However, as compared with previous census 2001, availing of banking services increased significantly largely on account of increase in banking services in rural areas) but now we can see the increase by 9% due to this pmjgy.

Also the above graph depicts an increasing trend with 1.5 crore accounts being opened in November and 2.1 crore accounts in December. The above table shows that percentage of account opened in rural places is comparatively more to urban area, as the average of account opened in rural area is 59.41% while in urban it is 40.58% , Thus we can see larger participation from the rural India.

02. Number of Accounts opened at different banks in India.

Account opened at different banks in India					
S.No		No Of Accounts			
		(In Lacs)			
		Rural	Urban	Total	percentage (%)
1	Public Sector Banks	476.71	402.67	879.38	79.3936549
2	Regional Rural Banks	166.26	29.41	195.67	17.665806
3	Private Banks	16.59	15.98	32.57	2.94053917
	Total	659.56	448.06	1107.62	100
Source : www.pmjdy.gov.in					



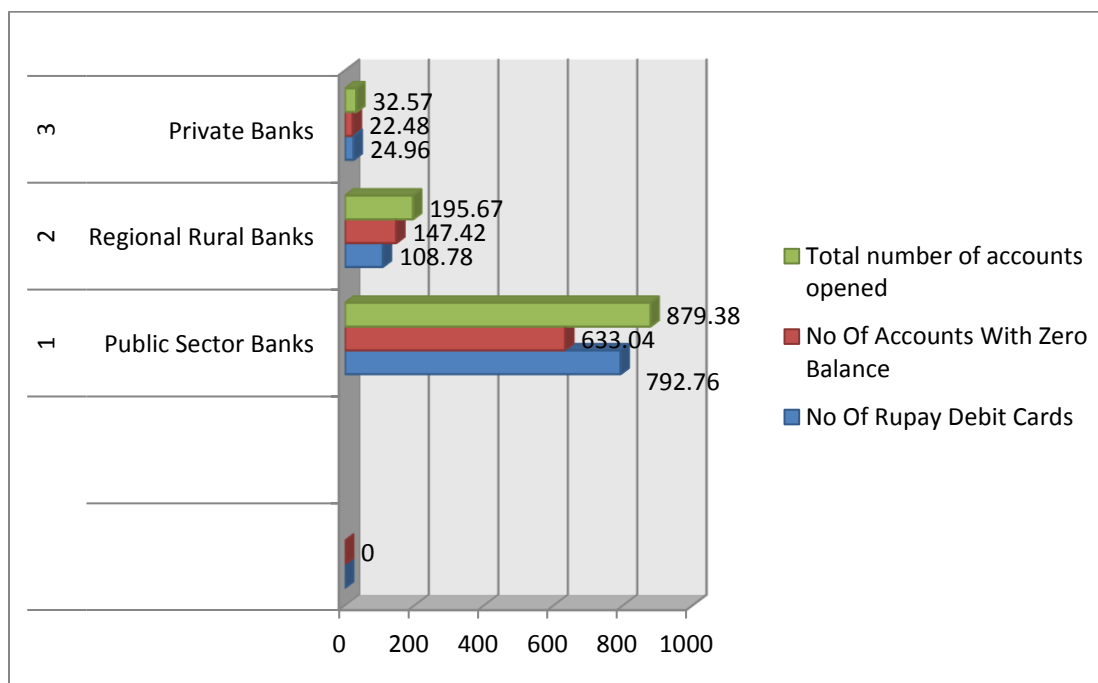
Source: www.pmjdy.gov.in

The above graph depicts that total 1107.62 lakhs accounts were opened on whole, of which public sector banks played vital role with opening highest percentage of account 79.39% followed by regional rural banks and private banks with 17.65% and 2.94%. It clearly shows that public sector banks have made a record by opening 80% of account on whole with state bank of India taking the lead with its Nation-wide presence, followed by Punjab National Bank and Bank of Baroda with large trail. Private Bank are the least contributors, which shows their lack of interest towards financial inclusion programmes. 90% of accounts opened by regional rural banks were in the rural areas due to their higher penetration in rural India. The best performing Regional Rural Banks were the banks sponsored by State Bank of India, United Bank Of India and Central Bank of India.

03. Account opened with Zero balance and Rupay card issued to customer.

Number of rupay cards issued and accounts with zero balance					
Account opened with Zero balance and Rupay card					
S.No	Banks	No Of Rupay Debit Cards	No Of Accounts With Zero Balance	Total number of accounts opened	Percentage of accounts opened with zero balance (%)
		(In Lacs)	(In Lacs)		
1	Public Sector Banks	792.76	633.04	879.38	71.98708
2	Regional Rural Banks	108.78	147.42	195.67	75.34114
3	Private Banks	24.96	22.48	32.57	69.02057
	Total	926.5	802.94	1107.62	72.11626

Source: <http://pmjdy.gov.in>



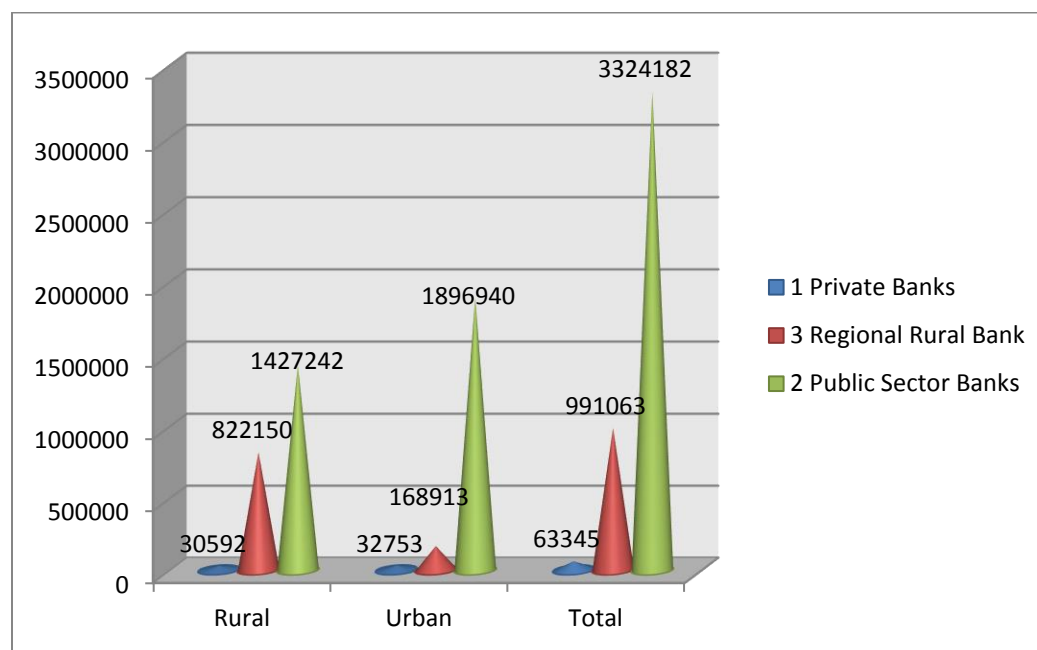
Source: www.pmjdy.gov.in

The above graphs disclose that according to scheme accounts started up with zero balance are 72.11% on an average with the total number of accounts opened on whole. This shows the

seriousness of people's participation in the drive as 28% of account holders have started with their savings deposited instantly activating their accounts. The highest percentage of zero balance account was opened at Regional rural banks (75.34) and the lowest at private banks. The graph also reveals that around 926.5 lakhs account holders were benefited with Rupay card

04. Number of accounts opened at different banks in Telangana State.

Number of Accounts opened in Telangana State					
s.no	Banks	Rural	Urban	Total	Total (%)
1	Private Banks	30592	32753	63345	1.446699
3	Regional Rural Bank	822150	168913	991063	22.6343
2	Public Sector Banks	1427242	1896940	3324182	75.91901
Total		2279984	2098606	4378590	100
Source : http://pmjdy.gov.in					



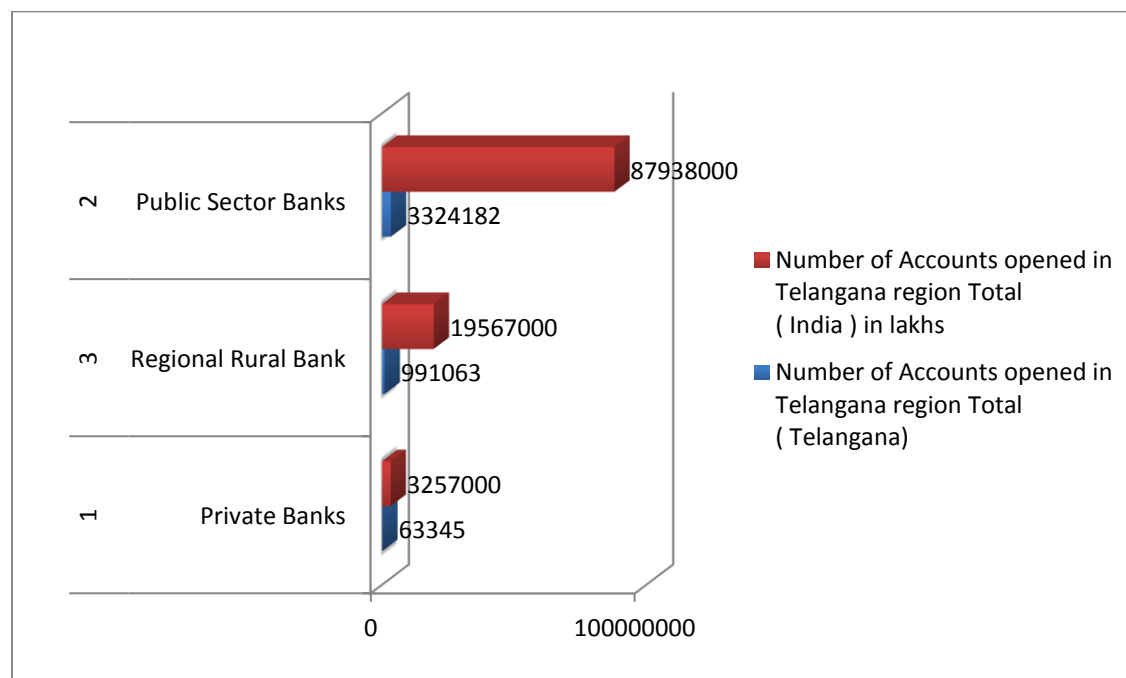
Source:www.pmjdy.gov.in

Among all the states and Union territories of India, Telangana was among top ten performers, first two being Uttar Pradesh approximately with 1.8 crore which is almost double of followed state Madhya Pradesh with 90 lakhs accounts. The People's contribution of opening new accounts in Telangana state towards pmjdy scheme was around 43 lakhs of which 75.91% of accounts

were opened with the highest number in Public sector banks followed by regional rural bank with 22.63%, where state Bank of Hyderabad played vital role in both the regions and when it comes private bank it is 1.64% where the highest contribution was from ICICI bank. It also shows highest number of accounts getting opened in public sector banks and private banks are from urban area, but when it comes to rural area the highest number of accounts were opened in Regional rural banks

05. The contribution of accounts opened by Telangana State to that of whole India.

Number of Accounts opened in Telangana State to that of India				
s.no	Banks	Total (Telangana)	percentage contribution by telangana	Total (India) in lakhs
1	Private Banks	63345	1.944887934	3257000
3	Regional Rural Bank	991063	5.064971636	19567000
2	Public Sector Banks	3324182	3.780142828	87938000
Total		4378590	3.953151803	110762000
Source: http://pmjdy.gov.in				



Source: www.pmjdy.gov.in

Telangana with a population of 351.9 lakhs (according to the 2011 census) accounts for about 3.6% percent of the total population of India, Coming to pmjdy scheme the number of accounts opened to the total number of accounts in India is 3.9% with 43.78 lakhs at all different banks in the region. When it comes to the regional rural bank its involvement is around 5.06%, followed by 3.78 and 1.94 by public sector banks and private banks respectively in opening of accounts by Telangana state.

FINDINGS AND SUGGESTIONS

Just like any other flagship program, Jan Dhan scheme's success depends on the implementation part, where the role of banks becomes even more important. The role of the government and banks is to make sure that the accounts do not go dormant after a certain time and, this is where the incentives will play a big role in making the accounts active then only the target of efficient financial circulation would be achieved. The schemes also provides insurance cover of 1,00,000/- under the lure of it, there is a possibility that multiple accounts can be opened under the single name, hence all banks needs to have single information sharing system by which this misuse can be stopped. This project largely depend on banking facilities, therefore efforts should be made to make sure banking services to reach the last mile in any form. The concept of mobile banking can be very effective here, if payment licenses are given to mobile networking companies then things would be much easier to manage. Here, also communication will play a very crucial role since, financially backward sections of the society are neither aware nor used to these services, hence they need to be aware regarding the benefits of these schemes, thus communicating the benefits, is the key. At the same time, while implementing the policy if the core objective of the scheme is not compromised, then this scheme would definitely give us results in the future.

WEBLINKS

- ❖ <http://www.pmjdy.govt.in>, January 12, 2015
- ❖ http://www.business-standard.com/article/economy-policy/pm-modi-launches-jan-dhan-yojana-1-5-crore-bank-accounts-opened-114082800764_1.html, January 12, 2015
- ❖ http://articles.economictimes.indiatimes.com/2014-09-01/news/53441944_1_bank-accounts-insurance-cover-insurance-premium, January 13, 2015
- ❖ http://www.business-standard.com/article/economy-policy/pm-modi-launches-jan-dhan-yojana-1-5-crore-bank-accounts-opened-114082800764_1.html, January 13, 2015
- ❖ <http://www.pmjdy.gov.in/AccountBalanceSummary.aspx>, January 16, 2015
- ❖ http://www.rbi.org.in/scripts/BS_SpeechesView.aspx?Id=862, January 27, 2015
- ❖ <http://www.pmjdy.gov.in/ArchiveFile/2014/12/31.12.2014.pdf>, January 27, 2015
- ❖ <http://www.pmjdy.gov.in/account-statistics-statewise-table.aspx>, January 27, 2015

- ❖ <http://www.pmjdy.gov.in/account-statistics-bankwise-table.aspx?yk5LV86RBm%2Bw8UWGuIqJ9Qj0gtLNyEU0ZBb8yLVW%2BE0%3D>, January 28,2015

AUTHOR DETAILS

NamrathaShrama,

H.no: 14-6-437, Begum Bazar, Hyderabad-12.

C.No : 9032911447/ 7702506295.

Email id- namrathasharma15@gmail.com.

WOMEN ENTREPRENEURS: PROBLEMS AND PROSPECTS: A STUDY OF TUMKUR DISTRICT, KARNTATKA

Dr. P. Paramashivaiah

INTRODUCTION:

Women entrepreneurs may be defined as the women or a group of women who initiate, organize and operate a business enterprise. The Government of India has defined a woman entrepreneurship as "an enterprise owned and controlled by a woman having a minimum financial interest of 51% of the capital and giving at least 51% of the employment generated in the enterprise to women". In India, women constitute around 48 percent of the population but their participation in the economic activities is only 34 percent. As per the Human Development Report (2007), India ranks 96th on the gender related development index of 137 nations.

The gender empowerment measures, which estimate the extent of women participation in the country's economic and political activities, rank India as 110th of the 166 nations. In the emerging complex social scenario, women have a pivotal role to play. Now women have taken up entrepreneurial role in order to create a meaning for themselves. The traditional roles of house wives are gradually changing into women entrepreneurs. Some of the factors responsible for these changes are better education, changing socio cultural values and need for supplementary income. When proper exposure, education and knowledge are imparted to them, Indian women will prove themselves to be potential productive force for the development of the nation.

In India, though women have played a key role in the society, their entrepreneurial ability has not been properly tapped due to the lower status of women in the society. It is only from the Fifth Five Year Plan (1974-78) onwards that their role has been explicitly recognized with a marked shift in the approach from women welfare to women development and empowerment. The development of women entrepreneurship has become an important aspect of our plan priorities. Several policies and programmes are being implemented for the development of women entrepreneurship in India. There is a need for changing the mindset towards women so as to give equal rights as enshrined in the constitution. The progress towards gender equality is slow and is partly due to the failure to attach money to policy commitments. In the words of president APJ Abdul Kalam "empowering women is a prerequisite for creating a good nation, when

women are empowered, society with stability is assured”.

CONSTRAINTS FACED BY WOMEN ENTREPRENEURS

SOCIAL SUPPORT:

The society plays a prominent role in entrepreneurial venture and success. Many researchers have been conducted to study the attitude and support to women entrepreneurs across the region. Some research concludes that, women received strong support from their social environment which she may have built either due to start up types requiring more social support or hesitation to enter the business formation forces.

MARKETING CHALLENGES:

The other hand women face marketing challenges in the form of competition from cheaper and substitute product, delayed payment and liberal credit terms. Women entrepreneurs neither have knowledge nor access to proper market, thus they sell their product through the middle man. This middle man exploits them and entrepreneur received for price than desired even if the demand of product is high.

CAPITAL:

Finance is a critical resource for venture creation. It is very important that women entrepreneurs have adequate knowledge and information of the various financial institutions which are rendering financial incentives and many other help for the women entrepreneurs in the region.

OPERATIONAL CONSTRAINTS:

Women entrepreneur in India not only struggle at the time of establishment of enterprises but at operation stage also, they have lots to overcome with different functional difficulties. Usually women faced two fold operational problems and she has to overcome with problems of production process like, scarcity of raw material, lack of technical skills, lack of utilities and infrastructure facility.

MANAGERIAL SKILL:

It is normally believed that women have low managerial skill. But in fact women are stronger in more logic based skills though they are weaker in self promotion and handling frustration. The increasing number of female students and their excellent performance in management education is a proof to the fact.

MOBILITY CONSTRAINTS:

Women in India have got restricted mobility, our society is a conservative society, and the career of women was limited to four walls of kitchen. Although now, women have got relatively more freedom in terms of entrepreneurial activity but also by the family members if they move out after normal hours. Though women faced lots of problems being mobile in entrepreneurial activity, the mobility problem has been solved to certain extent by the expansion of education awareness to all.

DUAL ROLE:

The most exploited individual of the day are the working women, as they have to perform dual responsibility, one at work and another as family as mother of wife. The level of women exploitation on family responsibility ground depends on her social dependence. Women also face the conflict of performing of home role as they are not available to spend enough time with their families. They spend long hours in business and as a result, they find it difficult to meet the demands of their family members and society as well. Their inability to attend to domestic work, time for education of children, personal hobbies, and entertainment adds to their conflicts.

RISK MANAGEMENT:

One prerequisites of the entrepreneurial success is risk taking. It is normally believe that women being feminist gender have low risk taking ability. They are being suppressed by the protected environment and are not allowed most of the time to take any type of risk even if she is willing or she has the ability to bear.

ENTREPRENEURIAL APTITUDE:

Many women take the training by attending the Entrepreneurship Development Programmes without entrepreneurial bent of mind. Women who are imparted training by various institutes must be verified on account of aptitude through the tests, interviews etc.

QUALITY OF EDPS:

All women entrepreneurs are given the same training through EDPs. Second-generation women entrepreneurs don't need such training as they already have the previous exposure to business.

CREDIT FACILITIES:

Women are often denied credit by bankers on the ground of lack of collateral security. Therefore, women's access to risk capital is limited. The complicated procedure of bank loans, the inordinate delay in obtaining the loans and running about involved do deter many women from venturing out. At the same time, a good deal of self-employment program has been promoted by the govt. and commercial banks.

RAW-MATERIALS:

Women entrepreneurs encounter the problems of shortage of raw-materials. The failure of many women co-operations in 1971 such as these engaged in basket making were mainly because of the inadequate availability of forest-based raw materials.

COMPETITION:

Many of the women enterprises have imperfect organizational set up. But they have to face severe competition from organized industries.

HIGH COST OF PRODUCTION:

High cost of production undermines the efficiency and stands in the way of development and expansion of women's enterprises, government assistance in the form of grant and subsidies to some extent enables them to tide over the difficult situations. However, in the long run, it would be necessary to increase efficiency and expand productive capacity and thereby reduce cost to make their ultimate survival possible, other than these, women entrepreneurs so face the problems of labour, human resources, infrastructure, legal formalities, overload of work, lack of family support, mistrust etc.

Steps taken by the Indian government to support women entrepreneurs: At present, the Government of India has over more than 26 schemes for women entrepreneurs operated by different departments and ministries. Some of these are:

1. Integrated Rural Development Programme (IRDP)
2. Khadi And Village Industries Commission (KVIC)
3. Training of Rural Youth for Self-Employment (TRYSEM)
4. Prime Minister's RojgarYojana (PMRY)
5. Entrepreneurial Development programme (EDPs)
6. Management Development programmes
7. Women's Development Corporations (WDCs)
8. Marketing of Non-Farm Products of Rural Women (MAHIMA)
9. Assistance to Rural Women in Non-Farm Development (ARWIND) schemes
10. Trade Related Entrepreneurship Assistance and Development (TREAD)
11. Working Women's Forum
12. Indira Mahila Kendra
13. MahilaSamitiYojana
14. MahilaVikasNidhi
15. Micro Credit Scheme
16. RashtriyaMahilaKosh
17. SIDBI MahilaUdyamNidhi
18. MahilaVikasNidhi
19. SBI Stree Shakti Scheme
20. NGO,,s Credit Schemes
21. Micro & Small Enterprises Cluster Development Programmes (MSE-CDP).
22. National Banks for Agriculture and Rural Development's Schemes
23. Rajiv Gandhi MahilaVikasPariyojana (RGMVP)
24. Priyadarshini Project-A programme for Rural Women Empowerment and Livelihood in Mid Gangetic Plains,,
25. NABARD – SEWA bank Project.
26. Exhibitions for women, under promotional package for Micro & Small enterprises approved by CCEA under marketing support

METHODOLOGY:

The study Gathered lists of women entrepreneurs from AWAKE, FKCCI, KASSIA and Commercial Banks in Tumkur district. These lists constitute sampling frame of the present

research after a thorough study. Women entrepreneur with a minimum of Rs.2.00.000 turnover per annum and minimum of 3 years experience were considered for the study.

The women entrepreneur's represents manufacturing and service sector including trading and merchandising activities 25 each from these two sectors have been picked up.

The present study is empirical and analytical study in nature with purposive simple random sampling.

OBJECTIVES OF THE STUDY:

1. To study the problems and prospects of women entrepreneurs in Tumkur City.
2. To propose suggestions for the study.

RESULTS OF THE STUDY:

1. 50% of the respondents are aged between 25 to 35 years and 38% between 36 to 45 years.
2. 10 % of the women entrepreneurs are divorced and 2% are single living with parents.
3. 75% of the women entrepreneurs are Hindus.
4. 35% of the women entrepreneurs are graduates and 25 % are qualified with SSLC. 8% with Post graduation and 5% with technical qualification.
5. 40% belong to joint family and 60% were from nuclear family.
6. 27% of the women entrepreneurs are with partnership and 73 are with sole ownership.
7. To be independent and empowered are the factors behind being women entrepreneurs.
8. Women entrepreneurs find difficulty in managing dual role.
9. 68% of the women entrepreneurs expressed that they feel stressed.
10. 55% of the women entrepreneurs are member in professional institutions.
11. 65% of women entrepreneurs received training to start business.
12. 65% of the women entrepreneurs felt that they need family support to manage the business.
13. 25% of the women market products through the fairs and exhibitions conducted by govt institutions.
14. 60% of the women entrepreneurs market products by advertisement.
15. 80% of the women entrepreneurs' availed loan for business and 20% with self finance.
16. 80% of the women entrepreneurs are aware about government schemes available for women entrepreneurs.
17. 73% of women entrepreneurs fall out of Income tax limits.
18. Only 30% of the women entrepreneurs are trained with management development.
19. 56% of the women entrepreneurs are aware about EDP's.
20. 85% of the women entrepreneurs are confident about the future of the firm.
21. 38% of the women entrepreneurs are finding difficult to coordinate with production/service and market/Customers.
22. 45% of the women entrepreneurs are finding difficulties in finding the markets for product.

23. 65% of the women entrepreneurs are finding difficulty in price fixation.
24. 45% of the women entrepreneurs are facing the problem of storing.
25. 70% of the women entrepreneurs are finding difficulty in branding the products.
26. 90% of the women entrepreneurs are poor in understanding market strategy.
27. 74% of the women entrepreneurs find problem in extending the market.
28. 55% of the women entrepreneurs find application of technology as big challenge in business.
29. 69% of the women entrepreneurs want government to buy the products.
30. 90% of the women entrepreneurs find male dominance in the business.
31. 100% of the women entrepreneurs expect a big subsidy in loan, and tax.

SUGGESTIONS:

1. To set up women entrepreneurs Special economic zone in the district
2. To establish women entrepreneurs park at each district.
3. To initiate a state/national/international network of women entrepreneurs.
4. Technical assistance in price fixation.
5. Government support to market the products globally and locally.
6. Regular training on MDP's and EDP's for women entrepreneurs.
7. Training on soft skills and technical skills are also needed.
8. Government to take steps for the women entrepreneurs of OBC's to set ventures through Banks.
9. Banks should not fix any education limitations for availing loan.
10. Compulsory membership in professional organisation to get technical and market support.
11. Government to organise Regular meet of women entrepreneurs.
12. Government to purchase the products of women entrepreneurs.
13. Consulting Unit for women entrepreneurs should set up by Govt.
14. Guidance cell should set up by Govt. for women entrepreneurs

CONCLUSION:

Entrepreneurship among women, no doubt improves the wealth of the nation in general and of the family in particular. Women entrepreneurship must be moulded properly with entrepreneurial traits and skills to meet the changes in trends, challenges in global markets and also to be competent enough to sustain and strive for excellence in the entrepreneurial arena. Women entrepreneurs have become a strong driving force in today's world. Women have the potential and the determination to set up, uphold and supervise their own enterprises in a very systematic manner. Appropriate support and encouragement from the Government and Society in particular and family members in general is required to help them to scale new heights in their business ventures. The right kind of assistance from family, society and Government can make these Women Entrepreneurs a part of the mainstream of national economy and they can contribute to the economic progress of India in this era of globalization.

REFERENCES:

1. Amott, Teresa L. and Julie Matthaei. *Race, Gender, and Work: A Multi-Cultural Economic History of Women in the United States*. Rev. ed. Boston, MA: South End Press, 1996.
2. Berkin, Carol, and Leslie Horowitz. *Women's Voices, Women's Lives: Documents in Early American History*. Boston: Northeastern University Press, 1998.
3. Brownlee, W. Elliot. *Women in the American Economy: A Documentary History, 1675 to 1929*. New Haven: Yale University Press, 1976.
4. Costa, Dora L. *From Mill Town to Board Room: The Rise of Women's Paid Labour*. NBER working paper series; working paper 7608. Cambridge, MA: National Bureau of Economic Research, 2000.
5. Dhameja S K (2002), *Women Entrepreneurs: Opportunities, Performance and Problems*, Deep Publisher (P) Ltd., New Delhi.
6. Dublin, Thomas. *Farm to Factory: Women's Letters, 1830-1860*. New York: Columbia University Press, 1981.
7. Dublin, Thomas. *Transforming Women's Work: New England Lives in the Industrial Revolution*. Ithaca, NY: Cornell University Press, 1994.
8. Gordon E. & Natarajan K.: (2007) *Entrepreneurship Development – Himalaya Publication House*, Second Revised edition.
9. Kessler-Harris, Alice. *Out to Work: A History of Wage Earning Women in the United States*. New York: Oxford University Press, 1982.
10. Kessler-Harris, Alice. *In Pursuit of Equity: Women, Men, and the Quest for Economic Citizenship in 20th-Century America*. New York: Oxford University Press, 2001.
11. Kwolek-Folland, Angel. *Incorporating Women: A History of Women and Business in the United States*. New York: Twayne Publishers, 1998.
12. Oppedisano, Jeannette M. *Historical Encyclopaedia of American Women Entrepreneurs: 1776 to the Present*. Westport, CT.: Greenwood Press, 2000.
13. Sunil Gupta, *Entrepreneurial Development- An Introduction*, First Edition, ISBN- 81-7881-343-2
14. Sharma Sheetal (2006) "Educated Women, powered, women" *Yojana* Vol.50, No.12.

AUTHOR DETAILS

Dr. P. Paramashivaiah

Professor & Dean,

Department of Studies and Research in Commerce,

Tumkur University, Tumkur-572 103.

KAIZEN-CARBON FOOT-PRINT CALCULATOR PROMOTION: A CASE STUDY

DrSanjeevaniGogavale

Prof Vijaya Hake

Introduction:

The term “carbon footprint” refers to the amount of carbon (CO₂) we emit individually in any one-year period. CO₂ is produced from many sources and is the primary gas responsible for Global warming and the resulting alarming changes in our climate.

What is a carbon footprint?

The term carbon footprint is commonly used to describe the total amount of CO₂ and other greenhouse gas emissions such as methane (CH₄) for which an organization is responsible. An organization's footprint includes both direct emissions sources (e.g. direct use of fuels) and indirect impacts (e.g. emissions from the extended supply chain). When calculating an organization's footprint it is important to include the full range of emissions sources so as to provide a comprehensive assessment of the organization's impact.

Why calculate a carbon footprint?

There are normally two reasons for an organization to calculate its carbon footprint:

1. To use as a management tool to reduce emissions over time
2. To report the footprint accurately to a third party.

Prime Minister Manmohan Singh has mentioned in his speech that climate change has become an urgent concern across the globe, ways and means should be developed to reduce India's carbon footprint as it would be among the nations to be "most seriously" impacted.

"We need to develop ways and means to reduce our carbon foot-print through technological innovation. In our country, more than 50 per cent of power comes from coal-based generation, which is a major emitter of greenhouse gases,"

Reckitt Benckiser has released its second annual sustainability report validated by PriceWaterHouseCoopers. A statement by Reckitt Benckiser said it has reduced per unit dose in the carbon impact across its products' lifecycles by 11%.

So it is very important aspect & It is a corporate social responsibility.

Organization: Aadishakti Foundation has initiated number of short term and long term improvement projects through QC, kaizen, QMS, EMS, Safety drives, & projects with the Vision of BEST – Behavioral effectiveness and systematic transformation. Every year we have received

an excellent Award in the national Conventions since inception (year 2005). During NCQC 07 we have achieved par excellent award. In year 2010 in ICQC two technical papers were presented, & we have achieved Gold awards.

Project: Carbon Foot print calculator promotion: by Team Iccha - The Circle formed in April 12th 12, It is a Trio team, where in Aadishakti Mentors, Samuchitenvirotech, VIM team have joined. Meetings are conducted on every Thursday; Participation 100%, Team leader is Avinash.

Explanation of the concept:

Theme finalization:

With the crises of global warming we wanted to promote the concept of protecting environment by reducing adverse impact. The awareness of the impact and the monitoring of the impact was possible through **Carbon Foot print calculator promotion**.

This was the new idea a small improvement for betterment of self and society the kaizen. **Kaizen is to introduce concept of CarbonFoot print calculator promotion using QCC and Kaizen.**

Identification of the problem:

Brainstorming –

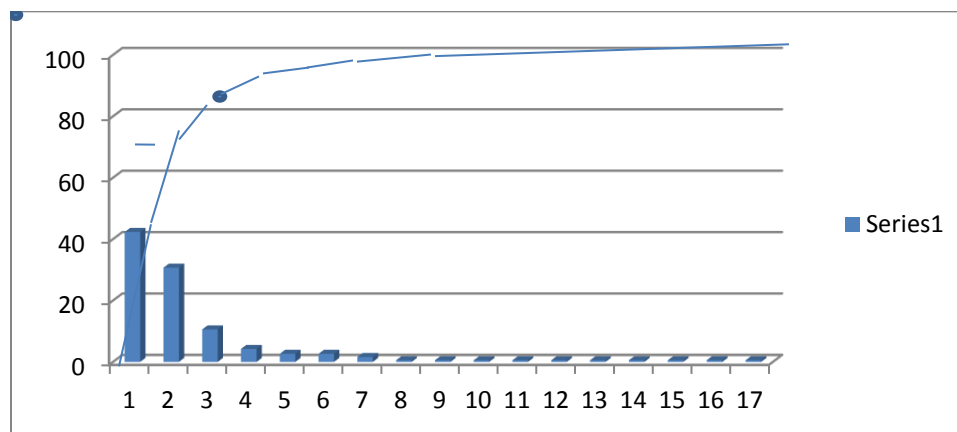
Team has brain stormed to identify the problems related for non effective control of impact on environment and also categorized into attribute as follows.

Individual	Society	Government	Resources :
<ul style="list-style-type: none"> • Attitude • Status • Lack of awareness. • Not for me approach • Fear of being ridiculed • Why think of tomorrow • I'm not contributing • I'll start from tomorrow • My family does not expected • Lack of commitment 	<ul style="list-style-type: none"> • No fixed guideline. • Too many people to control. • No support on doing extra. • Everyone are busy with other task. • No adequate time. • Who will follow the norms? • Why not let the government do it. • We do not 	<ul style="list-style-type: none"> • Lack of role model to emulating. • No platform to share. • Easy to manage • Bribing is easy than compiling • Not a priority • Lack of budget • No staff • No role model • No technology 	<ul style="list-style-type: none"> • Lack of deployment method. • Concept of sharing, caring, leading was missing. • Laws are not known • Alternate energy is costly • Product are not readily available • Repairing is a problem • Use is not easy • Waste disposal is a problem

<ul style="list-style-type: none"> • I forgot • Nobody told me • I can't do it because of health • My topic is important • It will not add value • Lack of discipline • Why do everyday • Plastic bags are ready to use • One bag won't matter • Lack of self control 	<ul style="list-style-type: none"> • have space to share such project. • No fixed budget. • No fix staff. • No co-ordination method. • No extra set-up. • No extra time, • No method to deploy it. • No resources 		<ul style="list-style-type: none"> • Government give subsidy only for a short time • Lack of sustainable ideas
---	---	--	--

Selection of the project:

Allocating and re arranging the by categorization further causes we could identify 17 major attributes for which data is collected and Pareto is drawn.



We did a Pareto analysis to identify the main most repeat concern as per the data collection based on survey given to all. The Pareto showed the main concern as lack of awareness and Focused Mentoring.

Definition of the problem:

Most of the drive on environment training and project in school were not effective. NGO like Samuchitenvirotech and corporate like green build were too busy to promote this. We thought this project can be promoted as a social initiative. A pilot project was launched in VIM. The Kaizen here is to use MBA students to spread the concept of environment and convert them in protecting environment called earth guard here after.

Plan of action:

Activity	Target
Develop basic teams and start training	15 th April 12
Brain storm and identify projects and depute earth guard and mentors	15 June 12
Actual monitory of the projects and impacts that of	June End 12
Share the problems/ achievements encountered with rest in the kaizen team	July 09-13
Validate it in different school	Whole academic year of -12
Follow up visit and feedbacks	14 July 12 onwards

SR. NO.	ACTIVITIES	NO. OF WEEKS															
		4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th	12 th	13 th	14 th	15 th	16 th	17 th		
1.	Definition of Problem																
2.	Analysis of problem																
3.	Identifying the causes																
4.	Root cause finding																
5.	Data analysis																
6.	Developing solutions																
7.	Foreseeing possible resistance																
8.	Trial implementation and check performance																
9.	Regular implementation																
10.	Follow- up/ Review																

Pre project Situation:

1. Environment is considered as filler, allocated the free time.
2. The visiting faculty was for leave management, as added resource.
3. Impact monitoring was subjecting and not linked to money saving
4. Simple changes creating future was demonstrated

Short term impact: -

Individuals were not aware of the impact cost by them. They were carried away with false ideas of presentations and not bother about tomorrow.

Long term impact:-

The lack of involvement, lack of mentoring, lack of understanding the concept may lead to a behavior that may create many problems and ill effect in self, families & society. Society may create problem of resource non availability.

Objective:

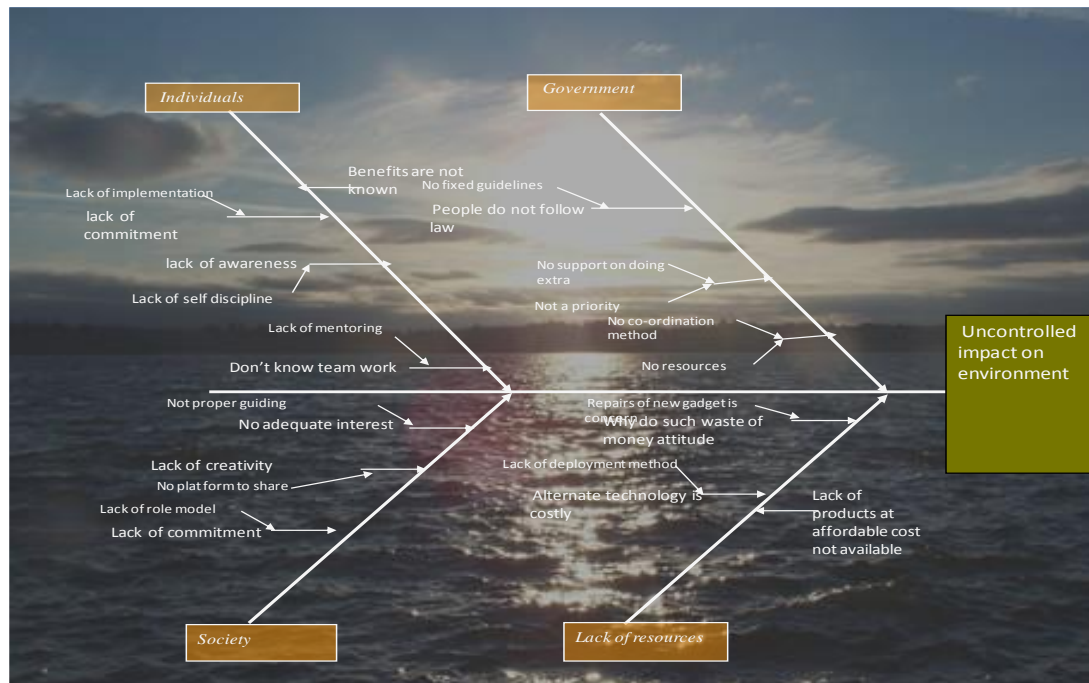
1. Identify different projects/methods to promote awareness of Carbon foot print calculator by June 12 end.
2. Identify the method to evaluate that students have learnt it, & minimized the impact by July 12 End.
3. Validate the same at list with one more team / school by mid August 12.

Target

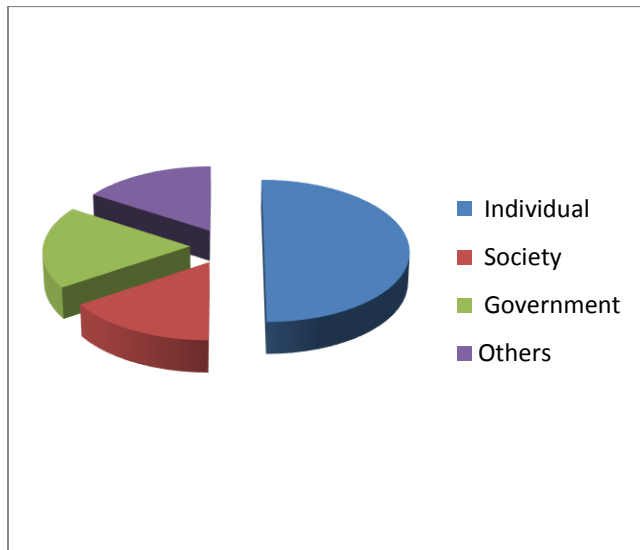
1. Brain storm in developing concept with them so known to unknown journey is initiated.
2. Identify the change required in them in a open class, and allow them to use Kaizen methodology for the change management.
3. Help them in defining the check sheet for monitoring the change in a group.
4. Monitor and mentor where in the problems are encountered, & award for achievers.

Analysis of the problem: why -why analysis to get the root cause

1. Lack of concept of Carbon Foot print calculator promotion– Why
2. Children were not interested – why
3. No one developed/ provoked their interest – why
4. The idea of promotion not initiated by any one – why
5. This was never thought of before– Why
6. No adequate methodology for monitoring the performance mentoring, resources, and support from school / college/ society or any other way was available.



So we decided to mentor the students to drive this noble idea which will not only shape their life, develop a positive attitude, utilize their energy, to save the mother earth.



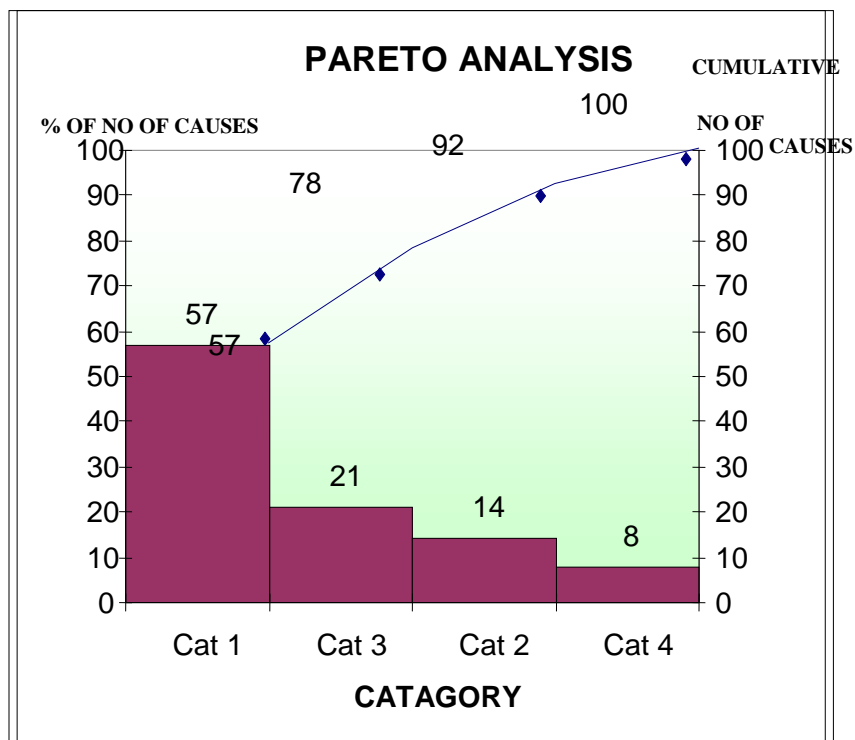
ACUITAS-The Journal of Management Research

The analysis of the problem in 5 W 1 H as to develop Solution -

Activity	Cause of concern	Probable solution
<u>Why</u> previously such education not successful	The impact was not known	Importance of the conservation though known, the methods were not known, a possibility to use Kaizen methodology for the self change management could be used.
<u>When</u> this can be implemented.	The time allocated to us, as otherwise all are busy in their schedule.	In addition to children time slot the mentors slot Thursday in evening 7 to 8.30 is the meeting time so same can be used.
<u>Where</u> it needs to be implemented	In pilot batches to start with in VIM	A pilot project identification with commitment from College team.
<u>Who</u> will be involved	The teachers team Aadishakti mentors and coordinators from College	All the teachers coordinated by Avinash, Dr.Karve from Samuchit got involved.
<u>How</u> it will be monitored for its effectiveness	The involvement, reach, effectiveness & sustainability are the parameters to be monitored where in the method for monitoring and criteria were difficult to be defined.	Target was given: minimum 3 projects by July end & sustainability was to be monitored all throughout the years. Feedbacks to be maintained in writing, Students participation logs could be a tool to monitor their effective involvement.
<u>What</u> is the focus	Use of 3R and other identified project implementation, for gas, electricity, & Petrol reduction.	Selecting & mentoring a proper project and theme for learning and team work than just for submissions, reducing the impact & getting Children involved was focused.

As there is no major attributor again with correlation of mentors influence new attributes were defined & data was collected to draw a Pareto.

Mentoring effectiveness	18 –Cat 1
Mentors availability	39 - Cat 1
Mentors credibility	6 Cat 2
Mentors rapport with children	8 Cat 2
Children's creativity	7 Cat 2
No Goal Clarity	3 Cat 3
No Commitment	3 Cat 3
No Involvement	3 Cat 3
No Resources	3 Cat 3
Parents involvement	2 Cat 3
School's approvals	1 Cat 4
No understanding	1 Cat 4
Lack of effective method	1 Cat 4
No sharing	1 Cat 4
No concern	2 Cat 4
Other situations as defined	2 Cat 4



From the Pareto it was evident that mentoring was the main contributor

1. a) Development of Solutions :

We decided to use the mentoring by Aadishakti to overcome the concern. As every Thursday we were meeting we took this as an opportunity to develop & mentor their kaizen team for promotion of environment friendliness.

Brainstormed for methods and check sheet for monitoring & self control for various themes related to self control in minimizing impact on our actions on environment was identified. Alternate project to minimize the same were identified.

b) The focus was:

Resource conservation Control of electricity bill using meter readings by use of alternate products like LED and CFC in place tube lights.

2. **Change of life style:** Not to use iron cloths unless essential, not to use cars unless essential.

Pool cars etc

3. Impact society by training and promotion of Green products

Plan of Actions:

Activity	Target
Develop basic training of impacts and projects to minimize the impacts on and identify teams	15 th April 12
start monitoring the impact by Carbon footprint calculator	15 June 12
Plan competitions for reduced impacts	June End 12
Develop & monitor the check & self declaration sheets	July 12-13
Award the changes and help the defaulters	Whole academic year of -12
Follow up visit, and feedbacks to other classes	14 August 12 onwards

Probable problems anticipated:

1. The students may not respond favorably as this may affect their regular study.
2. Budget for promotion may be a problem.
3. The parents may not like the idea of focusing on such extracurricular activities.
4. Mentors may not be available
5. Students may give up as this will involve lot of self control
6. The permission for promotion may be concern
7. However during execution, as this was carefully mentored activity students started enjoying it. Even parents liked this idea & all support was extended for promotion.

Trial run& performance monitoring

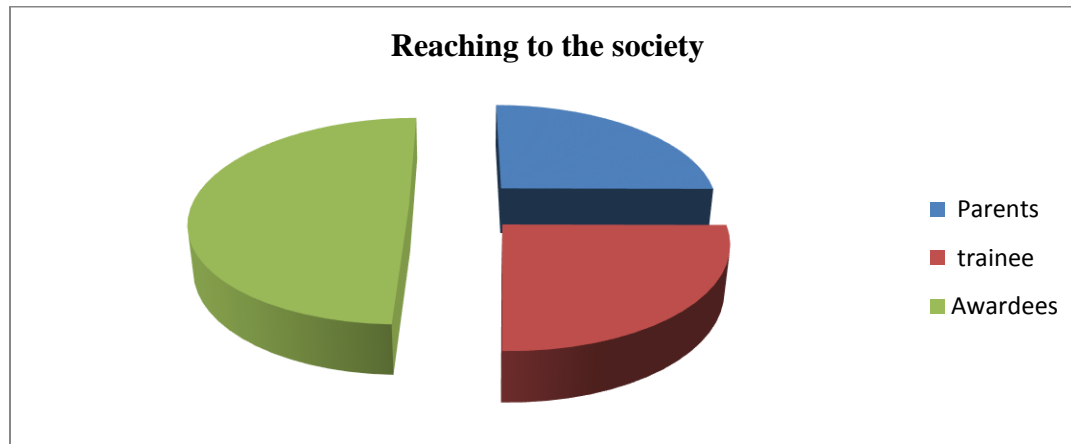
VIM all MBA students, teachers & staff got involved, in training and implementation . Dr. Karve demonstrated the use of calculator and Green build promoted and sponsored the projects.

Data classification for the teams we could reach:

Number of individuals involved - 410

Number of students participated in competitions= 180

Number of Parents/ teachers involved = 405



Checking & Concerns : Although the reach can be still increased, a pilot drive is initiated and all teachers , students and parents are happy, if for some reason we could not go, there are enquires , why we have not gone..

Comparison before and after:

Children were not aware of the power of small changes and the impacts that of on environment	Now they think twice before printing
Were creating negative impact	Now are positive impact contributors
Students never listen to elders and follow instruction and cost control was parents' complaint	Parents are happy as students are more self controlled and follow instruction and not only control cost are now guarding Earth...

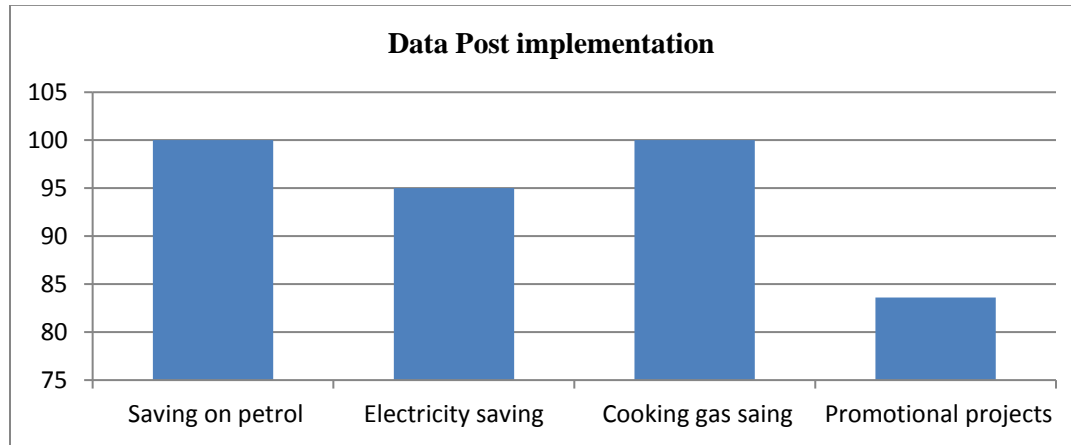
Act & Regular implementation:

Training and copy of Carbon footprint calculator was given to all & the monitoring of impact was done by all, under mentoring of Aadishakti.

Data analysis of the feedbacks from the children

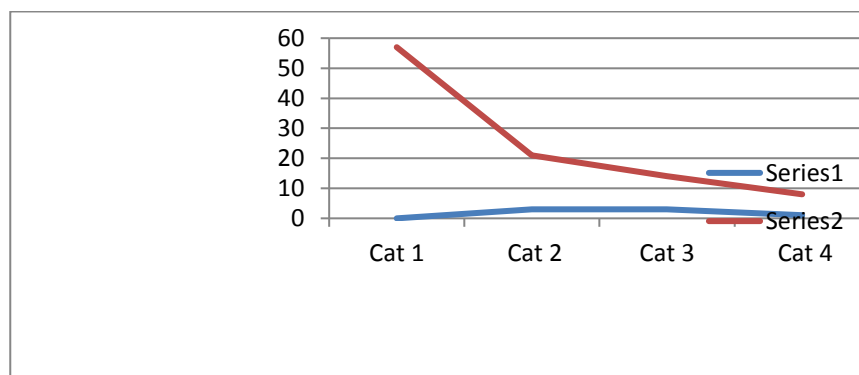
Number of projects initiated by the students	379
Projects on petrol saving	100
Projects on electricity saving	95
Project for Cooking gas saving	100
Project on concept promotion	84

All agreed that their goal in life and to use the values learnt.



Sr. no.	Activities	No. of weeks														
		4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th	12 th	13 th	14 th	15 th	16 th	17 th	
1.	Definition of Problem															
2.	Analysis of problem															
3.	Identifying the causes															
4.	Root cause finding															
5.	Data analysis															
6.	Developing solutions															
7.	Foreseeing possible resistance															
8.	Trial implementation and check performance															
9.	Regular implementation															
10.	Follow- up/ Review															

Petrol	0	100
Electricity	3	21
Cooking Gas	3	14
Promotion	1	8



Tangible benefits:

Could reach to 410 students by direct training
 Could reach to 405 parents by associated / secondary training
 Could complete the 379 projects

Non tangible benefits:

Developed earth guards
 Introduce to green concept
 Stage confidence and team work in children increased.
 Could get students involved in saving mother earth

Re occurrence prevention:

The Thursday meeting will include the school & related reviews also.
 Mentoring for the other values related problem will be the agenda.
 A speak up concept and revised check list for the students started.

Fool proofing:

Mentors will continue being available every Thursday for review.
 The remarkable projects will be promoted on web sites.

Follow up:

Promote the similar concept in other schools./ Collages * corporate. Mr. Shitole from BIL tech building element has agreed to sponsor promotion of such projects. Mr. Avinash has joined for some eco friend Cooking material and building material drives.

Feedback abstract:

Few selected reactions from the students -
 We know we can do it.
 We will be positive in every aspect.

We will like to save earth
You have shaped our future.

References:

Manmohan Singh, (2013), Need to develop ways to reduce Carban Foot Print, The Economic Times.

Reckit Benckiser,(2011), ReckitBenckiser:Has reduced 11% carbon footprint, The Economic Times.

www.carbondecision.ie

AUTHOR DETAILS

DrSanjeevaniGogavale

sanjeevanigogawale@gmail.com

Ph 9422522322.

Prof Vijaya Hake

Tilak Maharashtra University & Faculty,

Vishwakarma Institute of Management.Pune

vijayahake@vim.ac.in.

Ph 8975964212.