# Impact of Income on the Insurance Potential-A Case Study of Rural Sector of Jammu and Kashmir State

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#### Abstract

The Indian Insurance industry is flourishing with several national and international players competing and growing at rapid rates. The globalisation has allowed the Indian insurance sector to flourish as there is huge market potential for insurance in India and this potential will definitely increase further in future. The survey was conducted from the state of Jammu and Kashmir using primary and secondary sources of data. This study has explored and assessed insurance potential in rural areas of Jammu and Kashmir State by analysing relationship between disposable income and Insurance potential. Looking at the source of information for households, it was found that television is the primary source for both insured and uninsured households. Other sources of information are friends, relatives and neighbours, news papers, radios, and transistors.

Keywords: Households, Insurance, Information, Potential, Regulation.

#### INTRODUCTION

The insurance industry affects money, capital markets and the real sectors in an economy, making insurance facility necessary to ensure the completeness of a market. It is an industry with strategic importance for any country as it contributes to the financial sector (and hence the GDP) as well as confers social benefits on the society. Insurance is defined as a cooperative device to spread the loss caused by a particular risk over a number of persons who are exposed to it and who agree to ensure themselves against that risk. (Mishra, M.N-2005) Risk is uncertainty of a financial loss. The insurance is also defined as a social device to accumulate funds to meet the uncertain losses arising through a certain risk to a person injured against the risk. According to the U.S.Life Office Management Inc. (LOMC), "Life Insurance provides a sum of money if the person who is insured dies whilst the policy is in effect."

A potential customer is any entity or person who has ability to purchase insurance on the basis of his income. More ever potential customer is one who has desire for insurance, could be convinced to buy, advertised to, read your ad, Hear your radio ads, or your story about a product. Anyone has a need for insurance which you may be able to fulfill and accordingly buys an insurance policy to safe guard his life and property. (O P Dubey, 2001, Dr. Govind P. Shinde , 2011). Every person has unlimited insurable interest on his own life. From this viewpoint every individual is a prospect for life insurance. In reality, financial status effectually limits this potential, not only because of the practical consideration of insurable worth of a person to the insurer in financial terms but more so owing to the prospect's capacity to pay insurance premium after meeting other pressing needs. Then again, there are many practical factors affecting 'insurability', such as-old age, past and present illness, various physical and mental impairments (including defective genes), etc. Apart from these very basic aspects, at the time of assessing the real potential for life insurance business it is important to consider the feasibility of reaching all these prospects with available resources and also the profitability of providing life insurance to them - in other terms, the cost and profitability of exploiting the insurance potential otherwise calculated. (O P Dubey 2001, Roy and Vishal, 2007, Tone, K. et al 2005).

A potential customer is a complex term to ascribe, however for the purpose of this study a potential customer has been defined any individual whose annual income exceeds Rs.1, 20,000 and affords to subscribe his premium to sustain his policy till maturity or death because on average the house hold whose income exceeds Rs. 1,20, 000 has capacity to save in insurance. It does not include the customers who surrender their policy before maturity. Further the study describes potential customer any person whose economic strength and viability permits to safeguard life and property against the natural and manmade perils. The Whole world can be a potential customer for insurance if an insurance company has a product or service and it can get the word to them about it. India is a vast country and with its huge population more than 100 crore, is the second largest in the world. As such, in terms of population, India has immense potential for extending insurance cover. But to make a realistic assessment of this potential, apart from the very important factors like age group, income level, sex-wise distribution, literacy level, etc., this study has necessarily considered factors and other relevant factors like social structure, composition of population, etc. in various parts of the areas as also many 'invisible' factors like

religious faiths and social values. Real assessment of the insurance potential of our country is also a very complex exercise due to wide 'variance' in all aspects of Indian circumstances, and any crude estimate for the Indian market without a carefully refined analysis can only be misleading.

#### **Review of Literature**

Bhat, (2005) Professor, Finance and Accounting at IIM, Ahmedabad writes that the penetration of insurance critically depends on the availability of insurance products and services. He further explains that huge untapped market, proliferation of schemes, new product innovations, perception of insurable risks of Indian consumers, competitive pressures arising from integration of bank and insurance, impact of information technology, and the role of insurance industry in financial services industry are some of the forces which shape the competitive structure of the insurance industry. Based on empirical studies, Krishnamurthy (2005) confirms that awareness of insurance in India has improved substantially. A recent nationwide survey of over 60,000 households (Shukla, 2007) by National Council of Applied Economic Research (NCAER), New Delhi and Max New York Life has revealed awareness about insurance is quite high in India. The study clearly indicates that there is a definite scope for increasing the volume of savings in life insurance even at the existing levels of income, given its distribution and the employment structure. The world insurance report (2008) reveals that in India, reforms have helped to foster growth, but the insurance sector still remains mostly under-penetrated. It further finds that the average number of policies (life and non-life) held by an Indian consumer is just 1.33, compared with the average of 5.2 policies per client for mature markets. Thus the penetration of insurance is very low in India. Kannan and Thangavel (2008) state that life insurance has today become a mainstay of any market economy since it offers plenty of scope for garnering large sums of money for long periods of time. A well-regulated life insurance industry which moves with the times by offering its customers tailor-made products to satisfy their financial needs is, therefore, essential if we desire to progress towards a worry-free future. Sastry (2010) says that India is among the important emerging insurance markets in the world and that life insurance will grow very rapidly over the next decades in India. He reveals that the major drivers of this growth include sound economic fundamentals, a rising middle class, an improving regulatory framework, and rising risk awareness. Presently, life insurance is seen as a mechanism through which investors can receive a tax break only. Often, these considerations act as incentives to buy life insurance policies but people need to look at insurance as a long term saving instrument. There is a great need to study the awareness of the society on insurance to improve this situation. Though there are studies from other parts of India on this topic, there is hardly a study in Tamilnadu which focuses on the awareness of insurance among the public.

#### **Research Methodology**

The present study is of analytical and exploratory in nature. Accordingly, the use has been made of primary as well as secondary data. The secondary data have been collected mainly from IRDA, Journals, Financial Express political weekly, various newspapers and other literature available in the field.

#### **Objectives of the Study**

The present study pursues the following objectives.

- To assess the Potential of insurance according to household income groups in rural areas of J and K state.
- ▶ To determine the Source of Information for Insurance available to rural population.
- > To suggest measures for expansion and exploration of insurance in rural areas.

#### Hypotheses

- The study attempts to verify following hypotheses.
- There is significant relationship between disposable income and market potential of insurance among the rural households in Jammu And Kashmir State.

#### Geographical coverage of study area.

A primary survey of households was undertaken in major districts and covering only rural areas, in Budgam, Baramulla, and Annatnag in Kashmir division, ,Dodha, Udhampore and Kuthua in Jammu division. The remaining district of the state's population, were left out due to certain difficulties.

### Sample Design

A three-stage stratified sample design has been adopted for the survey to generate representative samples. Sample districts, villages and households formed the first, second and third stage sample units respectively for selection of the rural sample. Sampling was done independently within each district and estimates were generated at the district level.

#### Selection of the Sample

**Stage 1. Selection of districts**: From two divisions of state, a quarter of 6 districts were selected. The sample was drawn after consultation with research scholars, experts and insurers.

**Stage 2. Selection of villages**: Five sample villages were selected randomly from each district by the Simple Random Sampling.

**Stage3**. **Selection of households:** In each selected village, households were chosen by the equal probability sampling approach for the purposes of listing and preliminary survey. During the preliminary survey, the listed

#### households were stratified by:

(i) Insured and non-insured categories;

(ii) Principal source of income.

The households to be stratified were divided into two categories, namely: (a) insured, where at least one member of the household possesses a life insurance policy; and (b) uninsured, where no member of the household possesses a life insurance policy.

On the basis of this sampling design in rural areas, the realized sample was of **1200** households. The sample consists of Insured and uninsured population. Out of total sample **950** were uninsured and **250** were insured.

The primary data collection was mainly carried out through a one visit sample survey with prestructured questionnaires. The questionnaire was administered as schedule to the respondents as most of the respondents were unable to understand the questionnaire. The schedule was explained to them in their native languages.

#### Questionnaire Design.

A structured Questionnaire was designed to collect the primary data. The interview schedule was kept respondent friendly to make a quality of questionnaire. The questionnaire was developed by identifying the variables based on literature review and the objective of the study.

#### ANALYSIS AND INTERPRETATION

#### Occupation and Education and age profile of sample Respondents.

The distribution of households by occupation, level of education and age is shown in Table 1.1. The occupation which forms the major source of income for the family has been taken as the occupation of the household. (**O P Dubey, 2001**) Similarly, the highest level of education of any member in the household has been taken as its level of education. This was done because, even where the head of the family is not literate, the younger members might be well educated and, being aware of insurance, become responsible for the household becoming insured. It can be seen from Table 5.2 that a high percentage of the insured households are: (i) self-employed to the extent of approximately 52 per cent, comprising 9.67 per cent in agriculture and 32.28 per cent in Non-agricultural work; (ii) salaried, comprising 34 per cent; and (iii) engaged as labour, comprising less than 13 per cent. As regards uninsured households, the position is: (i) approximately 38 per cent belong to the labour force, comprising five per cent in agricultural labour and 33 per cent in casual labour; (ii) approximately 41 per cent are self-employed, comprising 16.2 per cent in agriculture and 24.81 per cent in non-agricultural work; and (iii) only one-fifth are salaried or earn regular wages. The irregularity in the earnings of uninsured households could be a major impediment in their opting for insurance, as it involves regular payment. **Table 1.1** 

Occupation					-
		Un-Insured	Insured		Total
Occupation	Percent	Frequency	Percent	Frequency	
Self-employed in agriculture	36.28	313	34.98	77	390
Agricultural labour	3.56	30	11.09	25	55
Casual labour	9.52	82	28.34	62	144
Self-employed in non-agriculture	24.64	312	13.13	28	341
Regular wages and salaried	25.63	221	11.59	25	247
Others	0.36	3	0.87	2	5
Total	100 865		100	220	1085
Education					
Illiterate	1.41	12	4.20	9	21.19
Up to primary school	7.87	68	16.10	35	103
Up to secondary school	33.66	291	41.21	91	124
Higher secondary school and above	57.06	493	38.49	85	578
Total Number of Households	100	865	100	220	1085
Age	·				
Below 30 years	21	182	40	88	270
31-40 years	32	277	32	64	342
41-50 years	40	346	21	46	392
51-60 years	4	34	4	9	43
Above 60	3	26	3	6	32
Total	100	865	100	220	1085

#### Occupation, Education and age profile of sample Respondents.

Source: Field Survey

As regards the highest level of education of households, nearly two-third of those insured are educated at least up to higher secondary school, but much lower for the uninsured at approximately 45 per cent. On the other hand, illiterate households account for approximately one per cent of the insured group, but three per cent of the uninsured group.

# Potential Customers (Perception of Uninsured Households based on their income and the amount they could contribute for insurance)

The uninsured households were asked if they would contribute some amount of their income for insurance. In the case of those who answered in the affirmative, the amount they could contribute per year was noted. Table 1.2 provides the distribution of such households based on income categories. On the whole, 38.23 per cent households answered in affirmative. The average contribution per year increased with increase in the income category and ranged between Rs 1,706 and Rs 11,641 all households; this gives the exact market potential of insurance which is the main objective of this study.

Table	1.2
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#### Uninsured Households based on their income and the amount they could contribute for insurance.

Households Income Class	No. Of Households t	Average Amount Per	
	Percentage Frequency		Year (Rs) they could
			contribute.
Less than Rs 10,000	22.39	194	1706.35
Rs 10,000 to Rs 16,000	27.70	240	2197.22
Rs 16,001 to Rs 27,000	26.51	229	3938.65
Above 27	23.40	202	11641.07
Number of households	100	865	

Source: Field Survey.

#### **Source of Information for Insurance**

For both insured and uninsured households in all areas, the insurance agents are the most important source of information on insurance shown in Table 1.3. Thus, as high as 70 per cent of insured and 45 per cent of uninsured households have mentioned agents being major source of information on insurance. In majority of cases more than 90 per cent of the households are dependent on agents for information. Hence, for both insured and uninsured households, the next two important sources of information are friends and relatives, and the visual media. As far as insured households are concerned, while 38 per cent are dependent on friends and relatives, for 39 per cent of the households, visual media is also the major source of information. As far as uninsured households, radios and transistors are important sources of information. The households' dependence on both visual and print media for information is marginally higher in the some areas. The print media has been mentioned as 18.8 percent in uninsured people and 19 percent in insured people by a high percentage of households in some areas of the state.

Source of Information on Insurance.							
Major source of information on	Uninsured Households		Insured Households				
insurance	Frequency	Percentage	Frequency	Percentage			
Print media	163	18.8	42	19.0			
Visual media	294	34.0	59	27.1			
Radio	178	20.6	45	20.5			
Internet	96	11.1	2	4.4			
Banks	50	5.8	13	5.8			
Friends/relatives	341	39.4	91	41.3			
Agents	598	69.1	92	42.0			
Number of households	865	Can't be equal to	220	Can't be equal to			
		100		100			

Table 1.3

Source: Field Survey

#### **Testing Hypothesis**

The hypothesis raised by the study was that "There is significant relationship between income and market potential of insurance among the rural households in Jammu and Kashmir state" To verify the hypothesis Chi Square-test was utilized. The data was all nonparametric. With the help of Chi-square test we were in a position to know whether a given difference between actual and expected frequencies has been caused by a chance or it has resulted because of inadequacy of the theory to fit the observed facts (Gupta, 1994). The values of  $\chi^2$  obtained were thus compared with the table value at 3 degree of freedom at 5% level of significance. The hypothesis to be tested is given as follows:

The overall frequencies obtained from the respondents were tabulated in the below given table as

observed frequencies. The respondents were asked 'how much amount they could contribute for insurance investment 324 out of 865 told Rs.1706, 316 told 2,197, 194 told 3,938 and 31 told 11,641. Since the number of choices given to respondents was four, therefore the degree of freedom was lessened by 1. The level of significance was fixed at 5%. The test static 103.675 obtained was compared with the table value at 3 degrees of freedom which is 7.815.

	Chi-Square Distribution of income an	a In	suran	ce pot	ential		
Potential of Insurance							
Income Class	The amount one could contribute for insurance	0	Е	O-E	(O-E) <sup>2</sup>	(O-E)²/E	
Less than 10000	1706	324	216.2	107.8	1162.84	53.75	
10000-16000	2197	316	216.2	99.8	9960.04	46.06	
17000-27000						2.279	
	3938	194	216.2	-22.2	492.84		
27000 and above	11641	31	216.2	185.2	34299.04	1.586	
Total	•	865					
						Σ(O-E) <sup>2</sup> /E=103.675	

Table 1.4
Chi-Square Distribution of income and Insurance potential

#### Source: Computed on the basis of table 4.23

The sample distribution was divided by 4 in all cases to obtain the expected frequencies, i.e.; 865/4=216.2. Thus the calculated value of  $\chi^2$  is 103.675. Degree of freedom= (n-1) =4-1=3. For 3 degrees of freedom at 5% level of significance the table value of  $\chi^2$  is 7.815, which is lesser than the calculated value of  $\chi^2$ . Therefore hypothesis stands rejected and alternate hypothesis stands accepted. It is therefore concluded that there is a significant relationship between disposable income and Insurance potential.

#### **Correlation and Insurance Potential**

To verify this hypothesis, Karl Pearson's correlation Method has been utilised. Data obtained from uninsured respondents in respect of their income figures and the amount they could contribute towards insurance as premium was used. Income class(x) and contribution amount(y) are shown in Table 1.5. The uninsured households were asked if they would contribute some money for insurance. In the case of those who answered in the affirmative, the amount they could contribute per year was noted. The results have been shown above. The average contribution per year increased with increase in the income category and ranged between Rs 1,706 and Rs 11,641 all households; this gives the exact market potential of insurance which is the main objective of this study.

Our main objective is to test whether or not there is a relationship between these two. The statistical tool used here is Pearson's product moment coefficient of correlation denoted by r. This coefficient gives an indication of the strength of the linear relationship between two variables.

In our case, the two variables are:

## 1. Income Class(x)

2. Potential(y) (The amount one could contribute towards insurance)

Table.1.5									
Correlation Distribution of income and Insurance potential									
Income Class	Potential	Mid Point(x)	dx=(x-a)	dy=(y-a)	dx2	dy2	dx.dy		
	(y)								
Less than 10000	1706	5000	-17000	-2232	289000000	37944000	37944000		
10000-16000	2197	13000	-9000	-1141	81000000	10269000	10269000		
17000-27000	3938	22000	0	0	0	0	0		
27000 and above	11641	39000	17000	7703	289000000	130951000	130951000		
			Σdx=-9000	Σdy=4330	$\Sigma dx^2 = 659000000$	$\Sigma dy^2 = 179164000$	∑dx.dy=179164000		

Source: Source: Computed on the basis of table 1.5

$$\sum dx=-9000$$
,  $\sum dy=4330$ ,  $\sum x^2=659000000$ ,  $\sum y^2=179164000$ ,  $\sum xy=179164000$   
r=?, n=4

$$\mathbf{r} = \frac{\sum xy \cdot (\sum x \times \sum y)/n}{\sqrt{n \sum x^2 \cdot (\sum x^2)^2 \cdot n \cdot \sum y^2 - (\sum y^2)^2}}$$

Substitute the values, we get

$$\mathbf{r} = \frac{(179164000 - (-9000 \times 4330)/4}{\sqrt{4(65900000) - (179164000)^2}}.4. (242552360) - (179164000)^2}$$

#### r=0.99

According to Lucey (2002), r can range from 1, i.e. perfect positive correlation where the variables change value in the same direction as each other, to -1, i.e. perfect negative correlation where y decreases linearly as x increases. Lucey states further that a strong correlation between two variables would produce an r value in excess of  $\beta 0.9$  or 20.9. If the value were less than, say 0.5 there would only be a very weak relationship between the variables. The value of our computed coefficient of correlation (r) is 0.99. This indicates a very strong positive correlation between the two variables, i.e. Income and insurance potential. The decision is that our hypothesis is accepted which states that there is s strong positive relationship between Income and potential.

#### CONCLUSION

The empirical findings were presented in tabulated form with description of fact in comparative as well as theoretical manner. Then conclusion of the research was arrived at after the data collected was subjected to various appropriate statistical tools, procedures and tests. On the basis of the findings an attempt has been made to provide result oriented suggestions as perceived from the statistical facts. Undoubtedly India has a vast insurance potential and this potential will definitely increase further in future. However, the future of the insurance market in India will largely depend on how the increasing potential is exploited by the future insurance operating system in the country which will depend on the marketing strategies adopted, improved information technology used, and effective regulation of the insurance market by the authorities, keeping in view the insurance needs of the entire Indian population and security for the insuring masses. The market potential for insurance companies is found to be greater in the long run as most of the Indians are of the opinion that insurance companies would be able to perform well in the future. The insurance companies have to take immediate steps in appointing more number of agents and/or advisors in addition to the employees as it has been found out that agents are the best channel to reach the general public regarding selling of insurance products. Hence, the market has potential. The insurance companies that are taking immediate steps can tap it.

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