

Population as Marker of Consumer Goods: Understanding the potential market of selected consumer durables in India

By

S.K.Mohanty

Lecturer

Department of Development studies

International Institute for Population Sciences

Govandi Station Road

Deonar, Mumbai-400088

sanjaviips@yahoo.co.in

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Abstract:

The census of India, 2001 for the first time collected data on six consumer durables such as radio, bicycle, scooter, moped and motorcycle, car, telephone and television for the country, states and districts disaggregated by rural and urban. These information were also collected in successive round of National family and Health Survey of 1992-93 and 1998-99. Using the above information, this paper attempts to understand the penetration of these consumer durables in rural and urban areas of the country. It also attempts to assess the market for the near future, i.e., till 2015 using the trends. This enable to assess the potential market for the country and have implications for domestic as well as global manufacturing of these assets. The results indicate that the potential market of the durables like scooter, motorcycle and moped, car and telephone is large while it is not so in case of radio and bicycle.

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I. Background:

Over the past three decades there has been growing recognition in the business community that demographic trends are critical for marketing. This is because *population shift directly affect the business*. The demographic environment is a major interest to marketers because it involves people and people make up markets. Demography today is a frame of social analysis as well as a business tool. Those who do not take population trends into account are at risks of losing sales, higher cost and failure to keep up with the competition. Demography is used as a business tool as it may be used to assess the market (consumer demand) for goods and services, determine the labour market (changing work force), evaluate consumer satisfaction, financial assistance required, production strategies to meet demand, marketing strategies to supply (sell) the product and organize required manpower- planning and human resource development. In this context demographics has been defined as the application of demographic information and methods in business and public administration. Demographics is the *management information* that help decision makers to identify and take advantage of change in population size, growth and composition. For example health care expenditure increases after age 60 and peaks after age 70, housing need peaks up in the age of 30s.

The information which demographers can provide are age composition, educational level of the population, income level of the household, occupation, family size, dwelling, and stage in life cycle. The demographic techniques are useful as it project the population of the country for near future. Demographics are valuable because demographic techniques make it possible to extract a great deal of new information from existing data. **Secondary data analysis is quick efficient and inexpensive in comparison to survey.**

The census of India, 2001 for the first time collected data on six consumer durables for the entire population of the country. These durables are radio, bicycle, scooter, moped and

motorcycle, car, telephone and television. These information were provided for the country, states and districts disaggregated by rural and urban along with other demographic information such as total population and the number of household. These information were also collected in successive round of National family and Health Survey (nationally representative large scale survey) of 1992-93 and 1998-99. These information are not only useful for understanding demographic and economic behavior of population but also immense help for market analysis. Demographic information along with other information is the key in market research.

On demographic front, the census of India counted the total population of the country at 1028 million as of March 2001 with **27** percent of urban population. The annual exponential growth rate of population was 1.9 percent with average family size of 5.4 person. With the current trends of fertility and mortality, about 17 million population are adding to the country. The population projection under the most optimistic scenario indicates that the population of the country will not less than 1229 million by 2015 (Bhat, 2004). On economic front, the economic reform in 1991 (Liberalization, Privatization and Globalisation) aimed at making the Indian economy globally competitive and efficient. In this context, the market is not only limited to domestic production/demand but also global production as well.

In economic front, the Indian economy is one of the fast growing economy with GDP growth rate of about 6 percent in 1990s. The economic reform was undertaken in 1991 and the economy was opened in many sectors. The process of Liberalization, Privatisation and Globalization has resulted sharp increase in Foreign Direct Investment as well as increase in foreign exchange reserve. The distance is no more a barrier in manufacturing the goods and many multinationals are venturing to consumer market in India.

Keeping this in mind, this paper attempts to understand the penetration of these durables in India and its future potential market. It will integrate the demographic information along with limited information on these consumer durables.

III. Objectives:

The specific objectives of this paper are as follows.

1. to examine the alternative data sources on consumer durables in India
2. to assess the penetration of selected consumer durables in India
3. to examine the regional penetration of consumer durables in India
4. to assess the potential market of the consumer durables in India

IV. Data Source:

The paper will be utilizing secondary information from the following sources

1. Census of India, 2001
2. National Family Health Survey, 1992-93 and 1998-99
3. Market Information Survey of Households, 1995

V. Methodology:

The methodology involves two steps. In the first step the projected population of India is used under the most likely scenario of fertility and mortality. In the second steps the trends in these durables are analyzed. Based on the trend, the potential market is assessed.

The population projection is carried out under the following assumptions

- a. fertility will decline from its level of 3.3 in 2001 to 2.1 by 2012 as outlined in National Rural Health Mission. The TFR will be constant at 2.1 till 2015.
- b. Life expectation at birth for male will increase from 61.9 years in 2001 to 63 years in 2015 and from 63.7 years for females in 2001 to 65 years in 2015. This increase is based on the past trends in life expectancy at birth observed during 1990-2000.
- c. Age distribution of sample Registration System, 2001 and that of final population of 2001 is used in the analysis.

The SPECTRUM package is used for population projection.

VI. Analysis:

a. Alternative Data Sources in India

As mentioned before the secondary data analysis is quick and inexpensive and provide valuable information for market planning. The main data source for analyzing the consumer durables in India are the Census of India, 2001, two round of National Family and Health Survey (NFHS) and Market Information Survey of Households (MISH). The variables collected in these survey/census is given in table 1(a) and table 1(b).

The two round of national family health surveys, NFHS 1 conducted during 1992-93 and NFHS 2 conducted during 1998-99 are two large scale sample surveys, recently conducted in the country under rigorous conditions of scientific sampling design, training of investigators and high quality data collection and edit procedures in the country. The NFHS-1 collected data on a representative sample of 88,562 households in the country covering most of the states and NFHS-2 covered a sample of 92,486 households. They were primarily designed to provide reliable information on fertility, mortality, contraceptive use and related factors in the country at state level separately for the rural and urban areas. These were done primarily questioning the ever-married women in the reproductive ages 15 to 49. However the surveys also collected data from the sampled households on the various **amenities in the house**, the literacy levels of the family members, age of the members and occupational status of the population. Detailed descriptions of the survey design of the NFHS surveys and the findings are available in the various reports from the surveys available at the national and state levels (NFHS 2, 1998-99). These are scientifically collected and are of immense help for market analysis. From the data available in the household schedules of the two surveys analysis is carried out to understand the trends and the important predictor on ownership of the selected durables. The NFHS 1 collected data on **9** consumer durables while it was for **19** consumer durables in case of NFHS 2 and **6** in case of census of India. Though these survey provide the representative sample across the states of India, the census of India provide these information in totality. In this paper the information of the NFHS is integrated with the census information (2001).

Market Information Survey of Households (MISH)

National Council of Applied Economic Research (NCAER) conducted the first survey of this kind in 1985-86 called the Market Information Survey of Households (MISH). Using a multi stage stratified sample design, the NCAER collects on market and consumer spreads across the entire country. They are collected through a large, well organized sample survey. The list of consumer durables collected by MISH, 1995-96 is given in table 1 (b). These goods can be classified based on the prices. The unit price of the 31 consumer durable goods covered in MIHS survey vary widely, from under Rs 200 to over Rs 30,000. For the sake of convenience these products has been classified into three categories on the basis of their process.

Group I: Products with price range less than Rs 1000

Group II: Rs 1000-Rs 6000

Group III: Over Rs6000

MIHS focused on ownership pattern and purchase of selected consumer durables since 1985. The MIHS 1995-96 covered 31 consumer durables that are sold in India.

Features of MISH

1.The strength of the MISH lies in the fact that the sample design, questionnaire and method of estimation are the same throughout the years. Therefore the trends that emerge from the survey result are consistent and reliable.

2.MIHS has also served to bring to the forefront the importance of rural market to manufactures. For the first time the quantitative estimates of the size of rural market for a variety of consumer product have been established. It has shown that the rural market is larger and the rural share for a number of product is often more significant than the urban areas. Trends show that the rural market is growing and growing faster than the trend in urban areas. Many manufactures who had earlier underestimated the potential of rural market have now started to concentrate on this untapped resources. Over the years the composition of assets owned by the households has undergone considerable changes. The share of low value consumer durable has come down and while that of Group II and III

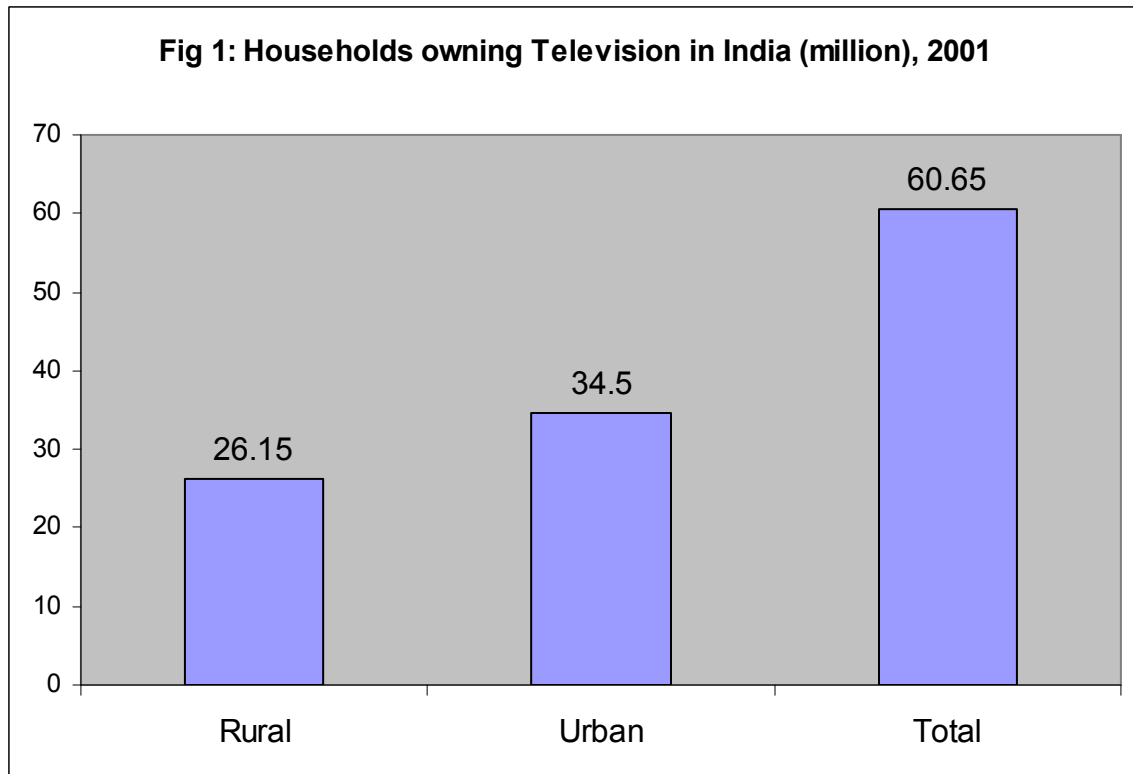
had gone up. It is clear that the households have steadily acquired more expensive durable goods over the last decades.

b. Penetration of Selected Consumer Durables in India:

The census of India canvassed question whether the households owns the consumer durables such as bicycle, television, scooter, moped and motor cycle, car, telephone and television. The number of households owing such durables as of March 2001 is given in table 2. Similarly, the percentage of households owning these goods over the period is given in table 3. The figures in table 2 are given in lakhs as well as the percentage. As of March 2001, the total population of the country was counted at 1028 million and the total number of household were 191.96 million. The number of rural households were 138 million and the number of urban households were 53.69 million. Among the six consumer durables specified in the census, the largest number of household owns bicycle followed by radio/transistor, television, scooter, motorcycle and moped followed by telephone, and car, jeep and van.

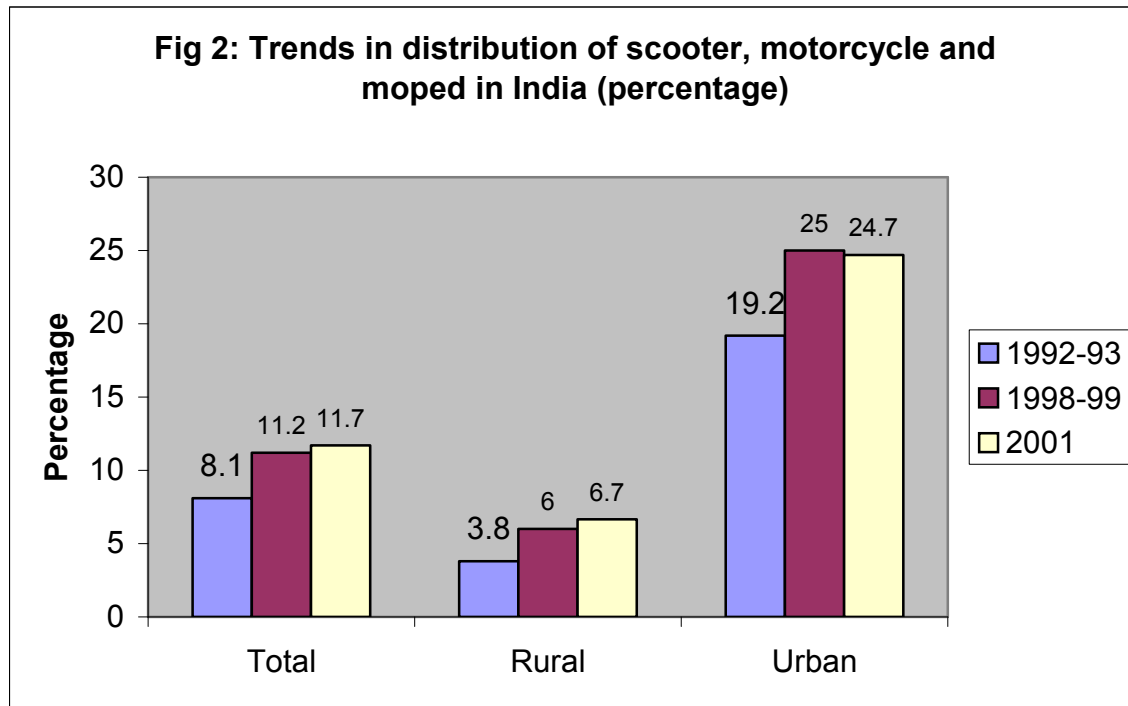
About 87.8 million households owns bicycle, 67.4 million households own radio, 60.65 million own television, 17.5 million holds telephone, 22.48 million households own scooter, motorcycle and 2.5 million households own car in the country. In other words about 43.67 percentage households in India owns bicycle which is 42.78 percent in rural areas and 45.98 percent in urban area. In case of radio or transistor, about 31.94 percentage rural households owns it as compared to 45 percentage in urban India. However, the trends in ownership of radio/transistor in urban areas is showing a declining trends, from 59 percent in 1992-93 to 45 percent in 2001. The trend is almost stagnant in rural areas. This may be due to switch over of consumer to use substitute consumer durables such as television. The scope of expanding the consumer market for radio/transistor is low. Similarly, about 43 percent household in rural India and 46 percent households own bicycle. Over the period, 1992-93 till 2001, the trend in use of bicycle is declining. The trend in bicycle is similar to that of radio or transistor.

The trends as well as penetration of other 4 goods is encouraging. About 60.64 million households in India own television as of 2001 which is 34.5 million in urban India and 26.15 million in rural India. In other words, about 32 percentage households in India owns television which is 64 percent in urban areas and 18.9 percent in rural areas. The trends in the ownership of television suggest that the future market of television is more on rural India as compared to urban areas.



The telephone sector is one of the fast growing industry in the country. As of march 2001, about 17.55 million households owned television in India which was 12.33 million in urban India and 5.2 million in Urban India. In other words, about 9.14 percent households owned telephone in India which was 22.97 percent in urban India and 3.77 percent in rural India. This is one of the industry with large potential market for near future. Moreover, there is increasing number of cell phone in the country. It is quite possible that one household own 2 or more cell phone as this need is more on individual basis. In case of scooter, motorcycle and moped, about 11.7 percent households owns it

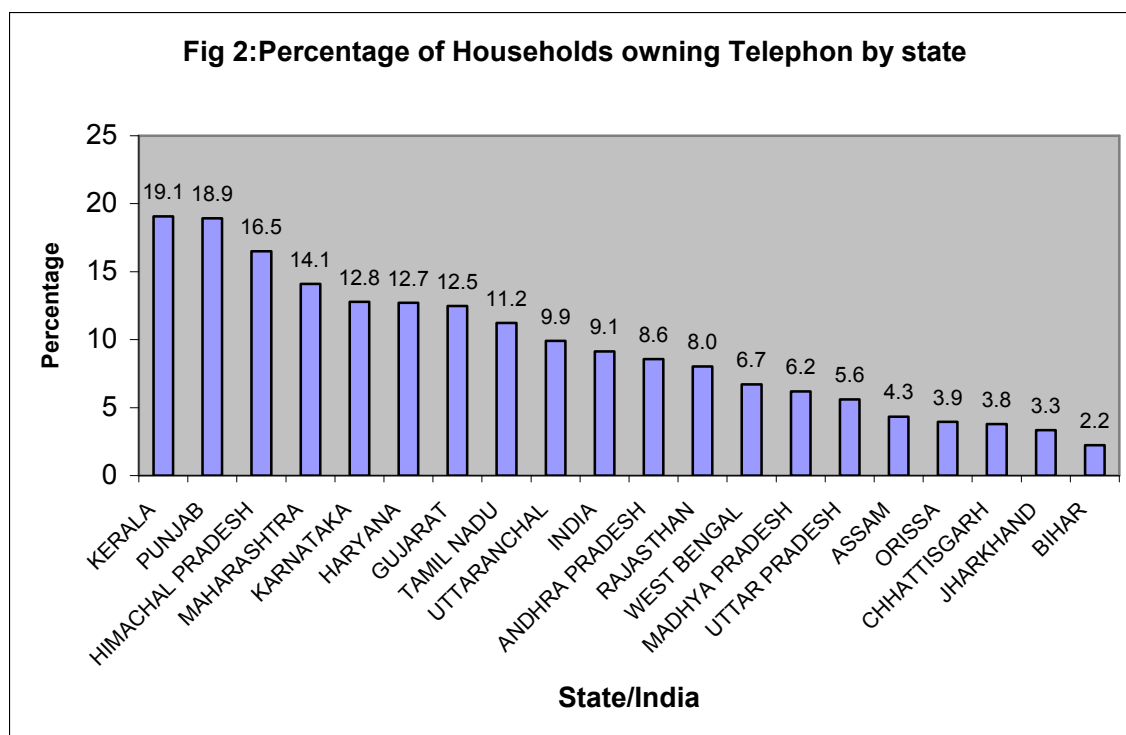
which is 25 percent in urban India and 6.67 percent in rural India. There is a large potential on these goods for both rural and urban areas.



C. Regional penetration of consumer durables in India

The states of India are on different stages of economic transition. While some of the states such as Punjab, Maharashtra, Gujarat and Haryana are economically better off it is not so for the eastern and north eastern states of India. The ownership of these consumer durables also depend on the economic standard of the households in the states. It is expected that the economically better off states/districts will have larger proportion of ownership of these assets. Accordingly, the distribution of these consumer durables, their relative share, percentage of households owing these goods are given in table 4 and table 5.

These distributions for major states of India are arranged in ascending order for each of the goods and given below.



Radio:

Kerala, Uttaranchal, Himachal Pradesh, Karnataka, Tamil Nadu, Uttar Pradesh, Punjab, Haryana, West Bengal, Maharashtra, Rajasthan, Assam. Gujarat, Bihar, Jharkhand, Orissa, Chattishgarh, Andhra Pradesh and Madhya pradesh.

The distribution varies from low of 20.89 percent in Madhya Pradesh to 59.18 percent in Kerala.

Television:

Punjab, Himachal Pradesh, Haryana, Maharashtra, Uttaranchala, Tamil Nadu, Kerala, Gujarat, Karnataka, Andhra Pradesh, Madhya Pradesh, Rajasthan, West Bengal, Uttar Pradesh, Chattisgarh, Assam, Jharkhand and Bihar

Telephone:

Kerala, Punjab, Himachal Pradesh, Maharashtra, Karnataka, Haryana, Gujarat, Tamil nadu, Uttranachala, Andhra Pradesh, Rajasthan, West Bengal, Madhya Pradesh, Uttar Pradesh, Assam, Orissa, Chattisgarh, Jharkhand and Bihar.

The distribution varies from low of 2.23 percent in Bihar to 19.07 percent in Kerala.

Bicycle:

Punjab, Uttar Pradesh, Chattisgarh, West Bengal, Orissa, Jharkhand, Haryana, Assam, Madhya Pradesh, Tamil Nadu, Bihar, Gujarat, Rajasthan, Andhra Pradesh, Uttaranchala, Karnataka, Maharashtra, Kerala and Himachal Pradesh.

The distribution varies from low of 9.10 percent in Himachal Pradesh to a high of 71.76 percent in Punjab.

Motorcycle:

Punjab, Gujarat, Haryana, Tamil Nadu, Karnataka, Maharashtra, Rajasthan, Madhya Pradesh, Uttaranchal, Chattisgarh, Uttar Pradesh, Andhra Pradesh, Kerala, Jharkhand, Orissa, Himachal Pradesh, Assam, West Bengal and Bihar.

The distribution varies from a low of 3.64 percent in Bihar to 31.63 percent in Punjab.

Car:

Punjab, Haryana, Kerala, Gujarat, Maharashtra, Karnataka, Uttarnachal, Himachal Pradesh, Rajasthan, Uttar Pradesh, Tamil Nadu, Assam, West Bengal, Madhya Pradesh, Jharkhand, Chattisgarh, Andhra Pradesh, Orissa and Bihar.

The distribution varies from low of 0.91 percent in Bihar to 5.77 percent in Punjab.

Table 7 gives the relative share of the state in national ownership of consumer durables. The states are arranged with respect to percentage of households in the country. The state of Uttar Pradesh accounts for 13.42 percent households in the country followed by Maharashtra (9.93 percent), Andhra Pradesh (8.78 percent) and West Bengal (7.38 percent). On the other hand the percentage households owning bicycle and transistor is also large in the state. This indicates that these two goods are mass used goods in the state. Irrespective of income level and state of development, these two items are largely owned by the masses.

In case of television, the state of Maharashtra holds the largest share in national ownership (13.87 percent) followed by Uttar Pradesh (10.62) and Tamil Nadu. It is observed that the states such as Punjab holding 2.2 percent national households owns 4.76 percent of total television in the country. Similar is the situation in the state of Delhi and Haryana.

In case of telephone, it is found that about 15.3 percent telephone users are in Maharashtra followed by 9.07 percent in Tamil Nadu and 8.24 percent in Andhra Pradesh. In case of scooter, motorcycle and moped, the largest share in national consumption is in Uttar Pradesh followed by Maharashtra and Tamil Nadu. In case of car/jeep/van, the highest consumption is in Maharashtra followed by Uttar Pradesh and Gujarat.

The implication is that both number of households and per capita income are crucial in ownership of the assets. While the states of Punjab, Haryana and Delhi with relatively low share in households holds relatively larger share in television, telephone as well as car. In the same time, the state of Uttar Pradesh, though economically less developed also having higher proportion in national consumption in many of the assets. There is substantial variation in ownership of television in states of India.

D. Potential market of consumer durables in India:

What lies for the consumer durables market in the future?

In this section the number of household in 2001 as well as the projected household till the year 2010 is used. The potential market is estimated for a relatively shorter period of time i.e., from 2005-2010. It is estimated that the total number of households owning television will be 101.72 million by 2010, indicating that about 25 million new product required during 2005-10. The number of telephone required may be about 13.7 million for the country during 2005-10. Similarly, the additional number of scooter, motor cycle and moped will be about 8.74 million by the 2005-10 and the number of car/jeep/van may be about 7 million.

Concluding Remarks

1. Out of 6 consumer durables analyzed, the penetration of bicycle and radio/transistor is large as about half of the households own it. However, the trends in the ownership of these two durables is not encouraging for marketing.
2. The four consumer durables such as television, telephone, scooter, motorcycle and moped and car, jeep and van is quite large. In case of television, the potential market is large in rural areas as compared to urban areas. Similarly the potential market of two wheeler and car, jeep and van is also large in urban areas.

3. The telephone industry is one of the fast growing industry in the country. Only 10 percent households own telephone as of 2001 indicating that the quantum of demand will be more in near future.
4. Rural households which form about 76 percent of total households accounted for only 52.2 percent of ownership of durable goods. The average number of consumer durables good owned per rural household is only 3 compared to 7 in urban areas. Among the durable goods considered the penetration level of Mechanical watch and Bicycle is more than 50 percent. The low level of penetration may be attributed to low income, inadequate infrastructure such as electricity, different life style

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Table 1 (a): Consumer durables collected from census of India, NFHS and MISH

Census of India, 2001	NFHS 2, 1998-99	NFHS 1, 1992-93
1.Radio 2.Bicycle 3.Scooter, motorcycle and moped 4.Car 5.Telephone 6. Television	1.Radio 2.Bicycle 3.Scooter, motorcycle and moped 4.Car 5.Telephone 6. Television (B&W) 7. Television (Colour) 8.Mattress 9.Pressure cooker 10.Chair 11.Cot/bed 12.Table 13.Clock/watch 14.Electric fan 15.Sewing machine 16.Refrigerator 17.Water pump 18.Thresher 19.Tractor	1.Radio 2.Bicycle 3.Scooter, motorcycle and moped 4.Car 5.Telephone 6. Television 7. Clock/watch 8.Sewing machine 9.Refrigerator

Table 1 (b): Consumer durables collected from MICS, 1995-96
Classification of consumer durables

Group I	Group II	Group III
1.Pressure cooker 2.Pressure Pan 1. Bicycle 2. Mechanical Wrist watch 3. Quartz wrist watch 4. Radio/transistor 5. Electric Iron 6. Ceiling fan 7. Table fan 8. Walk man 9. Mono cassette recorder	1. TV (B&W)small 2. TV (B&W) regular 3. Geyser (Instant) 4. Geyser (storage) 5. Sewing machine 6. Vacuum cleaner 7. Mixer/Grinder 8. 2-in1 (Mono) 9. 2-in-1 (stereo)	1. Television (co lour) (small) 2. Television (co lour) (regular) 3. Video cassette recorder (VCR) 4. Video cassette player (VCP) 5. Motorized 2-wheeler (scooter) 6. Motorized 2-wheeler (moped) 7. Motorized 2-wheeler (motor cycle) 8. Refrigerator 9. Washing machine 10. Music system 11. Car/Jeep

Table 2: Distribution of households own consumer durables in India (in lakhs and percentage), 2001

Consumer Durables	Rural		Urban		Total Number of households	Percentage of households
	Number	Percentage	Number	Percentage		
Bicycle	591.50	42.78	246.88	45.98	838.38	43.67
Radio	435.40	31.49	238.75	44.47	674.15	35.12
Television	261.49	18.91	345.00	64.26	606.49	31.59
Telephone	52.19	3.77	123.33	22.97	175.50	9.14
Scotter, Motorcycle, moped	92.23	6.67	132.62	24.70	224.85	11.71
Car, Jeep and van	17.81	1.29	30.21	5.63	48.02	2.50
None of these	559.89	40.49	102.10	19.02	661.99	34.48
Total Number of households	138,271,559		53,692,376		191,963,935	

Table 3: Trends in Distribution of consumer durables in India

	Rural			Urban			Total		
	1992-93	1998-99	2001	1992-93	1998-99	2001	1992-93	1998-99	2001
Radio/Transistor	31.6	32.2	31.94	59.4	53.2	44.47	39.3	38	35.12
Bicycle	39.7	45.7	42.78	47.5	53.5	45.98	41.8	47.8	43.67
Television	8.9	23.3	18.91	51.7	70.2	64.26	20.7	36.3	31.59
Scooter, Motorcycle and moped	3.8	6	6.67	19.2	25	24.7	8.1	11.2	11.71
Car, Jeep and Van	0.3	0.6	1.29	3.2	4.4	5.63	1.1	1.6	2.5
Telephone	NA	2.6	3.77		20.1	22.97		7.4	9.19
None of these			40.49			19.02			34.48
Total number of households (survey/census)	64138	65953	137747384	24424	25243	55832570	88562	91196	193579954
Total Population	363856	356700	742490639	131083	129310	286119689	494939	486011	8
Average number of household	5.7	5.4	5.4	5.4	5.1	5.1	5.6	5.3	5.3

Table 4: Interstate variation in ownership of Consumer Durables in India									
	State	Total Number of Households	Percentage of households owning Radio/Transistor	Percentage of households owning Television	Percentage of households owning Telephone	Percentage of households owning Bicycle	Percentage of households owning scooter, motorcycle or moped	Percentage of households owning car, jeep, van	Percentage of households owning none of these
1	PUNJAB	4265156	39.40	67.69	18.94	71.76	31.63	5.77	11.45
2	UTTAR PRADESH	2554149	39.61	25.00	5.61	69.48	10.37	2.25	20.26
3	HARYANA	1586321	39.40	52.98	12.72	50.05	18.97	4.26	24.06
4	UTTARANCHAL	201878	49.69	42.92	9.91	30.88	11.94	2.67	25.67
5	KERALA	19063149	59.18	38.83	19.07	18.45	10.00	3.98	27.22
6	HIMACHAL PRADESH	1240633	47.99	53.34	16.50	9.10	7.43	2.60	28.61
7	WEST BENGAL	420246	38.64	26.56	6.70	52.59	5.03	1.89	30.08
8	CHHATTISGARH	4862590	23.36	21.50	3.79	59.83	10.82	1.35	32.23
9	TAMIL NADU	16849857	43.55	39.48	11.24	42.44	16.09	2.18	32.38
	INDIA	191963935	35.12	31.59	9.14	43.67	11.71	2.50	34.48
10	KARNATAKA	34342	46.22	36.98	12.77	30.14	14.44	3.07	34.89
11	MAHARASHTRA	10919653	35.90	44.12	14.09	30.07	13.19	3.37	36.81
12	GUJARAT	4148518	30.18	38.69	12.47	37.31	21.10	3.43	37.30
13	JHARKHAND	4935358	26.37	17.25	3.35	50.32	9.35	1.53	39.56
14	RAJASTHAN	3529642	34.33	28.10	8.02	36.23	13.13	2.50	40.28
15	ASSAM	662023	30.19	18.30	4.34	46.39	5.21	2.05	40.65
16	ORISSA	15715915	23.66	15.49	3.95	51.96	7.86	1.08	41.00
17	MADHYA PRADESH	7870127	20.89	29.64	6.18	42.80	12.07	1.79	42.15
18	ANDHRA PRADESH	9643989	21.63	31.47	8.58	32.83	10.01	1.28	45.93
19	BIHAR	9342294	27.77	9.07	2.23	40.64	3.64	0.91	49.53

Table 5: Percentage of households owning consumer durables in states and union territories of India, arranged in ascending order, 2001

	Radio/Transistor	Bicycle	Television
Less than 30 percent	Madhya Pradesh, Andhra Pradesh, Chattisharh, Orissa, Jharkhand, Bihar and Tripura	Sikkim, Mizoram, Nagaland, Himachal Pradesh, Meghalaya., Jammu and Kashmir, Arunachal Pradesh, Kerala, Andaman and Nicobar, Dada & Nagar Haveli	Bihar, Orissa, Jharkhand, Nagaland, Assam, Mizoram, Meghalaya, Chattisgarh, Tripura, Manipur, Uttar Pradesh, Arunachal Pradesh, West Bengal, Dada and Nagar Haveli, Rajasthan and Madhya Pradesh
30-40	Gujarat, Assam, Daman & Diu, Meghalaya, Nagaland, Rajasthan, Maharashtra, Sikkim, West Bengal, Arnachal pradesh, Dada and Nagar Haveli, Haryana, Punjab and Uttar Pradesh	Maharashtra, Karnataka, Tripura, Uttaranchal, Goa, Andhra Pradesh, Rajasthan, Rajasthan, Gujarat, Delhi, manipur and daman and Diu	Sikkim, Arunachal Pradesh, Lakshwadeep, Karnataka, Gujarat, Kerala and Tamil Nadu
40+	Mizoram, Manipur, Pondicherry, Tamil Nadu, Karnataka, Himachal Prdash, Uttaranchal, Delhi, Andaman and Nicobar, Chandigarh, Goa, Kerala, Jammu and Kashmir, Lakshadweep	Bihar, Tamil Nadu, Madhya Pradesh, Assam, Haryana, Jharkhand, Orissa, West Bengal, Pondicherry, Chattigarh, Uttar Pradesh, Punjab, Lakshwadeep	Jammu and Kashmir, Uttaranchal, Maharashtra, Daman and Diu, Andaman and Nicobar, Haryana, Himachal Pradesh, Pondichery, Goa, Punjab, Chandigarh, Delhi
	Telephone	Motorcycle	Car
Less than 10	Bihar, Jharkhand, Chattisgarh, Orissa, Assam, Tripura, Nagaland, Manipur, Uttar Pradesh, Meghalaaya, Madhya Pradesh, West Bengal, Jammu and Kashmir, Dada and Nagar Haveli, Rajasthan, Andhra Pradesh, Arunachal Pradesh and Uttaranchal	Sikkim, Nagaland, Meghalaya, Bihar Tripura, West Bengal, Assam, Mizoram, Arunachal Pradesh, Himachal Pradesh, Jammu and Kashmir, Orissa and Jharkhand	All states of India except Goa, Delhi and Chandigarh
10-15	Tamil Nadu, Gujarat, Haryana, Karnataka, Sikkim, Maharashtra, Mizoram	Andhra Pradesh, Uttar Pradesh, Chattisgarh, Manipur, Uttaranchal, Madhya Pradesh, Rajasthan, Karnataka, Daman and Diu	Goa and Delhi
Above 15	Daman & Diu, Himachal Pradesh, Punjab, Kerala, Pondicherry, Andaman and Nicobar Island, Goa, Chandigarh, Delhi, Lakshwadeep	Andaman and Nicobar Island, Tamil Nadu, Haryana, Lakshwadeep, Daman and Diu, Pondicherry, Delhi, Punjab, Goa and Chandigarh	Chandigarh

Table 6: State's share in national total of consumer durables

	Total number of household	State share in national household	% share of the state in country's share of radio/ transistor	% share of the state in country's share of television	% share of the state in country's share of telephone	% share of the state in country's share of bicycle	% share of the state in country's share of scooter, motorcycle, moped	% share of the state in country's share of car, Jeep, van
INDIA	191,963,935							
UTTAR PRADESH	25,760,601	13.42	15.13	10.62	8.23	21.35	11.88	12.06
MAHARASHTRA	19,063,149	9.93	10.15	13.87	15.31	6.84	11.18	13.37
ANDHRA PRADESH	16,849,857	8.78	5.41	8.74	8.24	6.60	7.51	4.50
WEST BENGAL	15,715,915	8.19	9.01	6.88	6.00	9.86	3.51	6.20
TAMIL NADU	14,173,626	7.38	9.16	9.23	9.07	7.17	10.14	6.45
BIHAR	13,982,590	7.28	5.76	2.09	1.78	6.78	2.26	2.65
MADHYA PRADESH	10,919,653	5.69	3.38	5.34	3.85	5.57	5.86	4.06
KARNATAKA	10,232,133	5.33	7.01	6.24	7.45	3.68	6.57	6.53
GUJARAT	9,643,989	5.02	4.32	6.15	6.85	4.29	9.05	6.89
RAJASTHAN	9,342,294	4.87	4.76	4.33	4.27	4.04	5.45	4.86
ORISSA	7,870,127	4.10	2.76	2.01	1.77	4.88	2.75	1.77
KERALA	6,595,206	3.44	5.79	4.22	7.17	1.45	2.93	5.47
ASSAM	4,935,358	2.57	2.21	1.49	1.22	2.73	1.14	2.11
JHARKHAND	4,862,590	2.53	1.90	1.38	0.93	2.92	2.02	1.55
PUNJAB	4,265,156	2.22	2.49	4.76	4.60	3.65	6.00	5.13
CHHATTISGARH	4,148,518	2.16	1.44	1.47	0.90	2.96	2.00	1.17
HARYANA	3,529,642	1.84	2.06	3.08	2.56	2.11	2.98	3.13
DELHI	2,554,149	1.33	1.90	3.14	5.05	1.14	3.18	6.92
UTTARANCHAL	1,586,321	0.83	1.17	1.12	0.90	0.58	0.84	0.88
JAMMU & KASHMIR	1,551,768	0.81	1.50	1.04	0.60	0.24	0.54	1.01
HIMACHAL PRADESH	1,240,633	0.65	0.88	1.09	1.17	0.13	0.41	0.67
TRIPURA	662,023	0.34	0.28	0.26	0.20	0.24	0.12	0.15
MEGHALAYA	420,246	0.22	0.20	0.14	0.14	0.05	0.05	0.24
MANIPUR	397,656	0.21	0.25	0.16	0.12	0.18	0.20	0.25
NAGALAND	332,050	0.17	0.16	0.10	0.10	0.03	0.04	0.24
GOA	279,216	0.15	0.24	0.29	0.46	0.10	0.48	0.62
ARUNACHAL PRADESH	212,615	0.11	0.12	0.09	0.11	0.04	0.06	0.11
PONDICHERRY	208,655	0.11	0.13	0.19	0.23	0.14	0.25	0.13
MIZORAM	160,966	0.08	0.10	0.05	0.13	0.01	0.04	0.11
SIKKIM	104,738	0.05	0.06	0.05	0.08	0.00	0.01	0.05
ANDAMAN & NICOBAR ISLANDS 5	73,062	0.04	0.05	0.06	0.09	0.02	0.05	0.03
DADRA & NAGAR HAVELI	43,973	0.02	0.02	0.02	0.02	0.01	0.03	0.04
DAMAN & DIU	34,342	0.02	0.02	0.03	0.03	0.02	0.04	0.03
LAKSHADWEEP	9,240	0.00	0.01	0.01	0.03	0.01	0.01	0.00

Table 7 (a): Demographic Scenario of India, 2001

Variables	Rural	Urban	Total
Total Population (million)	742.49	286.12	1028.61
No of Households (million)	138.27	53.69	191.96
Average Household size	5.4	5.1	5.3
Average annual growth rate			1.93
Density			324
% population in 0-14	37.26	30.73	35.44
% population 15-64	57.77	64.95	59.77
% population 65+	4.97	4.32	4.79
Birth Rate	26.6	20.6	25.0
Death Rate	8.7	6.1	8.1
IMR , 2003	66	38	60
Life expectancy at birth, 2000			
Male	60.3	66.3	62.5
Female	61.8	69.2	63.3
Total	61.2	67.9	61.6

The projected population, households as well as the broad distribution of population is given in table 3. These estimates are borrowed from Bhat, 2004. It is estimated that under the realistic scenario the

Table 7 (b): Projected Population and Households in India under the Realistic scenario, 20120

Variables	2005	2007	2009	2011	2013	2015
Total Population (million)	1094	1123	1150	1173	1194	1214
No of Households (million)	206.36	215.96	229.92	239.39	243.60	252.92
Average Household size	5.3	5.2	5.1	5.0	4.9	4.8
% population in 0-14	31.33	30.57	29.92	28.21	28.23	27.07
% population 15-64	63.75	64.54	65.07	65.66	66.51	67.52
% population 65+	4.82	4.90	5.01	5.14	5.26	5.4
Birth Rate (per 1000)	23.4	21.9	20.4	18.8	17.8	17.7
Death Rate (per 1000)	9.2	9.2	9.2	9.2	9.2	9.3
Crude growth rate (per 1000)	1.42	1.42	1.28	6.96	6.86	6.84

Assume average family size assumed 5.3 for 2005, 5.2 for 2007, 5.1 for 2009, 5.0 for 2011, 4.9 for 2013 and 4.8 for 2015.

Table 8: Potential market for consumer durables

Variables	Percentage distribution			Household estimated owning the durables in million			Additional number of durables required in million
	2001	2005	2010	2001	2005	2010	2005-10
Television	31.59	36.98	43.78	64.26	76.31	101.72	25.4
Telephone	9.19	12.78	17.25	17.54	26.37	40.08	13.71
Scooter/motor cycle/moped	11.71	13.51	15.77	22.48	27.90	36.64	8.74
Car/Jeep/van	2.5	4.31	7.01	4.8	8.8	15.82	6.94

A comparison of age distribution of census, 2001 and SRS 2001, India-Total

