

## ANNEXURE A

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\* *NCAER : NATIONAL COUNCIL FOR APPLIED ECONOMIC RESEARCH*

\*\* *NSS : NATIONAL SAMPLE SURVEY*

Table 2.1

## MARKET SHARE OF CERTAIN CONSUMER DURABLES BY INCOME AND REGION

Consumer Durable	Share of Purchase by Income			%age Share of Rural Region
	Share of Top 10% (80 m.)	Share of Bottom 60% (480 m.)	Share of Middle 30% (240 m.)	
1. B&W TV (Regular)	40	20	41	28
2. B&W TV (Small)	35	22	44	35
3. Color TV Regular	61	11	28	18
4. Mono Two-in-One	46	19	35	46
5. Mono Cassette Recorder	38	23	39	61
6. Radio (Portable)	25	36	39	72
7. Table Fans	37	22	41	54
8. Bicycle	18	46	36	75
9. Mopeds	44	13	44	48
10. Scooters	64	8	28	28
11. Motor Cycles	64	8	28	45
12. Electric Stoves	35	18	47	31
13. Electric Irons	39	19	42	41
14. Mixers	60	9	31	19
15. Sewing Machines	37	25	39	39
16. Moulded Suitcases	49	13	38	24
17. Mechanical Wrist Watches	26	33	42	71
18. Quartz Wrist Watches	41	24	45	44

Source : Financial Express, Bombay, 27th Feb., 1991.

TABLE 2.2

## CERTAIN ECONOMIC INDICATORS OF MAJOR INDIAN STATES

State	Life-Expectancy (Projected) (1981-86)		Infant Mortality Rate (1987)		%age of Population Living Below Poverty (Prov.) (1983-84)		Literacy Rate (1981)		Percentage of Villages with Power Supply as of 31-03-85		No. of Industrial Workers Employed per Lakh of Population (1981-82)		Road Length per Lakh of Population as on 31-03-85	
	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank
1. Andhra Pradesh	58.94	6	79	7	36.40	9	29.94	10	83.96	8	1157	6	241	8
2. Assam	51.36	14	102	11	23.50	3	Data	N.A.	53.67	12	497	11	299	4
3. Bihar	54.05	11	101	10	49.50	15	26.20	13	49.43	15	396	15	120	14
4. Gujarat	56.82	8	97	9	24.30	4	43.70	4	88.29	6	1589	1	178	12
5. Harayana	60.05	5	87	8	15.60	2	36.14	8	100.00	1	1093	7	186	11
6. Karnataka	61.10	3	74	5	35.00	8	38.46	7	84.74	7	755	9	304	3
7. Kerala	67.55	1	28	1	26.80	5	70.42	1	100.00	1	969	8	421	2
8. Madhya Pradesh	52.35	13	120	13	46.20	14	27.87	11	57.10	10	467	12	206	10
9. Maharashtra	60.25	4	68	3	34.90	7	47.18	2	92.84	5	1546	2	287	5
10. Orissa	53.02	12	122	14	42.80	12	34.23	9	50.57	14	405	14	457	1
11. Punjab	64.32	2	62	2	13.80	1	40.86	6	99.49	4	1244	5	287	5
12. Rajasthan	55.12	10	103	12	34.30	6	24.38	14	59.38	9	443	13	213	9
13. Tamil Nadu	58.05	7	74	5	39.60	11	46.76	3	99.78	3	1362	3	275	7
14. Uttar Pradesh	49.01	15	123	15	45.30	13	27.16	12	56.04	11	568	10	129	13
15. West Bengal	56.61	9	70	4	39.20	10	40.94	5	50.65	13	1341	4	105	15
ALL INDIA	Data	N.A.	94		37.40		36.23		64.12		891		226	

Sources : 1) Family Welfare Programme in India. Year Book, 1988-89.

2) India - A Statistical Outline, (Oxford &amp; IBH Publishing Company, 1987).

TABLE 2.3

## DECADAL CHANGE IN CERTAIN ECONOMIC INDICATORS IN GUJARAT STATE

Name of District	Literacy Rate in 1981	Literacy Rate in 1991	%age Change During The Decade	Percent of Main Workers to Total Popln. in 1981	Percent of Main Workers to Total Popln. in 1991	%age Change During The Decade	Percent of Urban Popln. to Total Popln. in 1981	Percent of Urban Popln. to Total Popln. in 1991	%age Change During The Decade
1. JAMNAGAR	37.86	50.14	32.45	31.25	32.96	5.48	32.28	39.74	23.10
2. RAJKOT	44.60	57.88	29.77	32.75	33.77	3.12	24.64	47.03	90.87
3. SURENDRANAGAR	34.75	45.58	31.18	32.90	34.67	5.38	23.70	29.83	25.87
4. BHAVNAGAR	38.20	48.46	26.85	33.20	34.67	4.41	25.19	35.05	39.15
5. AMRELI	40.54	50.57	24.75	31.06	33.51	7.89	17.52	21.53	22.91
6. JUNAGADH	41.48	51.93	25.20	29.89	32.58	8.99	25.51	32.55	27.58
7. KACHCHH	33.73	43.80	29.85	32.13	32.84	2.22	19.03	30.28	59.13
8. BANASKANTHA	21.78	32.09	47.32	30.45	31.98	5.02	6.64	10.18	53.25
9. SABARKANTHA	37.78	50.22	32.93	29.81	34.52	15.81	8.56	10.50	22.70
10. MAHESANA	44.62	55.19	23.68	29.26	33.50	14.50	19.30	22.03	14.17
11. GANDHINAGAR	51.48	74.49	44.69	29.30	30.20	3.08	21.60	40.81	88.95
12. AHMEDABAD	45.10	63.30	40.35	31.80	31.34	-1.44	31.04	74.77	140.87
13. KHEDA	47.44	56.72	19.56	30.70	33.72	9.83	18.11	22.63	24.98
14. PANCHMAHALS	28.81	36.17	25.54	33.42	33.80	1.14	9.14	10.58	15.79
15. VADODARA	43.38	54.81	26.34	35.03	34.95	-0.23	13.99	42.82	206.08
16. BHARUCH	42.70	52.41	22.74	38.13	37.61	-1.37	13.07	21.26	62.66
17. SURAT	38.78	49.76	28.32	43.02	38.70	-10.04	13.63	50.61	271.28
18. VALSAD	45.16	55.34	22.55	39.07	38.95	-0.31	19.21	24.43	27.16
19. DANGS	29.84	37.39	25.30	39.78	46.85	17.78	0.00	11.08	ERR
STATE AVERAGE	46.79	51.67	10.44	31.68	34.27	8.17	26.39	34.40	30.36

Sources : 1) District Census Handbooks, 1981.

2) Census of 1991, Provisional Population Totals, (Papers 2&amp;3).

TABLE 2.4

## DECADAL CHANGE IN CERTAIN ECONOMIC INDICATORS IN KERALA STATE

Name of District	Literacy Rate in 1981	Literacy Rate in 1991	%age Change During The Decade	Percent of Main Workers to Total Popln. in 1981	Percent of Main Workers to Total Popln. in 1991	%age Change During The Decade	Percent of Urban Popln. to Total Popln. in 1981	Percent of Urban Popln. to Total Popln. in 1981	%age Change During The Decade
1. KASARGOD	55.08	70.15	27.36	30.21	30.35	0.45	4.93	16.46	233.80
2. CANNANORE	56.33	79.40	40.96	23.43	25.92	10.61	40.85	51.02	24.90
3. WAYANAD	58.16	70.49	21.20	33.54	33.63	0.28	0.00	3.41	ERR
4. KOZHIKODE	69.08	79.12	14.54	21.85	23.00	5.25	19.79	38.42	94.12
5. MALAPPURAM	60.36	71.86	19.05	21.85	21.51	-1.55	5.35	9.13	70.66
6. PALGHAT	56.81	69.79	22.85	33.55	32.81	-2.21	8.77	15.75	79.55
7. TRICHUR	57.59	79.30	37.70	21.01	29.24	39.15	17.54	26.32	50.05
8. ERNAKULAM	76.26	82.13	7.70	28.48	30.68	7.73	33.29	48.79	46.55
9. IDUKKI	66.18	75.99	14.83	35.32	35.91	1.68	4.17	4.73	13.34
10. KOTTAYAM	81.25	85.24	4.92	26.29	29.00	10.30	8.59	17.56	104.47
11. ALLEPPEY	78.15	83.61	6.99	25.28	29.60	17.07	15.19	30.62	101.58
12. PATHANAMTHITTA	-	84.25	NEW DT.	-	26.73	NEW DT.	-	13.06	NEW DT.
13. QUILON	74.21	79.38	6.97	25.14	27.50	9.41	9.64	18.59	92.85
14. TRIVANDRUM	69.93	78.11	11.70	27.07	29.74	9.88	20.64	33.95	64.48
STATE AVERAGE	70.28	78.09	11.11	27.51	28.23	2.63	15.445	26.44	71.19

Sources : 1) District Census Handbooks, 1981.

2) Census of 1991, Provisional Population Totals, (Papers 2&amp;3).

# RURAL STRATIFICATION FOR GUJARAT

Summary of Table 5.1

State Average Index = 35.844

## Highest and Lowest Index

	Index Value	Taluka	District
Lowest	11.9828	Vav	Banaskantha
Highest	53.2996	Vadodara	Vadodara

## Range For Determining Relative Development Levels

Status of Development	Index - Range	
	Min.	Max.
Below State Average	11.9828	25.7550
State Average	25.7551	39.5273
Above State Average	39.5274	53.2996

District	Total No. of Talukas	Status of Relative Development					
		Below Average		State Average		Above Average	
		No.	%age	No.	%age	No.	%age
JAMNAGAR	10	1	10.00	8	80.00	1	10.00
RAJKOT	13	1	7.69	6	46.15	6	46.15
SURENDRANAGAR	9	2	22.22	6	66.67	1	11.11
BHAVNAGAR	12	0	0.00	10	83.33	2	16.67
AMRELI	10	1	10.00	8	80.00	1	10.00
JUNAGADH	15	0	0.00	10	66.67	5	33.33
KACHCHH	9	2	22.22	5	55.56	2	22.22
BANASKANTHA	11	7	63.64	4	36.36	0	0.00
SABARKANTHA	10	2	20.00	6	60.00	2	20.00
MAHESANA	11	1	9.09	2	18.18	8	72.73
GANDHINAGAR	1	0	0.00	0	0.00	1	100.00
AHMEDABAD	7	0	0.00	3	42.86	4	57.14
KHEDA	10	0	0.00	2	20.00	8	80.00
PANCHMAHALS	11	7	63.64	4	36.36	0	0.00
VADODARA	12	3	25.00	3	25.00	6	50.00
BHARUCH	11	2	18.18	7	63.64	2	18.18
SURAT	13	2	15.38	6	46.15	5	38.46
VALSAD	8	1	12.50	2	25.00	5	62.50
DANGS	1	1	100.00	0	0.00	0	0.00
STATE TOTAL	184	33	17.93	92	50.00	59	32.07

TABLE 5.1

## RURAL STRATIFICATION FOR GUJARAT STATE

Name of District/ Taluka	Weighted Literacy Rate 30%	Weighted Power Supply 20%	Weighted Main Worker 20%	Weighted Bank per 1000 20%	Weighted Urban Popln. 10%	Composite Index	Stage of Relative Development
<b>1. JAMANAGAR DT.</b>							
A. Jamnagar	14.8710	19.1920	5.9660	0.0142	7.0700	47.1132	Above State Avg.
B. Lalpur	10.4400	20.0000	6.7120	0.0252	1.0910	38.2682	State Average
C. Jhamhodhpur	12.9150	9.5660	6.8760	0.0218	8.2370	37.6158	State Average
D. Bhanvad	10.3620	11.0000	6.5840	0.0256	1.6720	29.6436	State Average
E. Kalyanpur	7.4400	5.8460	5.9980	0.0164	0.0000	19.3004	Below State Avg.
F. Khamandal	11.8050	2.3800	5.7060	0.0532	6.0250	25.9692	State Average
G. Khambhalia	8.7690	8.3540	5.8920	0.0190	2.9640	25.9980	State Average
H. Jodiya	12.9270	9.2000	6.1420	0.0274	1.3630	29.6594	State Average
I. Dhrol	11.8440	14.6340	6.0000	0.0456	2.5380	35.0616	State Average
J. Kalavad	12.2070	14.2860	6.6320	0.0180	1.3230	34.4660	State Average
<b>2. RAJKOT DT.</b>							
A. Rajkot	17.4540	16.9900	5.7220	0.0298	7.8550	48.0508	Above State Avg.
B. Kotda Sengni	12.0480	17.0740	7.1840	0.0700	0.0000	36.3760	State Average
C. Gondal	15.4950	19.2500	6.2240	0.0248	3.1420	44.1358	Above State Avg.
D. Jetpur	14.5680	17.8720	6.0800	0.0362	4.2580	42.8142	Above State Avg.
E. Dhoraji	16.0440	19.3340	6.4700	0.0488	5.1230	47.0198	Above State Avg.
F. Upleta	15.5880	19.2000	6.9520	0.0312	3.2180	44.9892	Above State Avg.
G. Jamkandorna	13.0500	20.0000	6.6900	0.0568	0.0000	39.7968	Above State Avg.
H. Lodhika	11.5500	15.7900	7.0220	0.0958	0.0000	34.4578	State Average
I. Paddhari	11.9100	15.7380	7.1680	0.0608	0.9240	35.8008	State Average
J. Morvi	14.2680	10.9100	5.9220	0.0218	3.2670	34.3888	State Average
K. Maliya	11.3760	5.1060	6.0840	0.0576	0.0000	22.6236	Below State Avg.
L. Wankaner	11.6160	10.2000	7.0200	0.0400	2.6300	31.5060	State Average
M. Jasdan	8.9790	13.2000	6.6200	0.0256	1.6210	30.4456	State Average
<b>3. SURENDRANAGAR DT.</b>							
A. Wadhwan	15.4680	15.2180	5.9400	0.0192	6.3230	42.9682	Above State Avg.
B. Limbdi	11.2920	10.4080	6.5980	0.0100	1.7290	30.0370	State Average
C. Sayla	6.8520	10.9340	6.8100	0.0288	1.7040	26.3288	State Average
D. Chotila	8.0190	5.3580	6.7940	0.0210	2.8990	23.0910	Below State Avg.
E. Muli	8.6790	16.5520	7.0220	0.0214	0.0000	32.2744	State Average
F. Halvad	9.5940	11.3440	6.9080	0.0190	1.4620	29.3270	State Average
G. Dhrangadra	12.2730	14.9200	6.6080	0.0170	3.7380	37.5560	State Average
H. Dasada	10.4250	9.1960	6.3700	0.0126	1.5420	27.5456	State Average
I. Lakhtar	11.2350	6.1900	6.1620	0.0322	1.9350	25.5542	Below State Avg.
<b>4. BHAVNAGAR DT.</b>							
A. Bhavnagar	16.1610	12.0680	5.6840	0.0262	7.7840	41.7232	Above State Avg.
B. Ghogha	10.1040	8.9360	7.0960	0.0432	1.3870	27.5662	State Average
C. Talaja	8.4360	13.5720	7.1680	0.0140	0.8070	29.9970	State Average
D. Mahuva	9.3390	10.9920	6.8060	0.0114	2.1230	29.2714	State Average
E. Savarkundla	12.2340	15.3080	6.2820	0.0150	2.4670	36.3060	State Average
F. Gariadhar	11.7810	15.6000	6.4680	0.0320	1.7090	35.5900	State Average
G. Palitana	10.5540	15.6040	6.5640	0.0224	2.4680	35.2124	State Average
H. Sihor	11.7150	17.6620	6.3120	0.0230	2.2730	37.9850	State Average
I. Umrata	11.8110	17.0000	6.7760	0.0402	1.8730	37.5002	State Average
J. Gadhalia	10.7610	13.7840	6.7640	0.0220	1.2960	32.6270	State Average
K. Botad	12.0030	20.0000	6.5900	0.0312	4.3120	42.9362	Above State Avg.
L. Vallabhipur	12.6210	17.0380	7.1620	0.0450	1.7300	38.5960	State Average
<b>5. AMRELI DT.</b>							
A. Amreli	16.7850	17.7140	5.9820	0.0134	3.3050	43.7994	Above State Avg.
B. Dhari	14.0160	13.7340	6.2000	0.0162	2.3520	36.3182	State Average
C. Khamha	12.9930	12.2220	6.2340	0.0338	0.0000	31.4828	State Average
D. Rajula	9.0300	10.9900	6.5380	0.0150	2.0430	28.6160	State Average
E. Jafraabad	6.6570	7.6200	6.1920	0.0346	2.2890	22.7926	Below State Avg.
F. Kodinar	11.3100	20.0000	5.8200	0.0134	1.5640	38.7074	State Average
G. Kunkavav	13.8840	17.3520	6.0080	0.0130	2.1360	39.3930	State Average
H. Babra	10.5360	12.8580	6.3020	0.0198	1.3270	31.0428	State Average
I. Lathi	13.0620	16.7340	6.8060	0.0210	2.5000	39.1230	State Average
J. Lilia	13.3590	11.8920	6.0420	0.0294	0.0000	31.3224	State Average

TABLE 5.1

## RURAL STRATIFICATION FOR GUJARAT STATE

Name of District/ Taluka	Weighted Literacy Rate 30%	Weighted Power Supply 20%	Weighted Main Worker 20%	Weighted Bank per 1000 20%	Weighted Urban Popln. 10%	Composite Index	Stage of Relative Development
6. JUNAGADH DT.							
A. Junagadh	16.3740	17.4020	5.6920	0.0192	5.5980	45.0852	Above State Avg.
B. Mendrala	13.3170	16.0000	6.1640	0.0432	1.8470	37.3712	State Average
C. Talala	12.2940	12.5640	5.9560	0.0254	1.1960	32.0354	State Average
D. Patan-Veraval	9.8610	18.0400	6.0700	0.0132	4.0410	38.0252	State Average
E. Malia	10.8330	20.0000	6.1220	0.0202	0.9010	37.8762	State Average
F. Mangrol	9.9060	17.7780	5.6660	0.0194	2.6480	36.0174	State Average
G. Keshod	14.0280	20.0000	5.6780	0.0196	2.3430	42.0686	Above State Avg.
H. Porbandar	14.6490	17.3680	5.5880	0.0148	4.9190	42.5388	Above State Avg.
I. Ranavav	11.6280	11.1540	6.2300	0.0440	3.7880	32.8440	State Average
J. Kutiyana	11.8650	18.2600	6.0420	0.0332	2.2480	38.4482	State Average
K. Manavadar	15.7020	18.9100	5.6980	0.0232	2.9750	43.3082	Above State Avg.
L. Vanthali	13.9680	20.0000	6.1940	0.0300	2.8940	43.0860	Above State Avg.
M. Bhesan	11.4690	11.5560	6.2800	0.0308	0.0000	29.3358	State Average
N. Visavadhar	12.1020	12.6880	6.2100	0.0196	1.1720	32.1916	State Average
O. Una	8.6850	12.6960	6.0820	0.0110	1.6930	29.1670	State Average
7. KACHCHH DT.							
A. Bhuj	12.2430	12.1380	6.5020	0.0180	3.7650	34.6660	State Average
B. Mundra	11.5500	16.2720	6.1360	0.0456	1.6050	35.6086	State Average
C. Mandvi	13.0500	18.6520	5.9500	0.0246	2.4670	40.1436	Above State Avg.
D. Abdasa	9.5310	12.4000	6.7760	0.0336	0.9010	29.6416	State Average
E. Lakhpat	7.2120	2.1420	7.2180	0.0838	0.0000	16.6558	Below State Avg.
F. Nakhatrana	12.2670	13.0080	6.1000	0.0228	0.0000	31.3978	State Average
G. Rapar	5.4480	11.5460	6.4560	0.0194	0.7790	24.2484	Below State Avg.
H. Bhachau	7.2090	13.0440	6.4780	0.0280	1.3890	28.1480	State Average
I. Anjar	12.5580	15.7740	6.2140	0.0334	6.2220	40.8014	Above State Avg.
8. BANASKANTHA DT.							
A. Palanpur	10.2510	15.0260	6.0040	0.0070	2.2080	33.4960	State Average
B. Vadgam	11.1960	16.9100	6.1280	0.0122	0.0000	34.2462	State Average
C. Deesa	6.3360	12.1380	5.8720	0.0076	1.5880	25.9416	State Average
D. Kankrej	5.8770	15.6600	6.1960	0.0114	0.0000	27.7444	State Average
E. Radhanpur	7.9980	6.2960	6.1640	0.0282	2.6030	23.0892	Below State Avg.
F. Santalpur	4.9950	1.9180	6.1800	0.0232	0.0000	13.1162	Below State Avg.
G. Deodhar	5.0820	11.9360	6.2180	0.0116	0.0000	23.2476	Below State Avg.
H. Vav	4.3350	1.5000	6.1340	0.0138	0.0000	11.9828	Below State Avg.
I. Tharad	4.4610	3.5820	5.7980	0.0126	0.9030	14.7566	Below State Avg.
J. Dhanera	5.1780	6.7700	6.3180	0.0118	0.0000	18.2778	Below State Avg.
K. Danta	6.1500	6.5580	5.9880	0.0166	0.0000	18.7126	Below State Avg.
9. SABARKANTHA DT.							
A. Himatnagar	14.4990	18.1540	6.3700	0.0178	2.1200	41.1608	Above State Avg.
B. Prantij	13.5660	18.9480	6.2420	0.0142	1.4320	40.2022	Above State Avg.
C. Khedbrahma	12.9300	18.6520	6.1820	0.0118	0.8120	38.5878	State Average
D. Vijaynagar	6.7410	8.0300	6.1880	0.0218	1.0940	22.0748	Below State Avg.
E. Bhiloda	10.8030	17.8820	4.4880	0.0448	0.0000	33.2178	State Average
F. Meghraj	11.3820	16.2020	5.2620	0.0180	0.0000	32.8640	State Average
G. Modasa	8.1900	11.0240	5.7960	0.0310	0.7060	25.7470	Below State Avg.
H. Malpur	12.9870	15.7140	6.1920	0.0164	1.6660	36.5754	State Average
I. Bayad	10.0260	11.6000	6.4920	0.0444	0.7310	28.8934	State Average
	12.2070	15.6520	6.4160	0.0158	0.0000	34.2908	State Average
10. MAHESANA DT.							
A. Mahesana	15.8850	20.0000	5.7320	0.0172	2.3830	44.0172	Above State Avg.
B. Kadi	14.7240	18.8140	5.8720	0.0222	1.6320	41.0642	Above State Avg.
C. Chanasma	14.3940	19.8180	5.3820	0.0218	1.0960	40.7118	Above State Avg.
D. Sami	7.0470	10.2040	5.8660	0.0292	0.0000	23.1462	Below State Avg.
E. Harij	8.7480	18.9740	6.1380	0.0744	2.1550	36.0894	State Average
F. Patan	11.6610	20.0000	5.9880	0.0180	2.6050	40.2720	Above State Avg.
G. Sidhpur	15.4860	20.0000	5.6260	0.0204	3.1390	44.2714	Above State Avg.
H. Kheralu	12.2280	19.2400	6.1600	0.0194	1.6150	39.2624	State Average
I. Visnagar	16.5450	20.0000	6.1800	0.0264	2.3450	45.0964	Above State Avg.
J. Vijapur	15.6990	20.0000	5.6940	0.0124	1.0850	42.4904	Above State Avg.
K. Kalol	14.8440	18.2360	5.7280	0.0268	3.1780	42.0128	Above State Avg.

TABLE 5.1

## RURAL STRATIFICATION FOR GUJARAT STATE

Name of District/ Taluka	Weighted Literacy Rate 30%	Weighted Power Supply 20%	Weighted Main Worker 20%	Weighted Bank per 1000 20%	Weighted Urban Popln. 10%	Composite Index	Stage of Relative Development
11. GANDHINAGAR DT. A. Gandhinagar	15.4440	20.0000	5.8600	0.0362	2.1600	43.5002	Above State Avg.
12. AHMEDABAD DT. A. Ahmedabad City	18.9900	17.1420	5.7360	0.6802	9.9070	52.4552	Above State Avg.
B. Daskroi	13.9860	18.6200	6.3840	0.0724	2.0630	41.1254	Above State Avg.
C. Dholka	13.1280	20.0000	7.0100	0.0818	2.5200	42.7398	Above State Avg.
D. Dhandhuka	12.1020	7.2440	6.9600	0.0946	2.0840	28.4846	State Average
E. Sanand	11.3220	14.2440	6.2820	0.1392	1.6350	33.6222	State Average
F. Virangam	12.2220	16.6700	6.1220	0.0746	2.1630	37.2516	State Average
H. Dehgam	12.9510	19.5700	6.0300	0.1008	1.3540	40.0058	Above State Avg.
13. KHEDA DT. A. Mehsana	13.2300	19.7760	6.2460	0.0388	1.9390	41.2298	Above State Avg.
B. Nadiad	16.1460	19.9520	5.9400	0.0210	3.2730	45.3320	Above State Avg.
C. Anand	16.6140	20.0000	6.1820	0.1758	2.5820	45.5538	Above State Avg.
D. Petlad	15.7680	20.0000	6.2640	0.0300	2.0310	44.0930	Above State Avg.
E. Borsad	14.3130	20.0000	6.3660	0.0200	1.0420	41.7410	Above State Avg.
F. Khambhat	14.3400	16.8300	6.2320	0.0356	2.8940	40.3316	Above State Avg.
G. Matar	13.6140	19.2420	6.1740	0.0414	0.0000	39.0714	State Average
H. Kapadvanj	13.6590	19.3940	5.9300	0.0234	1.1000	40.1064	Above State Avg.
I. Balasinor	11.6400	14.9540	5.9020	0.0480	1.4010	33.9450	State Average
J. Thasara	12.9870	19.0380	6.1680	0.0348	1.8450	40.0728	Above State Avg.
14. PANCHMAHALS DT. A. Godhra	11.0940	11.5160	6.0980	0.0078	2.5210	31.2368	State Average
B. Kelol	12.2760	15.7060	6.3020	0.0152	0.9920	35.2912	State Average
C. Helol	10.2390	10.3140	7.5320	0.0184	1.7860	29.8894	State Average
D. Shehera	8.4840	9.7040	6.4440	0.0138	0.0000	24.6458	Below State Avg.
E. Lunavada	11.0430	7.1000	6.6080	0.0096	1.0550	25.8156	State Average
H. Santrampur	6.9600	4.8860	5.9640	0.0064	0.3400	18.1564	Below State Avg.
I. Jhalod	6.1830	6.6920	6.8860	0.0098	0.0000	19.7708	Below State Avg.
J. Dohad	8.0100	5.8180	5.8920	0.0092	2.7760	22.5052	Below State Avg.
K. Limkheda	4.8480	2.5260	6.3180	0.0094	0.0000	13.7014	Below State Avg.
L. Devgad Paria	6.4920	6.6300	8.9100	0.0076	0.5800	22.6196	Below State Avg.
M. Jumbugoda	9.4410	8.6240	6.5780	0.0806	0.0000	24.7236	Below State Avg.
15. VADODARA DT. A. Vadodara	19.2420	20.0000	6.0700	0.0256	7.9620	53.2996	Above State Avg.
B. Karjan	14.5020	20.0000	7.6380	0.0424	1.1250	43.3074	Above State Avg.
C. Padra	15.0420	18.7800	6.6420	0.0302	0.1830	40.6772	Above State Avg.
D. Savli	18.5820	15.6200	6.9400	0.0266	0.0000	41.1686	Above State Avg.
E. Vaghodia	12.7020	15.7440	7.3440	0.0540	0.7050	36.5490	State Average
F. Dabhoi	15.8310	15.5580	6.9180	0.0430	2.6980	41.0480	Above State Avg.
G. Sankheda	13.2090	11.6940	7.6440	0.0410	1.5510	34.1390	State Average
H. Jetpur-Pavi	7.1820	8.7200	7.2900	0.0318	0.3100	23.5338	Below State Avg.
I. Chhota-Udaipur	4.5570	5.9420	6.6260	0.0238	0.9960	18.1448	Below State Avg.
J. Nasvadi	7.8480	4.5880	6.5040	0.0652	0.0000	19.0052	Below State Avg.
K. Tilakvada	12.0870	12.5780	6.4200	0.1062	0.0000	31.1912	State Average
L. Sinor	15.3690	20.0000	8.0360	0.0854	1.2610	44.7514	Above State Avg.

TABLE 5.1

## RURAL STRATIFICATION FOR GUJARAT STATE

Name of District/ Taluka	Weighted Literacy Rate 30%	Weighted Power Supply 20%	Weighted Main Worker 20%	Weighted Bank per 1000 20%	Weighted Urban Popln. 10%	Composite Index	Stage of Relative Development
16. BHARUCH DT.							
A. Bharuch	17.1030	15.2680	6.7920	0.0128	4.5490	43.7248	Above State Avg.
B. Ankleshwar	14.8890	11.9300	7.6200	0.0218	3.3970	37.8578	State Average
C. Hansot	15.6090	9.7780	7.6700	0.0434	1.5070	34.6074	State Average
D. Vagra	14.9730	7.3520	6.9300	0.0282	0.0000	29.2832	State Average
E. Jambusar	13.8030	8.3960	6.2700	0.0142	1.7910	30.2742	State Average
F. Amod	14.6370	17.3080	7.7440	0.0272	1.5080	41.2242	Above State Avg.
G. Jhaghadia	11.4240	7.6360	8.1920	0.0144	0.0000	27.2664	State Average
H. Nandod	12.5760	7.1220	7.0740	0.0124	1.6300	28.4144	State Average
I. Dediapada	6.6150	2.7220	9.6200	0.0210	0.0000	18.9780	Below State Avg.
J. Sagbara	8.6970	2.7360	6.9840	0.0316	0.0000	18.4486	Below State Avg.
K. Valia	10.5870	11.3980	8.9880	0.0196	0.0000	30.9926	State Average
17. SURAT DT.							
A. Chorasi	17.5920	18.3360	6.9260	0.0230	8.5820	51.4590	Above State Avg.
B. Olpad	15.3210	14.3980	8.0100	0.0300	1.0380	38.7970	State Average
C. Kamrej	12.9360	20.0000	8.8780	0.0370	0.9900	42.8410	Above State Avg.
D. Mangrol	10.8960	11.0540	8.8780	0.0238	0.6240	31.4758	State Average
E. Mandvi	10.1100	9.6740	8.3760	0.0288	0.8740	29.0628	State Average
F. Songadh	8.2320	6.0780	8.7540	0.0302	1.8500	24.9442	Below State Avg.
G. Uchchhal	6.3540	4.3540	8.7200	0.0686	0.0000	19.4966	Below State Avg.
H. Nizar	9.1140	12.5720	8.4780	0.0448	0.0000	30.2088	State Average
I. Vyara	9.9240	11.4520	8.6760	0.0228	1.3130	31.3878	State Average
J. Valod	12.4650	18.5480	9.1400	0.0544	0.0000	40.2074	Above State Avg.
K. Bardoli	12.7290	19.6440	8.5340	0.0304	2.4420	43.3794	Above State Avg.
L. Mahuva	13.5210	16.2060	9.1720	0.0346	0.0000	38.9336	State Average
M. Palsana	12.0540	20.0000	9.2980	0.0476	0.0000	41.3996	Above State Avg.
18. VALSAD DT.							
A. Valsad	17.7750	17.2400	10.5020	0.0274	3.6960	49.2404	Above State Avg.
B. Pardi	14.9070	16.9620	7.1640	0.0294	2.0470	41.1094	Above State Avg.
C. Umbergaon	11.2500	19.5920	7.3840	0.0360	0.7560	39.0180	State Average
D. Gandevi	18.0060	19.2460	6.6400	0.0398	3.6520	47.5838	Above State Avg.
E. Navsari	17.2080	18.2740	7.2420	0.0214	3.7550	46.5004	Above State Avg.
F. Chikhli	13.8690	18.5720	7.5420	0.0230	0.2780	40.2840	Above State Avg.
G. Bansda	9.4680	14.4680	7.8600	0.0350	0.5850	32.4160	State Average
H. Dharampur	5.9100	3.9840	8.1760	0.0208	0.5950	18.6858	Below State Avg.
19. DANGS DT.							
A. Dangs	8.9520	2.1220	7.9560	-	0.0000	19.0300	Below State Avg.
STATE AVERAGE (ALL TALUKA)	14.0370	12.8160	6.3360	0.0160	2.6390	35.8440	

Sources : District Census Handbooks, 1981.

STRATIFICATION OF RURAL KERALA - SUMMARY

(DETAILS IN TABLE 5.2)

State Average Index 48.1431

	Highest	Lowest
Composite Index	55.9875	41.7070
Taluk	Kanayannur	Tirur
District	Ernakulam	Malappuram

Below Average Development Interval 41.7070 - 46.4671

Average Development Interval 46.4672 - 51.2273

Above Average Development Interval 51.2274 - 55.9875

Name of District	Total No. of Taluks	Below Average Development *		Average Development *		Above Average Development *	
		No.	%	No.	%	No.	%
1. KASARGOD	2	2	100	0	0	0	0
2. CANNANORE	3	0	0	2	67	1	33
3. WAYANAD	3	3	100	0	0	0	0
4. KOZHIKODE	3	2	67	1	33	0	0
5. MALAPPURAM	4	4	100	0	0	0	0
6. PALGHAT	5	4	80	1	20	0	0
7. TRICHUR	5	0	0	4	80	1	20
8. ERNAKULAM	7	0	0	5	71	2	29
9. IDUKKI	4	2	50	2	50	0	0
10. KOTTAYAM	5	0	0	3	60	2	40
11. ALLEPPEY	7	0	0	5	71	2	29
12. QUILON	6	0	0	6	100	0	0
13. TRIVANDRUM	4	1	25	2	50	1	25
STATE TOTAL	58	18	31	31	53	9	16

\* : Development Index Relative to State Average.

TABLE 5.2

## RURAL STRATIFICATION OF KERALA STATE

Name of District/ Taluk	Weighted Literacy Rate 30%	Weighted Power Supply 20%	Weighted Main Worker 20%	Weighted Bank per 1000 20%	Weighted Urban Popln. 10%	Composite Index	Stage of Relative Development
1. KASARGOD DT.							
A. Kasargod	15.699	20.000	6.176	0.014	0.986	42.8752	Below State Avg.
B. Hosdurg	17.346	20.000	5.906	0.014	0.000	43.2662	Below State Avg.
2. CANNANORE DT.							
A. Taliparamba	22.449	20.000	4.870	0.015	1.570	48.9032	State Average
B. Cannanore	24.105	20.000	4.548	0.015	6.352	55.0199	Above State Avg.
C. Tellicherry	18.996	20.000	4.638	0.015	4.333	47.9813	State Average
3. WAYANAD DT.							
A. Mananthavady	17.025	20.000	6.724	0.010	0.000	43.7588	Below State Avg.
B. Sultan's Battery	18.492	20.000	6.724	0.010	0.000	45.2258	Below State Avg.
C. Vythiri	16.824	20.000	6.678	0.010	0.000	43.5118	Below State Avg.
4. KOZHIKODE DT.							
A. Badagara	19.683	20.000	4.128	0.014	1.284	45.1094	Below State Avg.
B. Quilandy	20.721	20.000	4.628	0.014	0.000	45.3634	Below State Avg.
C. Kozhikode	21.768	20.000	4.352	0.014	4.653	50.7876	State Average
5. MALAPPURAM DT.							
A. Ernad	18.825	20.000	4.706	0.010	0.010	43.5509	Below State Avg.
B. Perinthalmanna	18.735	20.000	4.604	0.010	0.000	43.3490	Below State Avg.
C. Tirur	17.343	20.000	3.870	0.010	0.484	41.7070	Below State Avg.
D. Ponnani	17.526	20.000	4.296	0.010	1.646	43.4776	Below State Avg.
6. PALGHAT DT.							
A. Ottapalam	18.963	20.000	5.352	0.013	0.931	45.2588	Below State Avg.
B. Mannarghat	15.969	20.000	6.622	0.013	0.000	42.6036	Below State Avg.
C. Palghat	18.342	20.000	6.504	0.013	2.634	47.4924	State Average
D. Chittur	15.264	20.000	7.824	0.013	0.820	43.9206	Below State Avg.
E. Alathur	16.674	20.000	7.246	0.013	0.000	43.9326	Below State Avg.
7. TRICHUR DT.							
A. Chavakkad	20.952	20.000	4.532	0.018	1.579	47.0810	State Average
B. Talapilly	20.295	20.000	5.982	0.018	0.417	46.7117	State Average
C. Trichur	23.487	20.000	5.546	0.018	4.455	53.5066	Above State Avg.
D. Kodangallur	21.651	20.000	4.950	0.018	2.321	48.9405	State Average
E. Mukundapuram	22.698	20.000	5.212	0.018	1.177	49.1055	State Average
8. ERNAKULAM DT.							
A. Parur	23.208	20.000	5.086	0.018	5.358	53.6691	Above State Avg.
B. Alwaye	22.296	20.000	6.096	0.018	1.466	49.8754	State Average
C. Kunnathunad	22.338	20.000	6.448	0.018	0.662	49.4660	State Average
D. Kothamangalam	21.693	20.000	6.014	0.018	2.011	49.7352	State Average
E. Muvattupuzha	23.184	20.000	6.064	0.018	0.912	50.1771	State Average
F. Kanayannur	23.373	20.000	5.284	0.018	7.313	55.9875	Above State Avg.
G. Cochin	24.054	20.000	4.886	0.018	5.584	54.5418	Above State Avg.
9. IDUKKI DT.							
A. Devicolan	17.226	20.000	8.014	0.010	0.000	45.2504	Below State Avg.
B. Udumbancholam	20.628	20.000	6.866	0.010	0.058	47.5625	State Average
C. Thodupuzha	22.539	20.000	6.066	0.010	1.610	50.2258	State Average
D. Peermade	19.026	20.000	7.310	0.010	0.000	46.3464	Below State Avg.
10. KOTTAYAM DT.							
A. Vaikom	23.835	20.000	5.658	0.014	0.760	50.2672	State Average
B. Meenachil	24.357	20.000	5.786	0.014	0.577	50.7343	State Average
C. Kottayam	25.065	20.000	5.252	0.014	1.201	51.5325	Above State Avg.
D. Changanacherry	24.621	20.000	5.166	0.014	1.755	51.5560	Above State Avg.
E. Kanjirapally	24.003	20.000	4.424	0.014	0.000	48.4412	State Average

TABLE 5.2 (contd.)

## RURAL STRATIFICATION OF KERALA STATE

Name of District/ Taluk	Weighted Literacy Rate 30%	Weighted Power Supply 20%	Weighted Main Worker 20%	Weighted Bank per 1000 20%	Weighted Urban Popln. 10%	Composite Index	Stage of Relative Development
11. ALLEPPEY DT.							
A. Cherthala	24.057	20.000	6.552	0.012	1.576	52.1968	Above State Avg.
B. Ambalapuzha	22.998	20.000	5.146	0.012	4.535	52.6908	Above State Avg.
C. Kuttanad	24.255	20.000	5.874	0.012	0.000	50.1408	State Average
D. Thiruvalla	22.449	20.000	4.246	0.012	2.023	48.7298	State Average
E. Karthigapally	22.872	20.000	4.898	0.012	1.423	49.2048	State Average
F. Chengannur	23.208	20.000	4.246	0.012	1.038	48.5038	State Average
G. Mavelikkara	24.273	20.000	4.426	0.012	0.035	48.7458	State Average
12. QUILON DT.							
A. Karunagapally	21.657	20.000	5.082	0.017	0.000	46.7560	State Average
B. Kunnathur	22.398	20.000	5.296	0.017	0.000	47.7110	State Average
C. Pathnamthitta	23.655	20.000	5.250	0.017	0.990	49.9117	State Average
D. Pathanapuram	21.699	20.000	5.376	0.017	1.151	48.2425	State Average
E. Kottarakara	22.272	20.000	4.678	0.017	0.000	46.9670	State Average
F. Quilon	21.894	20.000	4.480	0.017	3.641	50.0318	State Average
13. TRIVANDRUM DT.							
A. Chirayinkil	20.622	20.000	5.190	0.018	1.229	47.0587	State Average
B. Nedumangad	20.772	20.000	5.508	0.018	0.871	47.1692	State Average
C. Trivandrum	22.452	20.000	5.382	0.018	5.735	53.5868	Above State Avg.
E. Neyyattinkara	20.070	20.000	5.576	0.018	0.420	46.0845	Below State Avg.
STATE AVERAGE (ALL TALUK)	21.084	20.000	5.502	0.013	1.545	48.1431	

Sources : District Census Handbooks, 1981.

TABLE 5.3

## DISTRIBUTION OF URBAN CENTRES BY CLASS IN DISTRICTS IN GUJARAT

Urban units are, for the purpose of analysis, categorised into the following six distinct classes.

Class	Population
I	1,00,000 and above
II	50,000 to 99,999
III	20,000 to 49,999
IV	10,000 to 19,999
V	5,000 to 9,999
VI	Less than 5,000

District	Urban Agglomerations	Class I	Class II	Class III	Class IV	Class V	Class VI	Total
1 Jamnagar	1	0	0	2	8	3	1	15
2 Rajkot	0	1	5	1	2	3	0	12
3 Surendranagar	1	0	1	1	5	2	0	10
4 Bhavnagar	0	1	3	2	4	6	0	16
5 Amreli	0	0	1	3	6	2	0	12
6 Junagadh	2	1	0	4	11	2	0	20
7 Kutch	0	0	0	0	0	0	0	0
8 Banaskantha	0	0	1	2	1	1	0	5
9 Sabarkantha	0	0	0	2	4	1	1	8
10 Mehsana	0	0	4	5	4	1	0	14
11 Gandhinagar	0	0	1	0	0	0	0	1
12 Ahmedabad	1	0	0	5	4	2	0	12
13 Kheda	0	1	2	6	7	1	1	18
14 Panchmahals	1	0	1	1	4	0	1	8
15 Vadodara	1	0	0	2	4	10	1	18
16 Bharuch	0	1	0	3	1	2	1	8
17 Surat	1	0	0	2	5	5	1	14
18 Valsad	2	0	0	1	5	11	1	20
19 Dangs	0	0	0	0	0	0	0	0
STATE TOTAL	10	5	19	42	75	52	8	211

Sources : District Census Handbooks, 1981.

TABLE 5.4

## DISTRICTWISE DISTRIBUTION OF URBAN CENTRES BY CLASS IN KERALA

Name of District	Urban Agglomerations	Class of Towns						Total
		Class I	Class II	Class III	Class IV	Class V	Class VI	
1. KASARGOD	-	-	-	1	-	-	-	1
2. CANNANORE	2	2	4	15	4	-	-	25
3. WAYANAD	-	-	-	-	-	-	-	0
4. KOZHIKODE	1	1	-	-	-	-	-	6
5. MALAPPURAM	-	1	3	-	-	-	-	4
6. PALGHAT	1	-	-	3	-	-	-	4
7. TRICHUR	2	-	-	5	9	2	-	25
8. ERNAKULAM	1	-	-	11	-	1	-	16
9. IDUKKI	-	-	-	1	-	1	-	2
10. KOTTAYAM	-	-	2	2	-	-	-	4
11. ALLEPPEY	-	1	-	3	2	-	-	6
12. QUILON	1	-	5	-	-	-	-	6
13. TRIVANDRUM	1	-	-	4	-	-	-	6
STATE TOTAL	9	5	14	45	15	4	0	105

Sources : District Census Handbooks, 1981.

TABLE 5.5  
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Consumer Expenditure of Broad Groups of Items as Percentage of Total Non-food Expenditure for a Period of 30 Days by Monthly Per Capita Expenditure Class (32nd Round - Second quinquennial Round : June '77-July '78)

	Monthly Per Capita Expenditure Class in Rupees All India : Rural				
	80-100	100-150	150-200	200+	All Exp. Classes
Total Food Expenses	202.42%	156.80%	117.40%	33.49%	180.50%
Items in Non-Food group					
-Pan, Tobacco & Intoxicants	8.92%	7.28%	5.73%	1.92%	8.10%
-Fuel & Light	17.60%	13.21%	9.87%	3.03%	16.82%
-Clothing	30.10%	33.13%	36.08%	17.15%	24.39%
-Footwear	2.39%	2.94%	3.03%	2.23%	2.08%
-Misc. Goods & Services	33.88%	34.58%	33.99%	18.72%	28.99%
-Durable Goods	7.12%	8.86%	11.30%	56.95%	19.63%
Non Food Total	100.00%	100.00%	100.00%	100.00%	100.00%
All India : Urban					
	80-100	100-150	150-200	200-300	300+ All Exp. Classes
Total Food Expenses	196.51%	154.67%	125.29%	98.84%	44.47%
Items in Non-Food group					
-Pan, Tobacco & Intoxicants	7.52%	6.02%	5.27%	4.33%	2.86%
-Fuel & Light	21.06%	16.54%	13.36%	10.01%	4.45%
-Clothing	15.30%	19.10%	20.57%	23.35%	18.87%
-Footwear	1.43%	1.77%	1.96%	1.99%	1.37%
-Misc. Goods & Services	37.86%	37.64%	37.98%	36.81%	32.82%
-Durable Goods	16.83%	18.93%	20.85%	23.50%	39.63%
Non Food Total	100.00%	100.00%	100.00%	100.00%	100.00%

Source : Sarvekshana, Jan. 1986, pp. S92, S96, S101, S158, S162, S167.

TABLE 5.5 (contd.)

Consumer Expenditure of Broad Groups of Items as Percentage of Total Non-Food Expenditure for a Period of 30 Days by Monthly Per Capita Expenditure Class (32nd Round - Second Quinquennial Round : June '77-July '78)

	Monthly Per Capita Exp. Class in Rupees Gujarat : Rural					Monthly Per Capita Expenditure Class in Rupees Kerala : Rural				
	80-100	100-150	150-200	200 +	All Exp. Classes	80-100	100-150	150-200	200 +	All Exp. Classes
	236.22%	178.70%	106.21%	61.03%	218.97%	180.85%	152.22%	118.37%	59.04%	156.73%
Total Food Expenses										
Items in Non-Food group										
-Pan, Tobacco & Intoxicants	9.35%	7.40%	3.68%	2.50%	9.03%	9.89%	8.20%	5.61%	3.28%	8.80%
-Fuel & Light	21.04%	15.40%	8.84%	4.86%	20.33%	16.24%	12.65%	11.75%	6.32%	15.18%
-Clothing	21.84%	30.03%	42.66%	37.72%	24.59%	18.23%	20.93%	20.32%	23.20%	18.56%
-Footwear	2.84%	2.83%	2.58%	2.18%	2.31%	1.14%	1.15%	1.06%	1.01%	0.90%
-Misc. Goods & Services	38.00%	36.55%	31.34%	29.23%	35.03%	43.38%	43.02%	41.09%	28.09%	38.82%
-Durable Goods	6.93%	7.78%	10.89%	23.51%	8.71%	11.12%	14.05%	20.17%	38.10%	17.43%
Non Food Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Gujarat : Urban										
Total Food Expenses	210.33%	156.75%	118.86%	47.02%	146.21%					
Items in Non-Food group										
-Pan, Tobacco & Intoxicants	6.66%	4.80%	3.89%	1.62%	4.83%	10.50%	6.79%	3.80%	3.47%	7.49%
-Fuel & Light	21.74%	16.23%	12.65%	4.83%	15.37%	19.37%	14.41%	15.29%	8.22%	16.37%
-Clothing	13.15%	18.23%	23.80%	13.83%	15.13%	15.13%	19.51%	16.96%	23.85%	15.23%
-Footwear	1.71%	2.40%	2.42%	1.03%	1.63%	1.33%	1.24%	1.44%	1.96%	1.28%
-Misc. Goods & Services	40.33%	39.56%	37.82%	21.64%	33.64%	39.88%	42.45%	42.94%	37.99%	26.02%
-Durable Goods	16.40%	18.78%	19.41%	57.04%	29.40%	13.80%	15.60%	19.57%	24.50%	34.65%
Non Food Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Kerala : Urban										
Total Food Expenses										
Items in Non-Food group										
-Pan, Tobacco & Intoxicants										
-Fuel & Light										
-Clothing										
-Footwear										
-Misc. Goods & Services										
-Durable Goods										
Non Food Total										

Source : Sarvekshana, Jan. 1986, pp. s92, s96, s101, s158, s162, s167.

TABLE 5.6

Consumer Expenditure of Broad Groups of Items as Percentage of Total Non-Food Expenditure for a Period of 30 Days by Monthly Per Capita Expenditure Class  
(38th Round - Third Quinquennial Round : Jan.'83-Dec.'83)

Total Food Expenses	268.01%	232.22%	195.09%	164.46%	132.02%	108.44%	79.37%	190.47%
Items in Non-Food Group								
-Pan, Tobacco & Intoxicants	11.57%	10.30%	8.90%	7.87%	6.28%	5.67%	4.39%	8.68%
-Fuel & Light	29.20%	24.78%	20.34%	16.23%	37.02%	10.26%	6.89%	20.46%
-Clothing	17.23%	20.82%	25.03%	28.90%	34.26%	38.32%	32.16%	24.95%
-Footwear	2.23%	2.77%	3.09%	3.48%	3.51%	3.77%	3.22%	2.87%
-Misc. Goods & Services	37.65%	38.56%	39.03%	38.31%	36.93%	33.98%	31.86%	36.42%
-Durable Goods	2.07%	2.80%	3.59%	5.22%	6.33%	8.01%	21.48%	9.17%
Non Food Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
All-India : Urban								
Total Food Expenses	240.81%	219.09%	196.18%	163.74%	136.25%	120.51%	81.31%	144.15%
Items in Non-Food Group								
-Pan, Tobacco & Intoxicants	9.69%	8.95%	7.73%	6.78%	5.52%	5.14%	3.63%	5.98%
-Fuel & Light	30.17%	26.89%	23.29%	19.28%	15.73%	13.10%	33.91%	16.94%
-Clothing	8.58%	10.17%	12.59%	16.75%	20.00%	21.45%	25.37%	18.67%
-Footwear	1.84%	2.22%	2.55%	2.68%	2.98%	3.07%	2.96%	2.68%
-Misc. Goods & Services	48.73%	50.09%	51.86%	51.70%	52.48%	52.60%	48.44%	50.22%
-Durable Goods	0.99%	1.68%	1.99%	2.81%	3.06%	4.64%	11.01%	5.50%
Non Food Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source : Sarvekshana, April 1986, pp.546, 550, 555, 574, 578, & 583.

TABLE 5.6 (contd.)

Consumer Expenditure of Broad Groups of Items as Percentage of Total Non-Food Expenditure for a Period of 30 Days by Monthly Per Capita Expenditure Class  
(38th Round - Third Quinquennial Round : Jan.'83-Dec.'83)

Total Food Expenses	281.72%	254.62%	221.96%	182.90%	132.12%	95.90%	61.24%	195.38%	261.10%	237.47%	204.77%	187.35%	159.66%	138.67%	65.25%	160.87%
Items in Non-Food Group																
-Pan, Tobacco & Intoxicants	13.58%	11.36%	9.21%	7.59%	4.15%	3.13%	2.74%	8.76%	12.71%	12.05%	11.09%	9.47%	7.89%	7.70%	2.63%	8.08%
-Fuel & Light	30.95%	27.29%	21.82%	17.44%	13.12%	9.27%	5.16%	20.32%	27.52%	23.61%	19.52%	16.57%	13.45%	10.65%	5.21%	15.18%
-Clothing	9.86%	15.17%	15.38%	23.97%	30.41%	37.46%	41.43%	21.93%	7.74%	11.17%	15.30%	16.11%	21.93%	25.44%	20.07%	16.65%
-Footwear	3.92%	3.65%	2.96%	3.79%	2.25%	3.31%	1.74%	2.96%	1.29%	1.69%	1.91%	2.29%	2.06%	1.94%	1.58%	1.72%
-Misc. Goods & Services	41.11%	40.75%	48.31%	43.63%	42.55%	32.57%	27.94%	39.82%	49.41%	49.79%	49.35%	50.49%	47.82%	45.82%	30.35%	42.83%
-Durable Goods	0.62%	1.84%	2.37%	3.61%	7.53%	14.29%	20.99%	6.23%	1.29%	1.69%	2.82%	5.05%	6.85%	8.45%	40.16%	15.52%
Non Food Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Gujarat : Urban																
Total Food Expenses	257.57%	232.96%	230.32%	184.33%	141.01%	119.52%	79.72%	161.17%	231.40%	248.81%	222.67%	178.51%	157.32%	163.93%	82.81%	146.21%
Items in Non-Food Group																
-Pan, Tobacco & Intoxicants	10.56%	8.41%	6.95%	5.04%	4.48%	3.80%	3.19%	5.28%	12.45%	11.48%	8.56%	7.76%	6.35%	5.23%	2.89%	5.91%
-Fuel & Light	30.26%	27.36%	25.65%	21.15%	16.03%	13.07%	8.72%	18.28%	26.86%	25.51%	21.90%	17.76%	14.97%	13.65%	7.04%	14.28%
-Clothing	6.34%	10.10%	6.91%	14.80%	21.82%	27.63%	29.46%	18.89%	7.08%	10.01%	12.76%	16.85%	19.37%	14.16%	27.33%	20.03%
-Footwear	3.00%	2.49%	2.50%	3.57%	3.15%	3.05%	2.52%	2.87%	1.39%	2.12%	2.52%	1.99%	2.18%	2.84%	2.65%	2.36%
-Misc. Goods & Services	48.85%	49.99%	55.17%	53.70%	52.51%	49.82%	46.45%	50.61%	51.79%	48.88%	52.01%	51.46%	51.18%	59.72%	44.56%	48.40%
-Durable Goods	1.04%	1.69%	2.82%	1.94%	2.02%	2.65%	9.65%	4.07%	0.46%	2.03%	2.24%	4.17%	5.94%	4.40%	15.53%	9.00%
Non Food Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source : Sarvekshana, April 1986, pp.s46, s50, s55, s74, s78, & s83.

TABLE 5.7  
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Consumer Expenditure of Broad Groups of Items as Percentage of Total Non-Food Expenditure for a Period of 30 Days by Monthly Per Capita Expenditure Class (42nd Round - June '86-July '87)

	Monthly Per Capita Expenditure Class in Rupees							
	All India : Rural							All Exp. Classes
	85-100	100-125	125-150	150-200	200-250	250-300	300+	
Total Food Expenses	296.31%	298.97%	284.48%	256.92%	190.45%	161.59%	64.09%	192.72%
Items in Non-Food Group								
-Pan, Tobacco & Intoxicants	14.00%	12.17%	12.45%	10.92%	8.40%	7.18%	3.65%	8.91%
-Fuel & Light	33.53%	31.85%	33.77%	27.72%	20.80%	16.55%	6.22%	20.99%
-Clothing	8.46%	6.83%	9.80%	13.04%	17.52%	27.63%	50.96%	25.11%
-Footwear	5.24%	3.26%	2.68%	2.86%	3.84%	8.22%	3.65%	3.74%
-Misc. Goods & Services	37.83%	44.30%	39.74%	43.08%	45.34%	38.89%	20.02%	34.92%
-Durable Goods	0.94%	1.59%	1.58%	2.38%	4.10%	1.54%	15.50%	6.33%
Non Food Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
All-India : Urban								
Total Food Expenses	280.69%	257.04%	221.74%	204.23%	170.13%	146.68%	81.77%	132.94%
Items in Non-Food Group								
-Pan, Tobacco & Intoxicants	12.22%	10.86%	10.74%	9.88%	7.55%	6.94%	4.18%	6.35%
-Fuel & Light	35.22%	33.62%	27.91%	24.72%	20.82%	16.42%	8.98%	15.73%
-Clothing	4.26%	5.98%	7.18%	11.60%	12.79%	18.73%	17.91%	15.18%
-Footwear	1.64%	1.36%	1.69%	2.32%	2.45%	-	2.75%	2.62%
-Misc. Goods & Services	45.80%	47.04%	51.50%	49.13%	52.50%	50.85%	51.87%	51.05%
-Durable Goods	0.86%	1.14%	0.98%	2.35%	3.90%	3.03%	14.32%	9.08%
Non Food Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source : Sarvekshana, April-June 1989, pp.S50,S55,S76,S155,S160 & S181.

TABLE 5.7 (contd.)

Consumer Expenditure of Broad Groups of Items as Percentage of Total Non-Food Expenditure for a Period of 30 Days by Monthly Per Capita Expenditure Class (42nd Round - June '86-July '87)

	Monthly Per Capita Expenditure Class in Rupees							Monthly Per Capita Expenditure Class in Rupees						
	Gujarat : Rural							Kerala : Rural						
	85-100	100-125	125-150	150-200	200-250	250-300	300+ All Exp. Classes	85-100	100-125	125-150	150-200	200-250	250-300	300+ All Exp. Classes
Total Food Expenses	296.31%	300.39%	284.48%	256.92%	190.45%	161.59%	64.09%	256.38%	266.90%	251.10%	215.10%	177.42%	173.26%	65.45%
Items in Non-Food Group														
-Pan, Tobacco & Intoxicants	14.00%	12.17%	12.45%	10.92%	8.40%	7.18%	3.65%	14.50%	14.26%	14.05%	13.39%	12.89%	7.86%	3.84%
-Fuel & Light	33.53%	31.85%	33.77%	27.72%	20.80%	16.55%	6.22%	30.97%	30.53%	27.24%	21.14%	18.31%	16.16%	5.71%
-Clothing	8.46%	6.83%	9.80%	13.04%	17.52%	27.63%	50.96%	4.40%	6.45%	7.10%	14.00%	17.24%	17.99%	16.43%
-Footwear	5.24%	3.26%	2.68%	2.86%	3.84%	8.22%	3.65%	1.66%	0.88%	1.69%	2.20%	2.62%	2.13%	17.90%
-Misc. Goods & Services	37.83%	44.30%	39.74%	43.08%	45.34%	38.89%	20.02%	48.21%	46.32%	46.19%	47.13%	45.64%	50.46%	27.50%
-Durable Goods	0.94%	1.59%	1.58%	2.38%	4.10%	1.54%	15.50%	0.27%	1.56%	3.73%	2.13%	3.30%	5.41%	28.62%
Non Food Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Gujarat : Urban														
Total Food Expenses	364.88%	275.26%	295.43%	225.80%	211.12%	165.14%	83.08%	205.59%	217.21%	297.25%	239.28%	180.26%	169.75%	98.69%
Items in Non-Food Group														
-Pan, Tobacco & Intoxicants	24.89%	9.69%	12.74%	6.66%	6.53%	6.37%	2.75%	13.22%	15.62%	12.05%	9.86%	11.99%	7.42%	3.40%
-Fuel & Light	31.96%	36.38%	30.92%	29.33%	28.03%	19.35%	12.26%	22.87%	26.38%	28.06%	28.22%	20.71%	16.85%	5.94%
-Clothing	2.71%	3.54%	3.87%	9.52%	7.07%	12.37%	19.37%	26.73%	7.24%	7.69%	11.26%	12.63%	14.54%	20.30%
-Footwear	0.55%	5.36%	1.89%	4.18%	3.37%	3.42%	0.55%	0.36%	1.11%	1.24%	1.30%	2.05%	0.57%	2.20%
-Misc. Goods & Services	39.89%	44.21%	50.49%	49.85%	53.96%	57.36%	0.55%	36.15%	48.59%	48.90%	48.95%	2.35%	59.03%	44.45%
-Durable Goods	0.00%	0.83%	0.08%	0.46%	1.04%	1.12%	64.51%	0.69%	0.97%	2.05%	0.41%	0.34%	1.57%	23.70%
Non Food Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Kerala : Urban														
Total Food Expenses														
Items in Non-Food Group														
-Pan, Tobacco & Intoxicants														
-Fuel & Light														
-Clothing														
-Footwear														
-Misc. Goods & Services														
-Durable Goods														
Non Food Total														

Source : Sarvekshana, April-June 1989, pp. S50, S55, S76, S155, S160 & S181.

**TABLE 5.8**

**DISTRIBUTION OF HOUSEHOLDS IN THE RURAL AND URBAN AREAS**

	RURAL	URBAN	TOTAL
GUJARAT	133	133	266
KERALA	133	133	266
TOTAL	266	266	532

**TABLE 5.9**  
**VILLAGES AND TOWNS VISITED DURING THE FINAL SURVEY**

STATUS OF DEVELOPMENT	TALUKA	DISTRICT	VILLAGE	NUMBER OF HOUSEHOLDS
<b>VILLAGES VISITED IN THE RURAL SURVEY</b>				
<b>Gujarat State :</b>				
Below State Average	Jetpur-Pavi	Vadodara	Sithol	17
Below State Average	Jetpur-Pavi	Vadodara	Behsavahi	15
Below State Average	Jetpur-Pavi	Vadodara	Chudel	12
State Average	Vaghodia	Vadodara	Pipaliya	16
State Average	Vaghodia	Vadodara	Limba	14
State Average	Vaghodia	Vadodara	Kamlapur	14
Above State Average	Anand	Kheda	Mogar	20
Above State Average	Anand	Kheda	Vadod	16
Above State Average	Nadiad	Kheda	Uttarsanda	8
<b>Kerala State :</b>				
Below State Average	Ottapalam	Palghat	Vaniamkulam	16
Below State Average	Ottapalam	Palghat	Coyalmanam	15
Below State Average	Alathur	Palghat	Lakkidi	13
State Average	Talapilly	Trichur	Mullurkara	20
State Average	Talapilly	Trichur	Kondazhy	10
State Average	Talapilly	Trichur	Chelakkara	14
Above State Average	Trichur	Trichur	Pudukad	18
Above State Average	Trichur	Trichur	Dherpu	18
Above State Average	Trichur	Trichur	Padiyam	9
<b>TOWNS VISITED IN THE FINAL SURVEY</b>				
<b>Gujarat State :</b>				
III	Dabhoi	Vadodara	Dabhoi	22
III	Mehamedabad	Kheda	Mehamedabad	22
II	Anand	Kheda	Anand	25
II	Ankleshwar	Bharuch	Ankleshwar	19
I	Nadiad	Kheda	Nadiad	23
I	Bharuch	Bharuch	Bharuch	22
<b>Kerala State :</b>				
III	Irinjalakuda	Mukundapuram	Trichur	22
III	Chalakudy	Mukundapuram	Trichur	22
II	Trichur	Trichur	Trichur	23
II	Palghat	Palghat	Palghat	21
I	Cochin	Cochin	Cochin	45

## NOTE 5.1

### DEFINITION OF "RURAL" AND "URBAN" ADOPTED FOR THIS RESEARCH

This research has adopted the definition employed by the Census of India 1981, for the delineation of an area as either "rural" or "urban".

Indian census has been presenting the demographic data separately for rural and urban areas. The unit of classification in this regard is "town" for urban areas and "village" for rural areas.

The Census of India notes:

"The following criteria were adopted for treating a place as urban for the 1981 Census:

- (a) All statutory towns i.e. all places with a municipal corporation, municipal board, cantonment board or notified town area etc.
- (b) All other places which satisfy the following criteria:
  - (i) A minimum population of 5000;
  - (ii) Seventy five percent of the male working population engaged in non-agricultural (and allied) activity; and
  - (iii) A density of population of at least four hundred per square kilometer (one thousand per square mile)<sup>1</sup>."

To work out the proportion of male working population referred to under (b) (ii), the data relating to main workers were considered. Main workers are defined as those who have been employed for at least 270 days in a year.

Agricultural workers include cultivators, agricultural labourers and workers in Industrial Category II, namely, livestock, forestry, fishing, hunting, and plantations, orchards, and allied activities.

All such areas which do not satisfy the above mentioned criteria were defined as rural, that is, that which is not urban is identified as rural.

Urban areas are divided into six different classes by their population size in the following manner :

<u>Size Class</u>	<u>Population</u>
Class I	100,000 +
Class II	50,000-99,999
Class III	20,000-49,999
Class IV	10,000-19,999
Class V	5,000-9,999
Class VI	< 5,000

A town with a population of at least 100,000 was treated as a city.

#### Urban Agglomeraion(U.A.)

The concept of urban agglomeration adopted for the 1971 Census continued for the 1981 Census. Very often larger railway colonies, University Campuses, port areas, military camps etc. come up outside the statutory limits of the city or town but adjoining it. Such areas may not have, by themselves, qualified to be treated as town but if they formed a continuous spread with the adjoining town, it would have been only realistic to treat them as urban and this was done - Such settlements have been termed as outgrowths(O.Gs.) and may cover a whole village, or a part of a village. Two or more towns may also be continuous to each other. Such towns together with their O.G. have been treated as one urban unit and called U.A. An U.A. therefore constitutes: (a) A city or town with continuous OGs, the outgrowths being outside the statutory but falling within the boundaries of the adjoining village or villages; or (b) two or more adjoining towns with their outgrowth(s); or (c) a city with one or more adjoining town with their OGs all of which form a continuous spread<sup>2</sup>."

#### REFERENCES

1. Census of India, 1981.
2. ibid, 1981.

## Note 5.2

### METHODOLOGY FOR DETERMINING THE STATUS OF THE TALUKAS IN BOTH THE STATES

#### I. Rural Stratification For Gujarat

State Average Index = 35.844

Highest and Lowest Index			
-----			
	Index		
	Value	Taluka	District
-----			
Lowest	11.9828	Vav	Banaskantha
Highest	53.2996	Vadodara	Vadodara

Towards segregating the talukas into three levels, firstly, the difference between the highest and the lowest was ascertained. This worked out to be 41.3168 (53.2996-11.9828). This difference was used to calculate the range for the three levels in the following manner: Divide 41.3168 by 3 (since three levels were desired). This worked out to be 13.7722 (41.3168/3). On adding 13.7722 with 11.9828 (the lowest index value in the state) results in 25.7550.

Therefore, the first level (the below state average) worked out to be between 11.9828 and 25.7550.

The second level (the state average level) was worked out in the similar manner: The lower limit of the second level would be 25.7551 since the upper limit of the below average was 25.7550, and the object was to have mutually exclusive intervals. Hence the difference already worked out i.e. 13.7722 was added up with 25.7551 to get the upper limit of this level. This Hence, the upper limit was 39.5273 (25.7551+13.7722). The lower and upper limit of the state average level was 25.7551 and 39.5273 respectively. As can be noted the state average index falls in this category.

The upper limit of the above average level was 39.5274. Adding 13.7722 with this, results in 53.2996 (39.5274+13.7722). Therefore, the upper and lower limits for this level is 39.5274 and 53.2996 respectively. It may be noted that the highest index value forms the upper limit for this category.

The range values for each of the levels is given in a tabular form below:

#### Range For Determining The Relative Development Levels in Gujarat:

Status of Development	Index - Range	
	Min.	Max.
-----		
Below State Average	11.9828	25.7550
State Average	25.7551	39.5273
Above State Average	39.5274	53.2996

## II. Rural Stratification For Kerala

State Average Index = 48.1402

### Highest and Lowest Index

	Index Value	Taluka	District
Lowest	41.7070	Tirur	Malappuram
Highest	55.9875	Kanayannur	Ernakulam

Towards segregating the talukas into three levels, firstly, the difference between the highest and the lowest was ascertained. This worked out to be 14.2805 (55.9875-41.7070). This difference was used to calculate the range for the three levels in the following manner: Divide 14.2805 by 3 (since three levels were desired). This worked out to be 4.7601 (14.2805/3). On adding 4.7601 with 41.7070 (the lowest index value in the state) results in 46.4671.

Therefore, the first level (the below state average) worked out to be between 41.7070 and 46.4671.

The second level (the state average level) was worked out in the similar manner: The lower limit of the second level would be 46.4672 since the upper limit of the below average was 46.4671, and the object was to have mutually exclusive intervals. Hence the difference already worked out i.e. 4.7601 was added up with 46.4672 to get the upper limit of this level. This Hence, the upper limit was 51.2273 (46.4672+4.7601). The lower and upper limit of the state average level was 46.4762 and 51.2273 respectively. As can be noted the state average index fall in this category.

The upper limit of the above average level was 51.2274. Adding 4.7601 with this, results in 55.9875 (51.2274+4.7601). Therefore, the upper and lower limits for this level is 51.2274 and 55.9875 respectively. It can be noted that the highest index value forms the upper limit for this category.

The range values for each of the levels is given in a tabular form below:

### Range For Determining The Relative Development Levels in Kerala:

Status of Development	Index - Range	
	Min.	Max.
Below State Average	41.7070	46.4671
State Average	46.4672	51.2273
Above State Average	51.2274	55.9875

This was the methodology employed to segregate the talukas of both the state.

### NOTE 5.3

#### LIST OF CONSUMER DURABLES SELECTED FOR THE STUDY

Twenty six products were selected from among the five classes identified. The products selected were:

##### I. Transportation Products

1. Bicycle
2. Moped
3. Scooter
4. Motorcycle
5. Motor Car

##### II. Entertainment Products

6. Transistor Radio
7. Tape Recorder/Stereo
8. Television
9. VCP/VCR

##### III. Personal-Effect/Use Products

10. Wrist Watch
11. Flashlight
12. Alarm Clock
13. Sewing Machine
14. Moulded Suitcase

##### IV. Home Convenience

15. Wall Clock
16. Electric Fan
17. Electric Iron
18. Cupboard
19. Air Conditioner/Cooler

##### V. Kitchen Appliances

20. Pressure Cooker
21. Mixer
22. Grinder
23. Exhaust Fan
24. Refrigerator
25. Washing Machine
26. Vacuum Cleaner

NOTE 5.4

INTERVIEW-SCHEDULE OF THE FINAL SURVEY

1 a. Please indicate the size of your family :

- Two members
- 3 to 5 members
- 6 to 8 members
- 8 to 10 members
- more than 10 members

b. Do you live in a joint family?

Yes \_\_\_\_\_ No \_\_\_\_\_

2. Please indicate the type of your dwelling :

Owned: \_\_\_\_\_ Rented: \_\_\_\_\_ Co. Accomodation: \_\_\_\_\_

3. Please indicate the age group to which you and your spouse belong :

Male household head -----	Female household head -----
------------------------------------	--------------------------------------

Between 18 and 23 years

Between 24 and 30 years

Between 31 and 40 years

Between 41 and 50 years

Between 51 and 60 years

Above 60 years

4. Please indicate the no. of years of formal education you and your spouse have received :

Male household head -----	Female household head -----
------------------------------------	--------------------------------------

No formal education

1 to 3 years of school

3 to 7 years of school

Upto S.S.C./S.S.L.C.

Upto H.S.C./Pre-Degree

1 to 3 years of college

3 to 5 years of college

Above 5 years of college

5. Please indicate the occupation you and your spouse are engaged in :

	Male household head -----	Female household head -----
Only household work		
Labourers/unskilled workers		
Semi skilled workers like carpenters,tailors etc.		
Retailers,small businesses (bus. with only family mem.)		
Land holding farmers		
Office and staff workers, teachers, technicians		
Professors, middle mgmt., business(with upto 5 emp.)		
Professionals (like doctors,lawyers,etc.)		
Top mgmt.,Businesses (busi. with 6-10 employees)		

6. Please indicate your family's monthly income class

- Less than Rs. 1000/-
- Between Rs. 1000/- and Rs. 2500/-
- Between Rs. 2500/- and Rs. 4000/-
- Between Rs. 4000/- and Rs. 5500/-
- Between Rs. 5500/- and Rs. 7000/-
- Between Rs. 7000/- and Rs. 8500/-
- Between Rs. 8500/- and Rs. 10,000/-
- Above Rs. 10,000/-

7. Please indicate the kind of newspapers and magazines you and your spouse read regularly :

	Male household head -----		Female household head -----	
	Yes	No	Yes	No
	-----	-----	-----	-----
Read Newspaper(s)				
Read Vernacular Newspaper(s)				
Read English Newspaper(s)				
Read Magazine(s)				
Read ver. general interst magazine(s)				
Read ver. film magazine(s)				
Read ver. women's magazine(s)				
Read Eng. general interst magazine(s)				
Read Eng. film magazine(s)				
Read Eng. sport's magazine(s)				
Read Eng. women's magazine(s)				
Read Eng. business magazine(s)				

8. During a day we are engaged in a lot of activities. There are some we perform individually while there are some which we perform with the members of our family. Given below are certain statements with regard to some such activities. Please indicate the extent to which you agree with each of these statements :

Indicate '5' if you agree with the statement to the greatest extent  
Indicate '4' if you agree with the statement to a great extent  
Indicate '3' if you agree with the statement to some extent  
Indicate '2' if you agree with the statement to a little extent  
Indicate '1' if you do not agree with the statement at all.

- |   |       |
|---|-------|
| a. MHH has enough leisure time                                | _____ |
| b. MHH tends to spend most of his leisure time indoors        | _____ |
| c. Reading is an important leisure time activity for MHH      | _____ |
| d. MHH is active in one or more service organisations         | _____ |
| e. MHH is active in one or more professional organisations    | _____ |
| f. MHH is a member of one or more clubs                       | _____ |
| g. MHH is a member of the Panchayat                           | _____ |
| h. FHH spouse has enough leisure time                         | _____ |
| i. FHH tends to spend most of her time indoors                | _____ |
| j. Reading is an important leisure time activity for FHH      | _____ |
| k. FHH is active in one or more service organisations         | _____ |
| l. FHH is active in one or more professional organisations    | _____ |
| m. FHH is a member of one or more clubs                       | _____ |
| n. FHH is a member of the Panchayat                           | _____ |
| o. Television is our family's primary source of entertainment | _____ |
| p. We tune in to the radio frequently                         | _____ |
| q. Our family often goes out for movies                       | _____ |
| r. Our family often goes out for dinners                      | _____ |
| s. We have a wide social circle                               | _____ |
| t. We often call on our friends                               | _____ |
| u. Our family travels together quite often                    | _____ |
| v. During vacations we often visit our relatives              | _____ |
| w. During vacations we often go on pilgrimages                | _____ |
| x. During vacations we often visit places of interest         | _____ |

All the subsequent questions, excepting the last, pertain to the list of products given in this card. So please answer these questions for all of these products.

Product List

- a. Bicycle
- b. Moped
- c. Scooter
- d. Motorcycle
- e. Car
- f. Radio
- g. Tape recorder / Two in one
- h. Black & White Television
- i. Colour Television
- j. V C P / V C R
- k. Wrist watch
- l. Sewing machine
- m. Moulded suitcase
- n. Wall clock
- o. Electric fan
- p. Electric Light Weight Iron
- q. Air conditioner/cooler
- r. Pressure cooker
- s. Mixer
- t. Grinder
- u. Exhaust fan
- v. Refrigerator
- w. Washing machine
- x. Vacuum cleaner
- y. Dish washer

9. Products could be said to be a symbol of social standing and therefore possession of them might enhance one's status. Please give your opinion on the extent to which you consider these products might help in enhancing one's status.

Indicate '5' if the product enhances status to the greatest extent  
Indicate '4' if the product enhances status to a great extent  
Indicate '3' if the product enhances status to some extent  
Indicate '2' if the product enhances status to a little extent  
Indicate '1' if the product does not enhance status at all.

10. The extent of usage of products varies in our everyday life. Please indicate your opinion on the extent to which these products would be useful in everyday life.

Indicate '5' if the product is useful in everyday life to the greatest extent  
Indicate '4' if the product is useful in everyday life to a great extent  
Indicate '3' if the product is useful in everyday life to some extent  
Indicate '2' if the product is useful in everyday life to a little extent  
Indicate '1' if the product is not at all useful in everyday life.

11 a. For these products, please indicate the following: whether you possess them or not, whether it was bought or gifted, the number of each of the products bought, and the rank order in which they were bought (Rank '1' to the product first bought, '2' to the product that was bought second and so on).

- (i) Possess : Yes/No
- (ii) Gift/Bought : G/B
- (iii) No. of each product bought :
- (iv) Rank order in which the boughts were purchased :

b. There might be some products that you are planning to buy in the coming 12 months. If so, please indicate the products you buying from the list (Indicate '1' to the you would prefer buying first, '2' to the one you would prefer buying second and so on).

Questions 12 to 16 are based on different aspects of purchase decision of a product. Please answer these questions for all the products you own as well as for those you plan to purchase in the coming twelve months.

12. The decision to purchase a product is a process involving all or some members of the family. Please indicate the role played by the different members of the family in this decision process.

(i) Who initiated the idea of buying the product :

Indicate whether Male Household Head  
 Female Household Head  
 any of the Children  
 any other member staying in the same household  
 or several members.

(ii) Advice was taken from :

Indicate whether Male Household Head  
 Female Household Head  
 any of the Children  
 any other member staying in the same household  
 several members  
 or none of the members.

(iii) Which member(s) went/will go to purchase the product :

Indicate whether Male Household Head  
 Female Household Head  
 any of the Children  
 any other member staying in the same household  
 MHH & FHH  
 or Parent(s) & Child(ren)

13. The buying decision on a product is influenced by a host of factors. Given below are a selection of such factors. Please indicate the extent to which the factors have influenced your buying decision on all the products you bought and for those you plan to buy.

Indicate ' 5 ' if the factor influenced you to the greatest extent  
Indicate ' 4 ' if the factor influenced you to a great extent  
Indicate ' 3 ' if the factor influenced you to some extent  
Indicate ' 2 ' if the factor influenced you to a little extent  
Indicate ' 1 ' if the factor did not influence you at all.

- (i) I buy the product for its use to me and/or my family
- (ii) I buy the product whose price is affordable
- (iii) I buy the product which my friends/relatives/neighbours own
- (iv) I buy the product because I am expected to own it
- (v) I buy the product which high class people own
- (vi) I buy the product which my family persuades me to buy

Durable products are generally bought after learning about the products. Learning usually is through gathering information from a number of sources. Please indicate the extent to which you relied on the different sources listed below.

Indicate ' 5 ' if you relied on the source to the greatest extent  
Indicate ' 4 ' if you relied on the source to a great extent  
Indicate ' 3 ' if you relied on the source to some extent  
Indicate ' 2 ' if you relied on the source to a little extent  
Indicate ' 1 ' if you did not rely on the source at all.

- 14.
- (i) I asked my friends/relatives/neighbours who own the product/ know about the product
  - (ii) I enquired from retailers/dealers
  - (iii) I watch Television advertisements intently
  - (iv) I listened to radio advertisements attentively
  - (v) I read newspaper/magazine advertisements carefully

- 15 a. Durable products are bought either from current income, savings, instalments or a combination of these. Please indicate the manner in which you have bought your products and also the manner in which you plan to buy in the coming 12 months.

- (i) Only by current income
- (ii) Only from savings
- (iii) Only through instalments
- (iv) With current income and savings
- (v) With current income and instalments
- (vi) With savings and instalments
- (vii) With current income, savings and instalments

- b. Please indicate your annual discretionary income :

- Less than Rs.500
- Between Rs.500 and Rs.1500
- Between Rs.1500 and Rs.3000
- Between Rs.3000 and Rs.4500
- Between Rs.4500 and Rs.6000
- Between Rs.6000 and Rs.7500
- Between Rs.7500 and Rs.9000
- Above Rs.9000

16. We were so far confined to product decisions. We now come to the factors that influence the brand choice of a product. There are a host of factors which influence brand choice. Please indicate the extent to which each of the following factors influenced or would influence your brand choice.

Indicate ' 5 ' if the factor influenced you to the greatest extent  
Indicate ' 4 ' if the factor influenced you to a great extent  
Indicate ' 3 ' if the factor influenced you to some extent  
Indicate ' 2 ' if the factor influenced you to a little extent  
Indicate ' 1 ' if the factor did not influence you at all.

- (i) Price was affordable
- (ii) It was easily available
- (iii) Has good after sales service
- (iv) The looks are appealing
- (v) It is a well known brand
- (vi) Brand is durable
- (vii) Like the brand advertisement
- (viii) My friends/relatives neighbours bought this brand
- (ix) High class people own this brand
- (x) My family persuaded me to buy this brand
- (xi) Dealer/Retailer persuaded me to buy this brand
- (xii) I have had prior experience with this brand

17. Product and brand purchases lead to varying extent of satisfaction. Please indicate the extent of satisfaction received from your product and brand purchases.

Indicate ' 5 ' if satisfied to the greatest extent  
Indicate ' 4 ' if satisfied to a great extent  
Indicate ' 3 ' if you have no opinion/undecided  
Indicate ' 2 ' if dis-satisfied to a great extent  
Indicate ' 1 ' if completely dis-satisfied.

- (i) This product has been of great use to us
- (ii) This product has helped us raise our social status.
- (iii) This brand has helped us raise our social status.
- (iv) The after sales service of this brand is good
- (v) This brand is durable
- (vi) The performance of this brand is up to the mark

- 18 a. Please indicate whether you make any savings during a year or not

Yes \_\_\_\_\_ No \_\_\_\_\_

- b. There are a number of reasons for saving. Given below are a list of such reasons. To what extent do the following factors motivate you to save:

Indicate ' 5 ' if the factor motivates you to the greatest extent  
Indicate ' 4 ' if the factor motivates you to a great extent  
Indicate ' 3 ' if the motivates influenced you to some extent  
Indicate ' 2 ' if the factor motivates you to a little extent  
Indicate ' 1 ' if the factor does not motivate you at all.

- (i) I save for my old age
- (ii) I save for any unexpected events in the family
- (iii) I save for major expenditures like marriage
- (iv) I save to buy different durable products
- (v) I save to buy farmland, house etc.
- (vi) I save for my children

T H A N K   Y O U  
-----

#### NOTE 5.5

#### MODIFIED LIST OF PRODUCTS FOR THE FINAL SURVEY

Twenty Five products were included for the final survey. The changes made were :

Television was segregated into two different products. i) Black & White Television, and ii) Color Television. This change was incorporated due to the fact that the respondents consider these as two different products.

In the pilot survey questions pertaining to electric iron was asked of all who possess an electric iron. But it was found that some households who owned a light weight electric iron were varying in their responses than those possessing older models. Moreover, since manufacturers were now concentrating only on producing light weight electric iron, it was decided that the respondent would be asked questions on the behavioral process on electric iron only if they possess a light weight electric iron. Hence, it was decided that the research would restrict to analyzing the behavior of the consumers during purchase of light weight electric irons.

Three products were eliminated from the survey. These products were: i) Torch light, ii) Alarm Clock, and iii) Cupboard. Products (i) and (ii) were excluded from the final survey because on analysis of the pilot study, it was concluded that there was no behavioral process in the buying of these two products. The consumers of these products, buy it with not much involvement and much time spent on making these purchases. Cupboard was eliminated in the final survey because it was found that a number of households did not own one due to the fact that they had wall cupboards. Moreover, among the owners of a cupboard, a number of the households it was noted that they purchase locally made cupboards and with not a great degree of involvement.

One relatively new product was included for the survey. This was the dishwasher. Since it was a new product, having been lately introduced it was decided that this product could be studied, if need be, as a test case for knowing the acceptance and perception on new products.

In short, the products included in the final survey were:

I Transportation Products

1. Bicycle
2. Moped 3. Scooter
4. Motorcycle
5. Motor Car

II Entertainment Products

6. Transistor Radio
7. Tape Recorder/Stereo
8. Black & White Television
9. Color Television
10. VCP/VCR

III Personal-Effect/Use Products

11. Wrist Watch
12. Sewing Machine
13. Molded Suitcase

IV. Home Convenience

14. Wall Clock
15. Electric Fan
16. Electric Light Weight Iron
17. Air Conditioner/Cooler

V. Kitchen Appliances

18. Pressure Cooker
19. Mixer
20. Grinder
21. Exhaust Fan
22. Refrigerator
23. Washing Machine
24. Vacuum Cleaner
25. Dish Washer

### **NOTE 5.6**

#### **CLASSIFICATION OF PRODUCTS FOR STATISTICAL ANALYSIS**

The twenty five products were at the outset segregated into two groups, namely, brown goods and white goods. On segregation each category had the following products:

##### **A. Brown Goods**

1. Bicycle
2. Moped
3. Scooter
4. Motorcycle
5. Motor Car
6. Transistor Radio
7. Tape Recorder/Stereo
8. Black & White Television
9. Wrist Watch
10. Sewing Machine
11. Moulded Suitcase
12. Wall Clock
13. Electric Fan
14. Electric Light Weight Iron
15. Pressure Cooker
16. Mixer
17. Grinder
18. Exhaust Fan

##### **B. White Goods**

1. Motor Car
2. Color Television
3. VCP/VCR
4. Air Conditioner/Cooler
5. Refrigerator
6. Washing Machine
7. Vacuum Cleaner
8. Dish Washer

Brown goods were further classified into four groups by their function. They were classified as :

**I Transportation Products**

1. Bicycle
2. Moped
3. Scooter
4. Motorcycle

**II Entertainment Products**

1. Transistor Radio
2. Tape Recorder/Stereo
3. Black & White Television

**III Personal-Effect/Use Products**

1. Wrist Watch
2. Sewing Machine
3. Moulded Suitcase

**IV. Home & Kitchen Appliances**

1. Wall Clock
2. Electric Fan
3. Electric Light Weight Iron
4. Pressure Cooker
5. Mixer
6. Grinder
7. Exhaust Fan

Therefore, for the purpose of conducting a statistical analysis, these products were grouped into five classes. Analyses were performed for these classes of products only.

Statistical analyses has been performed by employing the Analysis of Variance(Anova) technique on seven of the questions, and percentages on the rest. Wherever percentages have been worked out, they have been done so for individual products, although the discussion would concentrate only on the trends discernible for the product classes. Anovas though have been performed for product classes only.

Anovas are performed for a single Dependent Variable(DV), with either multiple or single Independent Variable(s)(IV). A brief description of Anova follows in a subsequent sub-section, and hence not discussed here. This explanation only pertains to

the method devolved for testing a DV for a product class, when information has been collected for individual products. As mentioned, a product class is formed by amalgamating several products. Therefore, the problem to be solved is to find an approach for amalgamating the scores of a particular DV, in each product class, for every household. Moreover, the problem arises only when a household has purchased or plans to purchase more than a single product in any product class, for if only one product in any class has been purchased or being planned for, it obviously follows that the score for that particular product class would be that of the single product that has been purchased.

In order to solve the problem of multiple purchase of products in any class an average score has been employed. That is to say that, were any household to have purchased two products in a class, for instance, then the score for a particular DV pertinent to that class of products, for that household, would be the summation of the original scores of the DV for the two products, divided by two.

To take a concrete example: Suppose a household X has purchased a bicycle as well as a scooter- both belong to the transportation class. Suppose the influence of price has on product decision making is to be evaluated. Here, price is the DV. Also suppose that, this household X, have not been influenced by price to any extent while making a decision on purchase of a bicycle, that is, the influence of price on bicycle purchase is '1'; while for scooter, it may be assumed that the household has been influenced to a great extent, that is the influence of price is '4'. The score for the household X, for this DV, that is, price on product decision making for the transportation class, hence amounts to :  $(1 + 4)/2 = 2.5$  The summation is divided by two because this household has purchased two products of the four in this product class.

The methodology for the amalgamation of the scores for all products purchased on each of the DV to be tested has thus been devised.

## NOTE 5.7

### DETERMINATION OF SOCIAL CLASS

There were totally 529 households in the sample. The variables finally included to determine social class were : i) Family Monthly Income, ii) Education of FHH, iii) Education of MHH, and iv) Occupation of MHH.

Segregation of households into social classes was carried out in the following manner :

1) All these variables were nominally scaled in the interview - schedule. Nominal scaled implies that, the variables were assigned a number which was not quantifiable, since information on these variables were obtained through categories or classes. Family monthly income of a respondent was known from the eight classes that it was classified into. Education was classified into eight classes, while occupation was classified into nine classes.

Family monthly income classes was ordered on a five point scale in the following manner :

Score 1	Low Income	Upto Rs.2500
Score 2	Middle Income	Between Rs.2501 and Rs.4000
Score 3	Middle Middle Income	Between Rs.4001 and Rs.7000
Score 4	Upper Middle Income	Between Rs.7001 and Rs.10,000
Score 5	High Income	More than Rs.10,001

Education of the MHH and the FHH were ordered on a five point scale in the following manner :

Score 1	No/Low Education	Upto 3 years of school
Score 2	Secondary Education	4 to 7 years of school
Score 3	High/Junior College	7 years of school
Score 4	Graduate	3 years college
Score 5	High Education	Above 3 years college

Occupation of the MHH and FHH were ordered on a five point scale in the following manner, although the occupation of MHH was only considered for segregation into social classes :

Score 1	Household work/Unskilled/lowskilled workers
Score 2	Semi-skilled workers
Score 3	Small Entrepreneurs
Score 4	Skilled workers
Score 5	Professionals, middle management.

2) Having ordered the four variables from 1 to 5, social class score was computed for each of the households by adding up the score of the household for each of the four variables.

3) The mean social class score for the total sample was calculated. 11.37 was the mean social class score of the sample. Likewise, the standard deviation for the sample was also worked out, and this worked out as 3.13, the minimum and maximum social class score in the sample was 6.00 and 20.00 respectively.

4) The object now was to work out the interval estimate for the population mean. For this, ninety five percent confidence interval were computed. This worked out to be as :

$$\bar{X} \pm \frac{1.96 \sigma}{n^{0.5}}$$

where  $\bar{X}$  and  $\sigma$  are the mean and standard deviation of the sample respectively, and  $n$  is the sample size.

Hence, the interval estimate for the population mean ( $\mu$ ) will be :

$$11.37 \pm \frac{1.96 * 3.13}{529^{0.5}}$$

$$\begin{aligned} \text{Interval Estimate for } \mu &= 11.10 \leq \mu \leq 11.64 \\ &= 11 \leq \mu \leq 12 \end{aligned}$$

5) The class were determined as :

- Low class - those below the mean range;
- Middle class - those around the mean range;
- High class - and those above the mean range.

Hence the households would be determined as being in :

- Low Class - if social class score is 10 or below 10.
- Middle Class - if social class score is 11 or 12.
- High Class - if social class score is above 12.

## NOTE 5.8

### DESCRIPTION OF SPSS ANOVAS

Ensuing is a detailed explanation of the SPSS Anovas and how it has been employed in this research. The formulation of the various hypotheses to be tested, by both the Two Way and the One Way Anova have also been described.

#### 1) One Way Analysis of Variance

##### (a) Descriptive Statistics

In this instance, the parameter is estimated as an interval estimate where the confidence interval is taken at 95 percent. This means that if repeated samples are selected from a population under the same conditions and 95% confidence intervals are calculated, 95% of the intervals will contain the unknown parameter.

Additionally, for each group, the mean, standard deviation, standard error are displayed for every DV.

##### (b) Partitioning of Sum of Squares

Here, observed variability in the sample is subdivided into two components-variability of the observations within a group about the group mean and variability of the group means.

The within sum of squares is a measure of variability within groups. It is calculated as :

$$SSW = (N_i - 1)S_i^2$$

where  $S_i^2$  is the variance of group  $i$  about its mean, and  $N_i$  is the number of cases in group  $i$ .

Variability of the group means is measured by between- groups sum of squares, i.e.,

$$SSB = N_i(\bar{X}_i - \bar{X})^2$$

where  $\bar{X}_i$  is the mean of the  $i$ th group and  $\bar{X}$  is the mean of the entire sample. The mean squares are obtained by dividing the sum of squares by their degrees of

freedom. The between-groups degrees of freedom are  $k-1$ , where  $k$  is the number of groups. The within-groups degrees of freedom are  $N-k$ , where  $N$  is the number of cases in the entire sample.

#### (c) Testing the Hypothesis

To test the hypothesis that the three social classes under study have the same mean score for a particular dependent variable, i.e.,

Null Hypothesis ( $H_0$ ) : There is no difference in the mean score of the three social classes.

Alternate Hypothesis ( $H_a$ ) : There is a difference in the mean score of the three social classes.

The following statistic is calculated:

$$F = \frac{\text{Between Groups Mean Square}}{\text{Within Groups Mean Square}}$$

This is the  $F$  ratio shown in the output.

The observed significance level (shown as  $F$  Prob.) is obtained by comparing the calculated  $F$  values to the  $F$  distribution with  $k-1$  and  $N-k$  deg. of freedom. The observed significance level is the probability of obtaining an  $F$  statistic at least as large as the one calculated when all population means are equal. If this probability is small enough, the hypothesis that all population means are equal is rejected.

Alternately, the calculated  $F$  statistic is compared to the tabulated values of  $F$  with  $k-1$  and  $N-k$  deg. of freedom in the numerator and denominator respectively at the .05 level of significance, and since the reason for selecting .05 as the level of significance has been already discussed elsewhere, it is not repeated again. If the calculated  $F$  statistic is larger than the tabulated  $F$  values, then the hypothesis that all population means are equal is rejected.

#### (d) Multiple Comparison Procedures

A significant  $F$  statistic indicates only that the population means are probably unequal. It does not pinpoint where the differences are. Multiple comparison tests determine which population means are different from which others.

This test is better than a t-test between two groups because when many comparisons are made, some will appear to be significant even when all population means are equal<sup>1</sup>. These procedures protect against calling too many differences significant<sup>2</sup>. They set up more stringent criteria for declaring differences significant than does the usual t-test<sup>3</sup>. That is, the difference between two sample means must be larger to be identified as a true difference.

The Scheffe' method, for pairwise comparisons of mean, is conservative. It requires larger differences between means than most other methods<sup>4</sup>.

## 2) Two Way Analysis of Variance

Two-way Anova was run on SPSS to analyze the difference, if any between the rural and urban consumers of Kerala and Gujarat.

Three hypotheses are of interest in this study:

- (i) Does area i.e. rural/urban relate to the composite score?
- (ii) Does state i.e. Gujarat/Kerala relate to the composite score?
- (iii) Is there an interaction between the effects of area and state i.e. whether the scores are related to the joint effects of state and area?

The set of hypotheses for each of the three hypotheses would be as follows:

- (i) This is a test for main effect for area.

Null Hypothesis(Ho): There is no difference between the mean score of rural and urban area, i.e.,  $\mu_r = \mu_u$

Alternate Hypotheses(Ha): There is a difference between the mean score of rural area and urban area, i.e.,  $\mu_r \neq \mu_u$

- (ii) This is a test for main effect for state.

Null Hypothesis(Ho): There is no difference between the mean score of Gujarat state and Kerala state, i.e.,  $\mu_g = \mu_k$

Alternate Hypothesis( $H_a$ ): There is a difference between the mean score of Gujarat and Kerala, i.e.,  $\mu_g \neq \mu_k$

(iii) This is a test for the interaction effect of state and area.

Null Hypothesis( $H_0$ ): There is no difference in the mean score of Gujarat-Rural and Kerala-Rural. Also there is no difference in the mean score between Gujarat-Urban and Kerala-Urban, i.e.,  $\mu_{gr} = \mu_{kr}$ ;  $\mu_{gu} = \mu_{ku}$

Alternate Hypothesis( $H_a$ ) : There is a difference between the mean score of Guj-Rural and Ker-Rural. Also there is a difference between the mean score of Guj-Urban and Ker-Urban, i.e.,  $\mu_{gr} \neq \mu_{kr}$ ;  $\mu_{gu} \neq \mu_{ku}$

#### (a) Descriptive Statistics

The mean for the total population is displayed as well as the means for the independent variables. In this case, the total population mean also known as the grand mean is displayed. The mean for the independent variable, state, has been worked out separately for Gujarat as well as for Kerala. The mean for the independent variable, area, is worked out for Rural as well as for Urban. Moreover, the means for Gujarat-Rural, Gujarat-Urban, Kerala-Rural, and Kerala-Urban is also displayed.

#### (b) Partitioning of Sum of Squares

The total observed variation in the scores is subdivided into four components: the sum of squares due to area, sum of squares due to state, their interaction, and the residual. This can be expressed as :

$$\text{TotalSS} = \text{AreaSS} + \text{StateSS} + \text{InteractionSS} + \text{ResidualSS}.$$

This would not be additive if the sample sizes are unequal, i.e., the number of scores in each cell are not equal.

The sum of squares for each independent variable are termed as "main effects" in the model.

The degrees of freedom for area which has two level is  $(g-1)$ , i.e.,  $(2-1=1)$ ; state also has 1 degrees of freedom i.e.  $(t-1=2-1=1)$ ; the interaction terms have  $(g-1)(t-1)$  degree of freedom, i.e.,  $(2-1)(2-1)=1$ ; the residual term has  $N-gt$  deg. of freedom

where  $N$  is the number of cases in the entire sample; and  $SS_{total}$  has  $N-1$  deg. of freedom. The mean squares are obtained by dividing each sum of squares by its deg. of freedom.

### (c) Hypotheses Testing

The tests are based on the ratios of the mean squares of each sources of variation to the mean square for the residual. This is the  $F$  ratio shown in the output.

The observed significance level (shown as signif. of  $F$ ) is obtained by comparing the calculated  $F$  to values of the  $F$  distribution with the relevant degrees of freedom in the numerator and denominator. The observed significance level is the probability of obtaining an  $F$  statistic as large as the one calculated when all population means of either main effect or interaction effect are equal. If this probability is small enough, the hypothesis that population mean is equal is rejected- In this case the probability of .045 is taken as the cut-off point i.e. wherever the significance of  $F$  is smaller than .045,  $H_0$  is rejected in favor of  $H_a$ .

Alternatively, the  $F$  ratio can compared to the tabulated value of  $F$  with the relevant degrees of freedom in the numerator and the denominator at .05 level of significance. If the  $F$  statistic is larger than the tabulated value then  $H_0$  is rejected in favor of  $H_a$ .

As stated earlier there are three tests that are of interest. The first hypothesis that is tested is the test for interaction effect. If the presence of interaction is established then the tests for main effects are not carried out, since then such tests are not particularly useful, as the joint effect of the two independent variables with the dependent variable has already been ascertained.

If there is no significant interaction, the grouping variables can be tested individually. The  $F$  value associated with state provides a test of the hypothesis that state does not affect the scores; similarly the  $F$  value associated with area would test that area has no main effect on the mean scores of the dependent variable.

### (d) Multiple Classification Analysis(MCA)

This is a tool which ascertains the degree of association between the independent variables and the dependent variable. It explains the amount of variance attributable to the independent variables.

For each independent variable, MCA displays the correlation ratio() with the

unadjusted deviations. The square of  $\eta^2$  indicates the proportion of variance explained by all categories of the independent variable/factor. A partial beta ( $\beta$ ) equivalent to the standardized partial regression co-efficient is also displayed, which is obtained by assigning the unadjusted deviations of each factor category and regressing the dependent variable on the resulting variable; and the multiple R and  $R^2$  from this regression.

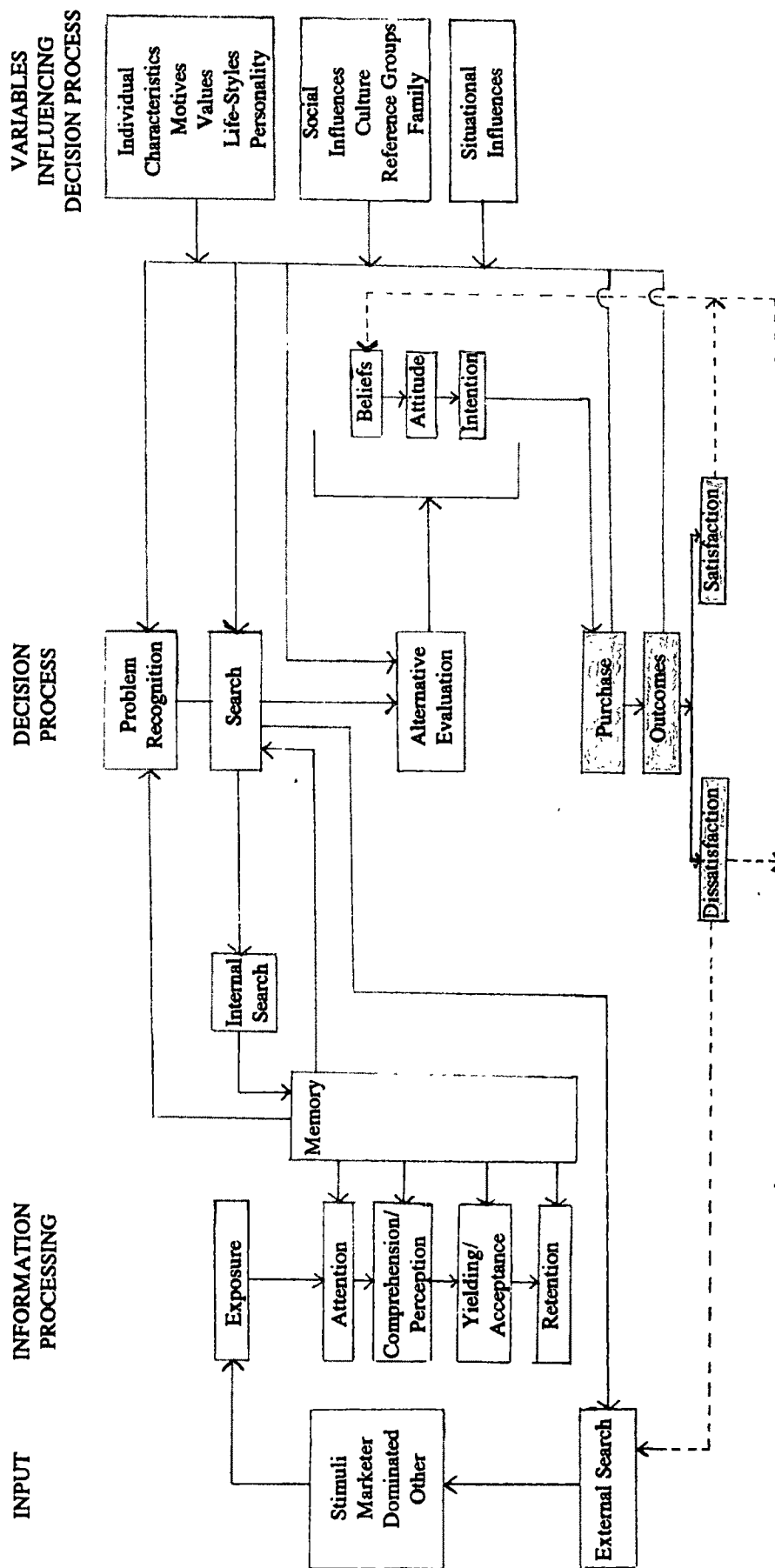
Beta reflects the relative importance on the DV of a change in the IVs. The Beta values for the IV reflects its importance in relation to another IV, but not in any absolute sense though. Multiple R measures the proportion of the variation of the dependent variable about its mean that is explained by the IVs.

#### REFERENCES

1. SPSS/PC+, Base Manual, Ver 2.0, (Chicago: SPSS Inc., 1988).
2. SPSS Base Manual, *ibid*.
3. SPSS Base Manual, *ibid*.
4. SPSS Base Manual, *ibid*.

FIGURE 5.1

THE COMPLETE DECISION PROCESS



SOURCE : Engel, James F., R.D.Blackwell, and P.W.Miniard, *Consumer Behavior*, (New York: CBS College, 1986), p. 35.