

S. C. Gulati

Component Analysis of the Change in the Sex Ratio : 1951-61

BECLINING sex-ratio (number of females per 1000 males) of the Indian population has been of concern for some time. This has led demographers to examine the underlying causal factors. Visaria (1968)¹ suggested as the most probable reason, the excess mortality of females. Desai (1967)² commenting on the regional variations in the sex composition argued that behind this demographic phenomenon lie the whole gamut of economic, social and cultural forces. There has, however, been no attempt to quantify the contribution of the different components of the change in sex ratio in different regions. The present paper is an attempt in this direction ; it seeks to analyse regional variations in terms of components.

The change in the sex ratio from one to another census may be traced to four factors, namely, sex ratio at birth, spatial mobility, sex-differentials in mortality and sex-differentials in the error of census count. The sex ratio at birth has been shown to vary within a narrow range³ of 104 to 107 from the experience of countries with relatively complete data. For India too, an inquiry based

1. P. M. Visaria, *The Sex Ratio of the Population of India*, Department of Economics, University of Bombay, 1968 (Mimeographed).

2. P. B. Desai, Variations in Population Sex Ratios in India, 1901-61 in : Bose, Ashish (ed.), *Patterns of Population Change in India*, Calcutta, Allied Publishers, 1967 : pp. 372-388.

3. U. S. Bureau of the Census, *The Methods and Materials of Demography*, vol. I, 1971, p. 194.

on hospital records during 1949-58⁴ has shown a similar ratio at birth. We may thus assume that sex ratio of births remains within this range and that it does not, therefore, affect either the trend of change over time or differentials between population segments.

With regard to differential error in enumeration, successive Census Commissioners have claimed increased accuracy. There is no reason to hold that the successive reduction in undercount has differed between the sexes. It is even possible that the scope for improvement had been greater for females for the reason that traditionally the undercount in their case had been relatively larger in degree. If this is assumed, it would have had the opposite effect of raising the sex ratio. For our purpose, we only assume that the reduction in error was proportionate such as that it did not contribute to variation in the ratio from time to time. We will thus focus attention on the other two factors i.e., migration and differential mortality by sex.

The Data

General Population Tables, Census of India 1961, Part II-A(i), provide population figures for fifteen states and twelve union territories of the Indian Union as constituted then, with their sex breakdown for 1961 and 1951. Migration Tables, Part II-C(iii) provide corresponding figures for migrants classified by place of birth and duration of residence in the place of enumeration. The classification by duration of stay comprises six categories : less than one, one to five, six to ten, eleven to fifteen, sixteen and over, and period not stated. To measure the incidence of internal movements over the inter-censal period i.e. 1951-63, we combine the first three categories. The tables give similar data for immigrants from Nepal, Pakistan and other countries. This gives us an idea also of the incidence of immigration over the decade. The limitation, however, is that for want of data on emigration from India, it is not possible to measure the net effect of international migration.

The present exercise is confined to the decade 1951-61 as corresponding figures for 1971 are not yet available. We may also note that the census migration data refer only to classification by place of birth and does not permit us

4. K. V. Ramachandran and Vinayak A. D. Deshpande, "The Sex Ratio at Birth in India by Regions". *Milbank Memorial Fund Quarterly*, 42(2), Part I, April 1964, pp. 85-95.

to take full account of return-migration which affect the survival rates of residents between the two censuses.

Methodology

As noted earlier the exercise is based on data of the two censuses of 1951 and 1961. The intention is to separate the effect of migration from the net change in sex composition over the decade of a given segment of a population. The residual may be taken to indicate the impact of the combined force of fertility and mortality. Since fertility appears to have been stable over time, this residual may be taken to reflect relative change in the force of mortality, between two censuses. Mortality has been decreasing since 1921 and its decrease has apparently been more rapid in the 1951-61 decade than before. What we thus get is an idea of the differential rates at which mortality has been improving for the two sexes.

Sex ratio of population in one census can be expressed in terms of the intercensal components of change as follows :

$$S_p^1 = \frac{P_f^1}{P_m^1} = \frac{P_f^0 + B_f - D_f + I_f - E_f}{P_m^0 + B_m - D_m + I_m - E_m}$$

Richard A Hornseth⁵ had developed this equation into a form expressing the change in the sex ratio during the intercensal period ($S_p^1 - S_p^0$), in terms of the sex ratio of the population at the beginning of the period (S_p^0) the sex ratio of each component (S_i , $i = 1, 2, 3, 4$ for births, deaths, immigrants and emigrants) and the rate of occurrence of each component, R_i : R_i is defined as the component divided by the population at the beginning of the period. The developed form is as follows :

$$S_p^1 - S_p^0 = \sum_{i=1}^4 \left[\frac{\left(\frac{S_i - S_p^0}{1 + S_p^0} \right) * R_i}{\frac{1}{1 + S_p^0} + \sum_{i=1}^4 \left(\frac{R_i}{1 + S_i} \right)} \right]$$

The evaluation of this equation gives directly the amount which each component of the population change contributes to the change in the sex ratio of

5. *Op. cit.*, p, 195.

a population during an intercensal period. We use this formula for estimating the contributions of net internal migration and immigration. This exercise has been carried out for all states and union territories.

Before we analyse the contribution of these components we may briefly present the regional pattern of change in sex ratio between 1951 and 1961. The range of inter-state variations in the decadal change in sex ratio extended from —21 points for Orissa to +13 points for West Bengal. The change was close to the change in the sex ratio for the country as a whole in Kerala, Mysore, Andhra Pradesh, Maharashtra among the states and Nagaland, NEFA and Goa, Daman and Diu among union territories. The extent of inter-state variation in sex ratio appears to have declined somewhat between 1951 and 1961, the coefficient of variation coming down from .059 to .053. We also note that the change in sex ratio was inversely related to its value at the beginning of the decade. The rank order correlation coefficient is as much as —.61. These facts seem to indicate reduction in regional differentials in sex ratio.

We will now confine attention to three components of change in sex ratio namely immigration, internal migration and force of mortality.

Immigration

Immigration does not play any major role in the process of population growth. As such, even though it is highly male-selective, its effect on the sex ratio of the national population is marginal. It is notable, however, that the proportion of immigrants who came during the decade measured as much as 50 per cent of the 1951 population in the small territory of Tripura, 12 per cent in the union territory of Delhi, 8 per cent in West Bengal and 4 per cent in Assam and also in Punjab.

Column 7 of Appendix Table 2 gives estimate of the contribution of immigration to decennial change in sex ratios. These figures indicate that states and union territories located on our international borders, namely Assam, West Bengal, NEFA, Nagaland, Tripura, Punjab and Himachal Pradesh, and also Andaman and Nicobar Islands and Delhi show a comparatively greater influence of this factor. In general immigration seems to have led to a decline in sex ratio in all the larger states excepting three namely Bihar, Punjab and Jammu and Kashmir. Assam records this contribution to be of the order of —5 points. Next in the order of magnitude comes Punjab (+3) followed by West

Benga (—1). Among union territories, we find that the immigration has led to an increase in sex ratio in Andaman and Nicobar Islands (+25), Delhi (+11), Tripura (+8), and to a decrease in NEFA (-42), Nagaland (-18) and Himachal Pradesh (—11).

Internal Migration

Inter-state migration too is, by and large, male-dominated. Such sex-selective migration obviously influences sex ratios in place of origin as well as in place of destination. It does not affect the sex ratio of the national population but tends to have differential impact of sex ratios of different states and territories of the nation.

An appraisal of Col. 8 of Appendix Table 1 giving sex ratio of immigrants with 10 or less years duration of residence in the place of enumeration shows that in all, except the four states of Andhra Pradesh, Orissa, Rajasthan, Uttar Pradesh and the Union territory of Pondicherry, the immigration streams were male dominated. Maximum intensity of male domination among immigrants is shown by West Bengal. Among the four exceptional States noted above, female domination is the maximum for Rajasthan.

Similarly an appraisal of Col. 10 of the same table depicting sex ratio of out-migrants with a residence in the place of enumeration of a decade or less, reveals female domination for three states of Madhya Pradesh, Maharashtra and Mysore and the union territories of Delhi, Pondicherry, Sikkim and Goa, Daman and Diu. This domination is maximum for Madhya Pradesh. Pondicherry is the only territory in which the female domination is found in both the migration streams i.e. immigration as well as out-migration. The male-domination among out-migration is found to be maximum in case of J and K followed closely by Bihar and Uttar Pradesh.

Among the 27 units under study, we have five states and ten union territories showing net immigration over decade. For the remaining ten states and two union territories we have net out-migration. We give in Table 1 sex ratios of immigrants and outmigrants for the states and union territories showing net immigration. If we compute similar ratios for indicating the sex composition of net balance of migration some odd results appear when the net migration bears opposite signs between the two sexes. This is shown by the case of Himachal Pradesh. Here there has been net immigration of 3138 males and net out-migration of 670 females.

TABLE 1— EXTENT AND SEX-COMPOSITION OF MIGRANTS IN AREAS WITH

NET INMIGRATION, 1951-61

<i>State/Union Territories</i>	<i>Population 1961</i>		<i>Inmigrants during 1951-61</i>		<i>Outmigrants during 1951-61</i>		<i>Net immigrants</i>	
	<i>Number</i>	<i>Sex Ratio</i>	<i>Percent of 1961 population</i>	<i>Sex ratio</i>	<i>Percent of 1961 population</i>	<i>Sex ratio</i>	<i>Percent of 1961 population</i>	<i>Sex ratio</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>	<i>(7)</i>	<i>(8)</i>	<i>(9)</i>
Assam	11,872,772	.8762	2.34	.3979	.12	.7460	1.62	.2830
Madhya Pradesh	32,372,408	.9527	2.88	.8452	1.28	1.2783	1.60	.6015
Maharashtra	842,692	.9362	3.56	.6277	1.43	1.0212	2.13	.4398
Mysore	23,586,772	.9589	2.98	.8612	1.91	1.0048	1.07	.6507
West Bengal	34,926,279	.8778	3.48	.2887	.98	.9916	2.50	.1309
Andaman and Nicobar Islands	63,548	.6168	29.21	.2204	.90	.6696	28.31	.2101
Delhi	2,658,612	.7850	23.38	.5389	4.37	1.0834	24.01	.4690
Himachal Pradesh	1,351,144	.9228	3.32	.6161	3.14	.7217	.18	-.2135
L. M. and A. Islands	24,108	1.0199	1.47	.2724	1.07	.1889	.40	.5654
Manipur	780,037	1.0153	.91	.7180	.61	.3747	.30	2.5359
Tripura	1,142,005	.9316	1.17	.6788	.94	.7771	.23	.3684
Dadra and N. H.	57,963	.9633	10.51	.9863	.00	3.0000	10.51	.9856
Nagaland	369,200	.9327	2.18	.1869	.66	.4638	1.52	.0973
Pondicherry	369,079	1.0130	10.98	1.5979	7.60	1.5057	3.38	1.8330
NEFA	336,558	.8940	4.41	.1632	.06	.6585	4.35	.1584

It will be seen (Col. 5 of Table 1) that the range of variation of sex ratio of immigrants extends from as low as 163 in NEFA to as high as 1598 in Pondicherry. The proportion of females among immigrants is smaller than half of the total in all states and territories excepting Pondicherry. It is indeed less than one-sixth in the case of West Bengal, Andaman and Nicobar Islands, Laccadiv, Minicoy and Amindivi Islands and Nagaland apart from NEFA.

The proportion of females in total outmigrants is comparatively larger. Here females outnumber males in Madhya Pradesh, Maharashtra, Mysore, Delhi, Dadra and Nagar Haveli and Pondicherry. Exceptionally low ratios among outmigrants is recorded in Laccadiv, Minicoy and Amindivi Islands.

The proportion of females in the total of net immigrants is very high in case of Manipur and Pondicherry and is extremely low in the case of Nagaland, West Bengal, NEFA, Assam, Andaman and Nicobar Islands and Tripura.

Likewise, we give in Table 2 sex ratios of immigrants, outmigrants, and net outmigrants for states and territories showing net outmigration. Here we have a negative sign before the sex ratio of net outmigrants in the case of Gujarat. This has resulted from net immigration of 3113 males and net outmigration of 19026 females.

Sex ratio in the case of immigrants is shown to be greater than unity in case of four states, namely Andhra Pradesh, Orissa, Rajasthan and Uttar Pradesh. While the corresponding ratio for outmigrants is shown to be greater than unity for the two small territories of Goa, Daman and Diu, and Sikkim, net outmigration shows an exceptionally high sex ratio in the case of Sikkim.

We may now indicate the impact of net migration on sex ratio. It will appear from Col. 4 of Appendix Table 2 that migration has led to an increase in sex ratio in nine states and three union territories. In the remaining states and union territories the role of net migration has been of the opposite kind. It is also notable that improvement in sex ratio is related in some cases to outmigration and in others to immigration.

About immigration it appears that the process has contributed to a decline in sex ratio in all but the three states of Andhra Pradesh, Rajasthan and Uttar Pradesh and in all the territories but Pondicherry, and Dadra and Nagar Haveli. This has been more pronounced in the case of Assam, Maharashtra

TABLE 2-EXTENT AND SEX COMPOSITION OF MIGRANTS IN AREAS WITH NET OUTMIGRATION, 1951-61

<i>State/Union Territories</i>	<i>Population 1961</i>		<i>Immigrants during 1951-61</i>		<i>Outmigrants during 1951-61</i>		<i>Net outmigrants</i>	
	<i>Number</i>	<i>Sex Ratio</i>	<i>Percent of 1961 population</i>	<i>Sex ratio</i>	<i>Percent of 1961 population</i>	<i>Sex ratio</i>	<i>Percent of 1961 population</i>	<i>Sex ratio</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>	<i>(7)</i>	<i>(8)</i>	<i>(9)</i>
Andhra Pradesh	35,983,447	.9813	1.00	1.0456	1.54	.8654	.54	.6040
Bihar	46,455,610	.9937	.92	.8800	2.51	.4846	1.59	.3242
Gujarat	20,633,350	.9403	1.73	.7288	1.81	.8336	.08	-6.3357
Jammu and Kashmir	3,560,976	.8775	.68	.7796	1.59	.4532	.91	.2791
Kerala	16,903,715	1.0215	.88	.8440	2.66	.5106	1.78	.3867
Madras	33,686,953	.9920	1.10	.8654	2.19	.8206	1.09	.7776
Orissa	17,548,846	1.0009	1.06	1.0182	1.52	.6068	.46	.0915
Punjab	20,306,812	.8645	2.21	.7688	3.95	.7465	1.74	.7189
Rajasthan	20,155,602	.9079	1.70	1.1528	3.12	.8619	1.42	.6043
Uttar Pradesh	73,746,401	.9088	.77	1.1318	2.15	.5150	1.38	.3030
Goa, Daman and Diu	626,667	1.0714	—	—	3.05	1.1646	3.05	1.1646
Sikkim	162,189	.9038	.98	.3230	1.90	1.1932	.92	6.1571

and Mysore among the states and Andaman Nicobar Islands, Delhi, NEFA and Nagaland among the union territories.

Outmigration appears to have contributed to improvement in sex ratio in all states except Madhya Pradesh, Maharashtra, Mysore and West Bengal and in all union territories except Andaman and Nicobar Islands, Delhi, Pondicherry, Sikkim and Goa, Daman and Diu. Such improvement appears to be substantial for Kerala, Bihar, Uttar Pradesh, Jammu and Kashmir, Orissa, and also Pondicherry, Laccadiv, Minicoy and Amindevi Islands, and Delhi.

Sex Differentials in Mortality

Our hypothesis is that the residual change in sex ratio, not explained by migration, is attributable, by and large⁶, to differential experience of decrease in mortality between the two sexes. We have shown these in Col. 8 of Appendix Table 2. These residuals are positive in the four states, of West Bengal, Assam, Maharashtra and Punjab and the seven union territories of Andaman and Nicobar Islands, Delhi, NEFA, Himachal Pradesh, Tripura, Sikkim and Dadra and Nagar Haveli. In all the other states and union territories the differential mortality between the two sexes seems to have contributed towards a decline in sex ratio.

The fact which stands out from the comparison of Col. 1 and Col. 8 of this table is that differential mortality between two sexes has contributed substantially towards change in sex ratios in areas where the sex imbalance of the base year deviated from the national level to significant degree. In general the process has led to substantial improvement in sex ratio in areas where sex ratios were comparatively much lower in 1951 as compared to Indian union such as West Bengal, Assam, Andaman and Nicobar Islands, Tripura, NEFA and Sikkim. Similarly, the process led to a substantial decline in the ratio in

6. The residual, has two components : sex differential in mortality and emigration. We do not rule out the possibility of a comparatively larger contribution by the emigration process in the areas located on our international borders. Mitra estimated the excess of immigrants over emigrants into the two bordering states of Assam and West Bengal and also for the union territory of Tripura. Similar type of disguised international migration is not ruled out for other bordering territories. The incidence of this cannot be expected to be significant apart from these exceptional cases. Thus, the residuals are attributed, by and large, to differential experience of mortality between the two sexes during the decade (see Census of India, Paper 1 of 1963, Religion, pp. 36-37).

areas where the imbalances in sexes were comparatively more in favour of females, such as Kerala, Madras, Orissa, Goa, Daman and Diu, Manipur, Laccadiv, Minicoy and Amindivi Islands and Pondicherry.

Conclusion

We have considered two main components of decennial change in sex ratio, namely, sex differentials in mortality decline and sex selectivity of internal migration. We find that internal migration accounts for the change in sex ratio to comparatively larger degree in the case of Assam, Maharashtra, Bihar, Jammu and Kashmir and Punjab and the Union territories of Andaman and Nicobar Islands, Delhi, Himachal Pradesh, Nagaland, Pondicherry, Sikkim and NEFA. The sex differential in mortality decline appears on the other hand to be comparatively a more important factor in ten states, namely, Andhra Pradesh, Gujarat, Kerala, Madhya Pradesh, Madras, Mysore, Orissa, Rajasthan Uttar Pradesh and West Bengal, and five union territories, namely, Laccadiv, Minicoy and Amindivi Islands, Manipur, Tripura, Dadra and Nagar Haveli, and Goa, Daman and Diu. Thus, the role of differential mortality by sex was responsible to a greater degree for the states and union territories accounting for 72 per cent of the total population of India.

APPENDIX
TABLE 1-SEX RATIO OF INTERCENSAL COMPONENTS OF POPULATION CHANGE IN
DIFFERENT AREAS OF INDIA, 1951-61

<i>State / Union Territories</i>	<i>Net change of population</i>			
	<i>Population 1951</i>	<i>Population 1961</i>	<i>Number</i>	<i>Sex Ratio</i>
	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
Andhra Pradesh	31,115,259	35,983,447	4,868,188	.9542
Assam	8,830,732	11,872,772	3,042,040	.8749
Bihar	38,786,184	46,455,610	7,669,426	1.0132
Gujarat	16,262,657	20,633,350	4,370,693	.8987
Jammu and Kashmir	3,253,852	3,560,976	307,124	.9219
Kerala	13,549,118	16,903,715	3,354,597	.9968
Madhya Pradesh	26,071,637	32,372,408	6,300,771	.8960
Madras	30,119,047	33,686,953	3,567,906	.8707
Maharashtra	32,002,564	39,553,718	7,551,154	.9171
Mysore	19,401,956	23,586,772	4,184,816	.9249
Orissa	14,645,946	17,548,846	2,902,900	.9002
Punjab	16,134,890	20,306,812	4,171,922	.8879
Rajasthan	15,970,774	20,155,602	4,184,828	.8598
Uttar Pradesh	63,215,742	73,746,401	10,530,659	.9024
West Bengal	26,299,980	34,926,279	8,626,299	.9197
Andaman and Nicobar Islands	30,971	63,548	32,577	.6088
Delhi	1,744,072	2,658,612	914,540	.8187
Himachal Pradesh	1,109,466	1,351,144	241,678	.9618

Appendix Table 1 (contd. on page 300)

Appendix Table 1 (contd. from page 299)

	(1)	(2)	(3)	(4)
L. M. and A. Islands	21,035	24,108	3,073	.8738
Manipur	577,635	780,037	202,402	.9580
Tripura	639,029	1,142,005	502,976	.9675
Dadra and Nagar Haveli	41,532	57,963	16,431	1.0089
Goa, Daman and Diu	556,059	686,667	30,608	.3699
Nagaland	212,975	369,200	156,225	.8493
Pondicherry	317,253	369,079	51,826	.9144
Sikkim	137,725	162,189	24,464	.8843
NEFA	206,249	336,558	130,309	.8850
India	361,088,090	439 234 771	78,146,681	.9170

Appendix Table 1 (contd. on page 301)

Appendix Table 1 (contd. from page 300)

State/ Union Territories	Internal Migration						Immigrants	
	Net Immigrants		Immigrants		Outmigrants		Number	Sex ratio
	Number	Sex ratio	Number	Sex ratio	Number	Sex ratio		
(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
Andhra Pradesh	-194,349	.6040	359,565	1.0456	553,914	.8654	13,697	.6843
Assam	191,872	.2830	278,032	.3979	86,160	.7460	340,476	.7278
Bihar	-739,062	.3242	425,734	.8800	1,164,796	.4846	112,717	1.1672
Gujarat	-15,913	-6.3357	356,647	.7288	372,560	.8336	85,011	.8653
Jammu and Kashmir	-32,563	.2791	24,157	.7796	56,720	.4532	18,829	1.0907
Kerala	-300,831	.3867	148,665	.8440	449,496	.5106	11,775	.6062
Madhya Pradesh	518,443	.6015	933,391	.8452	414,948	1.2783	98,880	.7694
Madras	-367,400	.7776	370,446	.8654	737,846	.8206	56,840	.7880
Maharashtra	842,692	.4398	1,407,642	.6277	564,950	1.0212	171,190	.8386
Mysore	252,909	.6507	702,954	.8612	450,045	1.0048	21,423	.8240
Orissa	-80,414	.0915	186,224	1.0182	266,638	.6068	24,102	.8287
Punjab	-352,400	.7189	449,565	.7688	801,965	.7465	717,517	.9448
Rajasthan	-287,656	.6043	341,667	1.1528	629,323	.8619	103,135	.8324
Uttar Pradesh	-1,016,423	.3030	571,497	1.1318	1,587,920	.5150	261,473	.8183
West Bengal	870,958	.1309	1,215,169	.2887	344,211	.9916	1,843,137	.8426
Andaman and Nicobar Islands	17,993	.2101	18,564	.2204	571	.6696	9,251	.8182
Delhi	638,365	.4690	754,631	.5389	116,266	1.0834	226,431	.9095
Himachal Pradesh	2,468	-.2135	44,890	.6161	42,422	.7217	14,270	.2230

Appendix Table 1 (contd. from page 301)

	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
L. M. and A. Islands	97	.5654	355	.2724	258	.1889		
Manipur	2,316	2.5359	7,085	.7180	4,769	3747	6,454	.7438
Tripura	2,626	.3684	13,383	.6788	10,757.4	.7771	266,541	.9410
DadraandNagarHaveli	6,086	.9856	6,090	.9863	19,131	3.0000	31	1.0667
Goa, Daman and Diu	-19,131	1.1646			2,430	1.1646		-
Nagaland	5,628	.0973	8,058	.1869	28,071	.4638	5,681	.2420
Pondicherry	12,451	1.8330	40,522	1.5979	3,088	1.5057	1,775	1.0520
Sikkim	-1,503	6.1571	1,585	.3230	204	1.1932	3,528	.6602
NEFA	14,640	.1584	14,844	.1632		.6585	13,903	.2398
India							4,429,452	.8569

TABLE 2-CONTRIBUTIONS TO CHANGE IN SEX RATIO BY DIFFERENT COMPONENTS OF
POPULATION CHANGE IN DIFFERENT AREAS OF INDIA, 1951-61

<i>State/Union Territories</i>	<i>Sex Ratio</i>		<i>Net Change in sex ratio 1951-61</i>	<i>Contribution to the Change in</i>			<i>Sex Ratio Immigration</i>	<i>Residual</i>
	<i>1951</i>	<i>1961</i>		<i>Internal net Immigration</i>	<i>Internal immig- ration</i>	<i>Internal outmig- ration</i>		
	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>	<i>(7)</i>	<i>(8)</i>
Andhra Pradesh	.9856	.9813	-.0043	.0026	.0006	.0020	-.0001	-.0068*
Assam	.8766	.8762	-.0004	-.0140	-.0150*	.0010	-.0046	.0182
Bihar	.9899	.9937	.0038	.0157	-.0010	.0167*	.0004	-.0123
Gujarat	.9518	.9403	-.0115	-.0020	-.0043	.0023	-.0004	-.0091*
Jammu and Kashmir	.8734	.8775	.0041	.0080	-.0007	.0087*	.0010	-.0051
Kerala	1.0277	1.0215	-.0062	.0166	-.0018	.0184	-.0004	-.0224*
Madhya Pradesh	.9669	.9527	-.0142	-.0071	-.0037	-.0034	-.0007	-.0064*
Madras	1.0074	.9920	-.0154	.0028	-.0017	.0045	.0000	-.0182*
Maharashtra	.9407	.9362	-.0045	-.0143	-.0132*	-.0011	-.0004	.0102
Mysore	.9664	.9589	-.0075	-.0040	-.0033*	-.0007	-.0001	-.0034*
Orissa	1.0221	1.0009	-.0212	.0078	-.0000	.0078	-.0003	-.0287*
Punjab	.8585	.8645	.0060	.0026	-.0021	.0047*	.0029	.0005
Rajasthan	.9211	.9079	-.0132	.0054	.0035	.0019	-.0005	-.0181*
Uttar Pradesh	.9099	.9088	-.0011	.0122	.0015	.0107	-.0003	-.0130*
West Bengal	.8645	.8778	.0133	-.0304	-.0292	-.0012	-.0013	.0450*

Appendix Table 2 (contd. on page 304)

Appendix Table 2 (contd. from page 303)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Andaman and N. Islands	.6253	.6168	-.0085	-.1571	-.1567*	-.0004		.1236
Delhi	.7679	.7850	.0171	-.0872	-.0754*	-.0118	.0113	.0930
Himachal Pradesh	.9145	.9228	.0083	-.0050	-.0118*	.0068	-.0114	.0247
Laccadiv, Minicoy and A. Islands	1.0432	1.0199	-.0233	-.0025	-.0180	.0155	—	-.0208*
Manipur	1.0362	1.0153	-.0209	.0025	-.0034	.0059	-.0028	-.0206*
Tripura	.9042	.9316	.0274	-.0017	-.0030	.0013	.0085	.0206*
Dadra and Nagar Haveli	.9457	.9633	.0176	.0041	.0041	-	—	.0135*
Goa, Daman and Diu	1.1277	1.0714	-.0563	-.0011	—	-.0011	—	-.0552*
Nagaland	.9988	.9327	-.0661	-.0230	-.0286*	.0046	-.0181	-.0250
Pondicherry	1.0301	1.0130	-.0171	.0192	.0482*	-.0290	-.0001	-.0362
Sikkim	.9073	.9038	-.0035	-.0129	-.0082*	-.0047	-.0062	.0156
NEFA	.9000	.8940	-.0060	-.0527	-.0529*	.0002	-.0417	.0884
India	.9463	.9410	-.0052	—	—	-	-.0009	-.0043*

*Denotes the relative maximum importance.