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SOCIAL DEVELOPMENT
RANKING OF DISTRICTS OF
PAKISTAN

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Social Development Ranking

of Districts of

Pakistan

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SOCIAL DEVELOPMENT RANKING OF DISTRICTS OF

PAKISTAN

1. INTRODUCTION

International comparisons reveal the lack of correlation between the ranking of countries in terms of levels of economic and social development. Pakistan is an example of a developing country with relatively high per capita income but extremely poor social/human development indicators. The objective of this paper is to examine in the spatial context for Pakistan at the district level how strong the relationship is between levels of economic and social development. This will help us in particular in identifying districts which have a low ranking within the country in terms of the level of social development. These districts can be targeted for special development allocations within the SAP to reduce the extent of regional disparity in terms of access to basic services like primary education, health, water supply, etc. If it emerges that the socially underdeveloped districts are also economically backward then the underlying reason may be the absence of a strong private sector or the absence of a local tax base or income affordability to finance the provision of these services.

Earlier research at the district level in Pakistan by Pasha, Mallik and Jamal [1990] has, in fact, demonstrated that education and housing indicators are highly correlated with the overall level of development. Districts which have a relatively developed/underdeveloped education sector in terms of literacy and primary enrollment rates generally appear to have higher/lower ranking in terms of the composite level of development. Although it is difficult to come to any definitive conclusions about the direction of causality this finding tends to substantiate the view that regions of the country which have made greater progress are endowed with higher levels of human development.

The paper is organised as follows: Section 2 gives the choice of social development indicators. Section 3 gives the methodology for derivation of the composite indicator of social development. Section 4 gives the resultant ranking of districts while Section 5 presents the profile of each province in terms of the level of social development. Finally, in Section 6 are given the conclusions.

2. CHOICE OF INDICATORS

The choice of development indicators at the district level is governed by a number of considerations. First, an attempt has been made to achieve as wide a sectoral coverage as possible. As such indicators have been selected to highlight development of sectors like education, health, water supply. Second, two alternatives were available regarding the choice of indicators: we could concentrate on measuring the consequences of development or the level of development inputs. Greater reliance in this study is on the latter primarily because of the lack of districtwise data on the former. For example, if the output approach had been adopted to measure development of the education sector, the indicators used would have been, for example, school graduates as a percentage of the labor force both in stock and inflation. But since data is not available on this magnitude the alternative chosen is to quantify the level of inputs in the form of teachers, schools, hospitals, beds, etc. Therefore, while there may he some loss of precision in the quantification of the level of development, the results are perhaps more useful and operational in character from the planning view point.

The lack of data has not only constrained the approach to the construction of social development but it has limited the number of indicators. Nevertheless, it has been possible to identify 11 indicators relating to health, education and water supply. Diverse sources of data have been used for quantifying the indicators. Firstly, data has been taken from the last census of population.

2

housing survey by the FBS and development statistics of the provincial governments. Secondly relevant data has also been collected from other published documents of the Federal Provincial governments and FBS.

Described below are the social indicators chosen in each sector. *Education*

Both stock and flow measures have been defined for the education sector. The stock measure is the literacy rate by gender which indicates the level of literacy among the population aged ten years and above in a district which has been taken from district census report of 1981. Measures of flow of output from the education sector relate to enrollment rates at the primary and secondary level (male and female separately). Information regarding enrolments at different levels has been taken from development statistics of the province. The relevant school age going population in each district have been projected on the basis of intercensal growth rates for purposes of deriving the enrollment rates. However, the distribution of census population has been adjusted according to newly formed districts which has been reported in the publication, Administrative Units of Pakistan, a publication of the Population Census organisation.

Health

Three types of indicators of development of the health sector have been defined. I he first relates to health personnel i.e doctors and nurses per 10,000 population, second, to hospital and rural health centre beds per 1,000 population while the third to number of patients treated in relation to total population. The last indicator is essentially an output measure. However, as the information regarding the number of district-wise doctors and nurses for the year 1991/92 was not available for Punjab. Therefore, it has been estimated on the basis of extrapolation of figures given in Health Statistics, a publication of provincial governments.

3

Housing

Only one indicator has been used to measure the level of social development, that is access to water supply. The particular indicator use is percentages of households with inside water connections. As the data on water supply was not available for the latest year the analysis has been done on the information reported in the Housing Survey of 1989 carried out by the FBS.

Magnitude of indicator for each district is given in Table A-1 Ninety four districts and eleven indicators have been included in the analysis. This includes 34 districts from Punjab 15 from Sindh. 20 from NWFP and 25 from Balochistan. Out of the eleven indicators. 6 relate to education. 4 to health and 1 to water supply.

Two summary measures, the mean and the variance, have been calculated to describe and compare the distributions of the indicators. By doing so we derive the extent of regional variation in social development. It needs to be pointed out that the means of the various indicators do not correspond to the national values of these indicators. This is because they are simple averages and not averages weighted by the population or area of the district depending on the indicator.

3. METHODOLOGY OF MEASUREMENT In the literature on regional development, a number of techniques have been used to reduce the dimensions of the complex multi variate problem associated with the construction of composite development indicator. The first is the Z-sum technique which sums for a particular district its

Z-score on each indicator. The Z-score is the standardised score, which has zero mean and unit variance. The higher the Z-sum1 the more developed the region.

The second technique computes the taxonomic distance [Khan and Iqbal (1983) and Nissan and Gracy (1988)], which is the Euclidean distance from the highest (standardised) values observed for different indicators2. The lower the taxonomic distance of a region or district, the more developed it is. Both the techniques have the problem of assigning equal importance to all development indicators. Further, the taxonomic distance technique is very sensitive to the presence of outliers.

The third and the most sophisticated method for indexing a multidimensional phenomenon is Factor Analysis (FA) technique (Adelman and Dalton (1971). This technique reduces the number of relationships by grouping together all those variables which are most highly correlated with each other into one factor or component. Thus the FA model can be described as follows:

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[1] *The Z-sum can be computed as follows:*

$$(Z \quad sum)_j = \sum_{i=1}^{n} Z_{ij}$$

where $Z_{ij} = X_{ij} - X_i / S_i$, $n=$ numbers of indicators, $X_i=$ mean value of the ith indicator, $S_i=$ Standard deviation of the ith indicator, $X_{ij}=$ value of the ith indicator in the jth district.

[2] *The taxonomic distance can be derived as follows:*

$$(TD)_j = [\sum_{i=1}^{n}(Z_{ij} - Z_i^*)^2]^{1/2}$$

where $Z_{ij}=$ standardised (as described in the previous footnote) value of the ith indicator in the jth region, $Z_i^*=$ highest standardised value of the ith indicator in all regions. The taxonomic distance is an Euclidean measure of the distance of a district from a hypothetical district which has the highest value for all the development indicators.

$$X_i = a_{i1} F_1 + a_{i12} F_2 \ldots + a_{ij} F_j$$

where,

X_j is the ith indicator.

    a_j is called the factor loading and represents the proportion of the variation in Xi which is accounted for by the jth factor.

Σa_{ij}.   is called the communality and it is equivalent to the multiple regression coefficient in regression analysis

    F   represents jth factor or component.

Principal Components Analysis (PCA) produces components in descending order of importance. that is the first component explains the maximum amount of variation in the data and the last component the minimum. It is often found that the first few components, called principal components, account for a sizeable part of the variation and subsequent components contribute very little. Using factor loadings of these principal components, factor score for each region or unit is computed as follows:

$$(FS)_{kj} = \sum_k e_{ij} * Z_i$$

where,

FS_{kj} represents factor score of the kth region and the jth factor,

Z_i is the standardised value of the ith indicator,

e_{ij} is the factor loading of the jth factor and the ith indicator.

To compute weighted factor score (WFS), these individual factor scores are derived from the following equation:

$$(WFS)_k = \sum_k e_j (FS)_{kj}$$

where ej is the eigen value of the factor j and depicts the proportion of variation in the data set explained by the factor j. This WFS is used as an index for ranking regions on the basis of the general characteristics of the variable-set.

In this study. PCA is preferred to explain the grouping of variables, with WFS being used to rank the district due to its more appealing characteristics. However, Z-sum technique is also used to observe the sensitiveness of the results with respect to the choice of technique for deriving the composite indicators. Pasha and Hasan (1982), Pasha et al (1990) also used these two techniques.

Table 1 presents the loading of each indicator on different factors. In addition, it gives the cigen values of each factor. Four factors emerge from the principal components analysis. These factors are described below:

Factor 1

Five out of 11 indicators load highly on this factor. It is by far the most important factor and includes most of the indicators from the education sector. As such education can he interpreted the most important service capturing variation in the level of social development. *Factor 2*

This factor includes three indicators. It essentially comprises of health and water supply and sanitation. *Factor 3*

The two indicators in this factor also relate to health. It is essentially a continuation of factor 2 and reflects the same underlying phenomena.

Indicators	Factor 1	Factor2	Factor3	Factor4
Secondary Enrollment Rate-Girls	0.88133	0.14516	0.30654	0.1646
Literacy Rate-Female	0.83926	0.27829	0.24511	-0.07239
Literacy Rate-Male	0.80951	0.11763	0.30996	0.27688
Primary Enrollment Rate-Girls	0.79726	0.10043	0.20128	0.40248
Secondary Enrollment Rate-Boys	0.71632	0.15801	0.20314	0.47522
Share of Households with Piped Water	0.40003	0.84549	0.06185	-0.10853
Patients Treated to Population	0.07031	0.80268	0.21396	0.22458
Hospital Beds per 10,000 Population	0.0549	0.75256	0.3051	0.35518
Doctors per 1000 Population	0.35292	0.24332	0.86359	0.0883
Nurses per 1000 Population	0.37494	0.24848	0.85231	-0.02692
Primary Enrollment Rate-Boys	0.37031	0.26334	-0.03524	0.88133
Eigenvalues	6.19901	1.99286	1.14938	0.61098

TABLE 1
FACTOR LOADING MATRIX

Factor 4

This factor includes only one indicator, primary boys enrollment rate. This indicator represents the most basic level of education and, therefore, variation in its magnitude is not strongly correlated with the overall level of social development.

4. RANKING OF DISTRICT

The rank ordering of districts in 1990/91 is presented in Table 2. The table gives rankings generated by the principal components analysis (weighted factor score) and the Z-sum technique respectively. The correlation between the two rankings is 0.988. This indicates the robustness of the results which is also highlighted by the fact that except for Gujranwala the top ten districts in WFS are also in the list of top 10 districts indicated by the Z-score.

Karachi and Rawalpindi are the most developed districts in Pakistan in terms of in social indicators according to the WFS while in Z-score ranking Lahore and Quetta displace Karachi and Rawalpindi as the most developed districts. Besides these the list of top 10 districts include Chakwal, Jhelum, Gujrat, Faisalabad, and Sialkot. Gujranwala and Peshawar rank 10th in the WFS and z-score rankings respectively. These top ten districts account for almost 25 percent of the country's population. It may be noted that according to both the techniques most of the top districts are located in the province of Punjab with one each in the other three provinces. This tends to indicate that Punjab is ahead of the other provinces in terms of social development.

At the lower end of the distribution, seven out often districts are the same in both the rankings. According to WFS, Dera Bugti and Jalmagsi are the least developed districts while Kohistan and Nasirabad emerge as the lowest two districts in Z-score ranking. The other least developed districts according to both the rankings include Zhob, Khuzdar, Kalat, Kharan, Tin-hat. Balan.

TABLE 2

DISTRICTS WISE RANKING OF SOCIAL SECTOR OF PAKISTAN

	Districts	Province	WFS		Districts	Province	Z-SCORE
TOP QUARTILE							
1	Karachi	[S]	26.0147	1	Lahore	[P]	33.7790
2	Rawalpindi	[P]	16.9032	2	Quetta	[B]	27.1702
3	Chakwal	[P]	16.2396	3	Rawalpindi	[P]	21.7602
4	Lahore	[P]	15.8617	4	Jhelum	[P]	15.1961
5	Jhelum	[P]	13.8476	5	Karachi	[S]	15.0423
6	Quetta	[B]	11.4693	6	Faisalabad	[P]	12.4723
7	Gujrat	[P]	10.6669	7	Chakwal	[P]	11.6895
8	Faisalabad	[P]	10.2559	8	Sailkot	[P]	10.4392
9	Sailkot	[P]	9.5103	9	Gujrat	[P]	10.2695
10	Gujranwala	[P]	9.0223	10	Peshawar	[N]	9.6742
SECOND QUARTILE							
11	T.T. Singh	[P]	8.7161	11	Gujranwala	[P]	8.3997
12	M. Baha Uddin	[P]	7.8838	12	T.T. Singh	[P]	7.6672
13	Narowal	[P]	7.4406	13	Haripur	[N]	7.1679
14	Haripur	[N]	6.3132	14	Shaiwal	[P]	6.8214
15	Attock	[P]	5.4162	15	Attock	[P]	6.6496
16	Sargodha	[P]	5.0561	16	Multan	[P]	5.7214
17	Hyderabad	[S]	4.8612	17	Abbottabad	[N]	5.5262
18	Shaiwal	[P]	4.3784	18	Sibi	[B]	5.2867
19	Nawshera	[N]	4.0355	19	Nawshera	[N]	4.9870
20	Khanewal	[P]	3.5312	20	Sargodha	[P]	4.7876
21	Multan	[P]	3.3155	21	Narowal	[P]	4.5065
22	Naushero F.	[S]	3.3003	22	M. Baha Uddin	[P]	4.1047
23	Okara	[P]	2.8373	23	Kohat	[N]	4.0671
24	Sheikhupura	[P]	2.7449	24	Hyderabad	[S]	4.0355
25	Abbottabad	[N]	2.7280	25	Charsadda	[N]	3.8821
26	Charsadda	[N]	2.3308	26	Rahim Yar Khan	[P]	3.3607
27	Tank	[N]	2.2013	27	Mainwalai	[P]	3.3278
28	Bahawalnagar	[P]	2.1264	28	Bhawalpur	[P]	3.1852
29	Malakand	[N]	1.6083	29	Tank	[N]	2.8443
30	Peshawar	[N]	1.3097	30	D.I. Khan	[N]	2.7729
				31	Larkana	[S]	2.4750
THIRD QUARTILE							
31	Mirpurkhas	[S]	1.0353	32	Chitral	[N]	2.4402
32	Mainwalai	[P]	1.0231	33	Karak	[N]	2.2741
33	Hafizabad	[P]	0.8930	34	Khushab	[P]	2.2490
34	Karak	[N]	0.7639	35	Bannu	[N]	1.5821
35	Sukkar	[S]	0.6430	36	Nawabshah	[S]	1.5610
36	D.I. Khan	[N]	0.6428	37	Naushero F.	[S]	1.3569
37	Swabi	[N]	0.5445	38	Malakand	[N]	1.3358
38	Vehari	[P]	0.3224	39	Sheikhupura	[P]	1.2868
39	Rahim Yar Khan	[P]	0.2881	40	Lakki	[N]	0.6170
40	Khushab	[P]	0.2413	41	Mirpurkhas	[S]	0.4713
41	Kasur	[P]	0.2153	42	Swat	[N]	0.4668
42	Kohat	[N]	0.1457	43	Khairpur	[S]	0.2289
43	Khairpur	[S]	-0.1975	44	Khanewal	[P]	-0.1656
44	Nawabshah	[S]	-0.1986	45	Sukkar	[S]	-0.4690
45	Layyah	[P]	-0.2253	46	Bahawalnagar	[P]	-0.7517
46	Jhang	[P]	-0.6348	47	Bhakkar	[P]	-0.7959
47	D.G. Khan	[P]	-0.9605	48	Okara	[P]	-0.9460

TABLE 2

DISTRICTS WISE RANKING OF SOCIAL SECTOR OF PAKISTAN

	Districts	Province	WFS		Districts	Province	Z-SCORE
48	Buner	[N]	-1.3008	49	Jhang	[P]	-1.1024
49	Bhawalpur	[P]	-1.4317	50	Buner	[N]	-1.2584
50	Pakpattan	[P]	-1.4499	51	Swabi	[N]	-1.6588
51	Chitral	[N]	-1.5092	52	Hafizabad	[P]	-1.8140
52	Mardan	[N]	-1.5608	53	Shikarpur	[S]	-1.8390
53	Lodhran	[P]	-1.7701	54	Kasur	[P]	-2.0419
54	Dadu	[S]	-2.1306	55	Mardan	[N]	-2.1385
				56	Ziarat	[B]	-2.2424
			BOTTOM QUARTILE				
55	Shikarpur	[S]	-2.2492	57	Layyah	[P]	-2.3279
56	Muzaffarghar	[P]	-2.5598	58	Vehari	[P]	-2.3336
57	Bannu	[N]	-2.9875	59	D.G. Khan	[P]	-2.6532
58	Larkana	[S]	-3.0215	60	Dadu	[S]	-3.0322
59	Sanghar	[S]	-3.1303	61	Thatta	[S]	-3.0647
60	Bhakkar	[P]	-3.1602	62	Sanghar	[S]	-3.7943
61	Manshera	[N]	-3.1704	63	Manshera	[S]	-3.8104
62	Swat	[N]	-3.1779	64	Kohlu	[B]	-4.1405
63	Barkhan	[B]	-3.6361	65	Dir	[N]	-4.7799
64	Thatta	[S]	-3.7789	66	Lodhran	[P]	-4.8434
65	Tharparkar	[S]	-3.9269	67	Chagai	[B]	-4.9470
66	Musa Khail	[B]	-3.9667	68	Muzaffarghar	[P]	-4.9657
67	Dir	[N]	-4.1152	69	Barkhan	[B]	-5.2614
68	Sibi	[B]	-4.3073	70	Badin	[S]	-5.3758
69	Ziarat	[B]	-4.3808	71	Pishin	[B]	-5.4476
70	Lakki	[N]	-4.4524	72	Jhalmagsi	[B]	-5.6175
71	Loralai	[B]	-4.6029	73	Rajanpur	[P]	-5.9379
72	Rajanpur	[P]	-4.7602	74	Pakpattan	[P]	-6.1570
73	Mastung	[B]	-4.7734	75	Gawader	[B]	-6.1616
74	Badin	[S]	-4.8466	76	Jacobabad	[S]	-6.1918
75	Pishin	[B]	-5.0904	77	Lasbela	[B]	-6.7740
76	Chagai	[B]	-5.1677	78	Loralai	[B]	-7.7837
77	Panjgur	[B]	-6.0387	79	Mastung	[B]	-7.9594
78	Kohlu	[B]	-6.0408	80	Tharparkar	[S]	-8.9178
79	Gawader	[B]	-6.3226	81	Jaffarabad	[B]	-9.1419
80	Lasbela	[B]	-6.5395	82	Musa Khail	[B]	-9.2995
81	Jacobabad	[S]	-6.5698	83	Bolan	[B]	-9.3237
82	Killa Saifullaha	[B]	-6.7825	84	Dera Bugti	[B]	-9.4643
83	Jaffarabad	[B]	-6.8593	85	Kharan	[B]	-9.6348
84	Awaran	[B]	-7.1243	86	Khuzdar	[B]	-10.1718
85	Kalat	[B]	-7.1316	87	Killa Saifullaha	[B]	-10.2935
86	Turbat	[B]	-7.2116	88	Awaran	[B]	-10.5132
87	Kharan	[B]	-7.2608	89	Kalat	[B]	-10.8131
88	Kohistan	[N]	-7.3670	90	Panjgur	[B]	-10.8265
89	Khuzdar	[B]	-7.4268	91	Zhob	[B]	-11.0581
90	Bolan	[B]	-7.5248	92	Turbat	[B]	-11.0819
91	Nasirabad	[B]	-7.7698	93	Nasirabad	[B]	-11.1989
92	Zhob	[B]	-7.8430	94	Kohistan	[N]	-12.6158
93	Jhalmagsi	[B]	-8.7686				
94	Dera Bugti	[B]	-9.4706				

[P]=Punjab , [S]=Sindh , [N]=NWFP , [B]=Balochistan

11

Panjgur, Awaran and Killa Saifullah, all districts of Balochistan estimates are that about 5 percent of the national population resides in these districts. Nine of these districts are in Balochistan. This implies that Balochislan is least socially developed province in the country.

Table 2 also classifies the 94 districts according to the level of development. Relatively developed districts are those in which the top quartile of population lives. Districts at the intermediate level are those in which the second and the third quartile lives while the relatively under developed districts account for the bottom 25 percent of the population.

According to Z-score ranking, the top quartile consists of 10 districts. All the provincial capitals are in this category. Besides, Faisalabad, Rawalpindi, Gujrat, Sailkot and Jhelum are districts with high rate of urbanisation and buoyant industrial activity. Their high ranking confirms the close link between the extent of urbanisation and industralisation and economic development and in turn the link between economic and social development. Except of one district each in Sindh, NWFP and Balochistan all the other districts in this quartile are from Punjab.

The second quartile of population resides in 20 districts. Here again we observe the dominance of Punjab, with eleven out of these districts belonging to this province. Among the top are Gujranwala, Toba Tek Singh, Sahiwal and Multan. Out of the remaining, seven districts are from NWFP, including Haripur, Abbotabad. Nowshera, Kohat, Charsadda, D.I. Khan and Tank. The relatively high enrollment rates at primary level alongwith access to water supply facilities are the prime reason for the relatively high ranking of districts in the province.

Nine each out of 25 districts in the third quartile are from NWFP and Punjab respectively while six are from Sindh. The last quartile which consists of 38 districts is dominated by Balochistan,

with 22 districts belonging to this province, followed by Punjab with seven districts and Sindh with six districts.

The population shares of each province in each quartile are presented in 'fable 3. 'I he share of Punjab in the top two quartiles is larger than its share in national population, implying that Punjab, by and large, has a high to intermediate level of social development. Sindh has a high share in the third and the fourth quartile, indicating the lower-middle to low level of social development in the province. NWFP has an intermediate level of development while Balochistan is the most backward province in terms of social development in the country. It is. however, important to note that even the relatively developed provinces have pockets of low development like the districts in the south of Punjab. Alternatively, even a relatively backward province has some areas with high level of social development. The best example of this is Quetta district in

TABLE 3 PERCENTAGE SHARE OF PROVINCES IN POPULATION QUARTILE BY LEVEL OF DEVELOPMENT (%)					
Quartile	Punjab	Sindh	NWFP	Balochistan	Total
To Quartile	61.1	31.5	5.6	1.8	100.0
Second Quartile	55.8	23.6	20.4	0.2	100.0
Third Quartile	55.8	23.6	20.4	0.2	100.0
Bottom Quartile	33.4	31.5	8.7	26.3	100.0

Table 4 presents the profile of social development in the country. The table shows the ten most and the ten least developed districts in each indicator. It appears that Lahore and Quetta have the most extensive coverage of health services in the country. Lahore has the highest number of

TABLE 4
PROFILE OF SOCIAL DEVELOPMENT

RANKING OF TOP 10 DISTRICTS

S.No.	Doctors/Population [10000pop]	Nurse/Population [10000pop]	Number of Patients Treated/Population	Total Hospital Beds/Population [1000pop]	Primary Enrollm Rate-Boys	Primary Enrollm Rate-Girls	Sec. Enrollment Rate-Boys	Sec. Enrollment Rate-Girls	Literary Ratio Male-1981	Literarcy Ratio Female-1981	% of HH With Inside Piped Water 1987,000
1	Lahore [P]	Lahore [P]	Quetta [B]	Quetta [B]	Quetta [B]	Jhelum [P]	Rawalpindi [P]	Karachi [S]	Rawalpindi [P]	Karachi [S]	Quetta [B]
2	Rawalpindi [P]	Rawalpindi [P]	Charsadda [N]	Sibi [B]	Sibi [B]	Chakwal [P]	Jhelum [P]	Faisalabad [P]	Karachi [S]	Lahore [P]	Karachi [S]
3	Bhawalpur [P]	Sailkot [P]	Peshawar [N]	Peshawar [N]	T.T. Singh [P]	Gujrat [P]	Naushero F. [S]	Lahore [P]	Chakwal [P]	Rawalpindi [P]	Lahore [P]
4	Multan [P]	Quetta [B]	Nawshera [N]	Lahore [P]	Faisalabad [P]	Quetta [B]	Chakwal [P]	Rawalpindi [P]	Lahore [P]	Haripur [N]	Peshawar [N]
5	Faisalabad [P]	Multan [P]	Lahore [P]	Haripur [N]	Jhelum [P]	Rawalpindi [P]	Khairpur [S]	Quetta [B]	Jhelum [P]	Chakwal [P]	Hyderabad [S]
6	Nawabshah [S]	Gujranwala [P]	Rahim Yar Kha [P]	Abbottabad [N]	Karak [N]	Shaiwal [P]	Lahore [P]	Chakwal [P]	Quetta [B]	Jhelum [P]	Kohlu [B]
7	Quetta [B]	Bhawalpur [P]	Kahat [N]	Bannu [N]	Haripur [N]	Narowal [P]	Gujrat [P]	Jhelum [P]	Gujrat [P]	Quetta [B]	Loralai [B]
8	Hyderabad [S]	Shaiwal [S]	Rawalpindi [P]	Lakki [N]	Abbottabad [N]	T.T. Singh [P]	Attock [P]	Gujranwala [P]	Abbottabad 41.64	Nawabshah [S]	Barkhan [B]
9	Shaiwal [P]	Faisalabad [P]	Chitral [N]	Jhalmagsi [B]	Swat [N]	Sailkot [P]	Sailkot [N]	T.T. Singh [P]	Faisalabad [P]	Naushero F. [S]	Kahat [B]
10	Jhelum [P]	Jhelum [P]	Buner [N]	Nawabshah [S]	Larkana [S]	Attock [P]	Gujranwala [P]	Gujrat [P]	T.T. Singh [P]	Charsadda [N]	Malakand [B]

RANKING OF LOWEST 10 DISTRICTS

S.No.	Doctors/Population [10000pop]	Nurse/Population [10000pop]	Number of Patients Treated/Population	Total Hospital Beds/Population [1000pop]	Primary Enrollm Rate-Boys	Primary Enrollm Rate-Girls	Sec. Enrollment Rate-Boys	Sec. Enrollment Rate-Girls	Literary Ratio Male-1981	Literarcy Ratio Female-1981	% of HH With Inside Piped Water 1987,000
1	Turbat [B]	Karak [N]	Panjgur [B]	Mustung [B]	Awaran [B]	Awaran [B]	Bolan [B]	Kohlu [B]	Panjgur [B]	Loralai [B]	Jhang [P]
2	Zhob [B]	Kohistan [N]	Mastung [B]	Turbat [B]	Killa Saifullaha [B]	Jhalmagsi [B]	Loralai [B]	Awaran [B]	Gawader [B]	Lasbela [B]	Kasur [P]
3	Nasirabad [B]	Mardan [B]	Kalat [B]	Dera Bugti [B]	Nasirabad [B]	Zhob [B]	Nasirabad [B]	Turbat [B]	Barkhan [B]	Kalat [B]	Muzaffargha [P]
4	Panjgur [B]	Killa Saifulla [B]	Pakpattan [P]	Musa Khail [B]	Zhob [B]	Nasirabad [B]	Killa Saifull [B]	Jhalmagsi [B]	Musa Khail [B]	Bolan [B]	Kharan [B]
5	Kohistan [B]	Kohlu [B]	Hafizabad [P]	Awaran [B]	Tharparkar [S]	Bolan [B]	Turbat [B]	Kalat [B]	Jhalmagsi [B]	Turbat [B]	Killa Saifull [B]
6	Musa Khail [B]	Dera Bugti [B]	Khuzdar [B]	Lasbela [B]	Kalat [B]	Musa Khail [B]	Zhob [B]	Bolan [B]	Jaffarabad [B]	Nasirabad [B]	Layyah [P]
7	Barkhan [B]	Nasirabad [B]	Awaran [B]	Nasirabad [B]	Musa Khail [B]	Tharparkar [S]	Musa Khail [B]	Nasirabad [B]	Kharan [B]	Kohistan [N]	Jaffarabad [B]
8	Buner [N]	Musa Khail [B]	Lodhran [P]	Tharparkar [S]	Turbat [B]	Dera Bugti [B]	Kalat [B]	Musa Khail [B]	Awaran [B]	Khuzdar [B]	Dera Bugti [B]
9	Nawshera [N]	Barkhan [B]	Kohistan [N]	Kohistan [N]	Panjgur [B]	Kalat [B]	Panjgur [B]	Dera Bugti [B]	Kohistan [N]	Kohlu [B]	Zhob [B]
10	Mastung [B]	Ziarat [B]	Malakand [B]	Buner [N]	Kohistan [N]	Kohistan [N]	Kohistan [N]	Kohistan [N]	Dera Bugti [B]	Dera Bugti [B]	Shikarpur [P]

14

health personnel (both doctors an nurses) relative to population while Quetta has the best coverage of hospital beds and the most number of patients treated. In education. Rawalpindi and Karachi are on the top. Karachi has the highest female literacy rate and girls secondary enrollment rate. Rawalpindi has the highest male literacy rate and boys secondary enrollment rate. Quetta and Jhelum have the highest primary male and female enrollment rates respectively. The dominance of Punjab in at most of the indicators, particularly in those related to health, in the lop districts is striking. Similarly, the poor performance of districts in Balochistan in most indicators is noticeable.

'table 5 gives the correlation matrix between different indicators. High correlation is observed between doctors and nurses, primary and secondary enrollments, literacy rates and enrollment rates. In particular, girls primary and secondary enrollment rates are strongly related to the male and female literacy rates. There also appears to be a degree of correlation between different sectors. Linkage exists between water supply and health services and education and health services, specifically health personnel. This correlation is a reflection of the spillover and externalities generated by different social services and highlights the presence of synergies between sectors. On the whole, in the profile of development, the key sector appears to be education, in particular, female primary and secondary enrollment rates.

5.   **PROVINCE-WISE PROFILE OF DEVELOPMENT** Province wise ranking of districts in terms of social development is presented in 'fable 6. Within Punjab, the top five districts according to the Z-score include Lahore, Rawalpindi. Jhelum. Faisalabad and Chakwal while the five most lagging districts are Pakpattan. Rajanpur. Lodhran, Muzaffargarh and D.G. Khan. The last two fall in the barani areas with underdeveloped economic base and therefore, lag behind in social development also. Also noticeable is the

15

TABLE 5

CORRELATION BETWEEN SOCIAL INDICATORS

Indicators	Doctors/ Population [10000pop]	Nurse/ Population [10000pop]	Number of Patients Treated/Population	Pri Enrol Rate Boys 1991-92	Pri Enrol Rate Girls 1991-92	SecEnrol Rate Boys 1991-92	SecEnrol Rate Girls 1991-92	Literarcy Ratio [Male] 1981	Literarcy Ratio [Female] 1981	% of Households with Inside Piped Water	HOSPITAL RHC BED
Doctors\1000 Pop	1.00000										
Nurses\1000 Pop	0.88090	1.00000									
Patients Treated\Pop	0.40591	0.40132	1.00000								
Primary Enr.-Boys	0.27303	0.16642	0.38080	1.00000							
Primary Enr.-Girls	0.47133	0.51504	0.24912	0.59583	1.00000						
Sec. Enrol.-Boys	0.49811	0.48307	0.38916	0.64211	0.77362	1.00000					
Sec. Enrol.-Girls	0.61623	0.61686	0.28043	0.48885	0.86746	0.73185	1.00000				
Literacy Rate-Male	0.61825	0.54877	0.28096	0.52766	0.79438	0.75025	0.85712	1.00000			
Literacy Rate-Female	0.58983	0.56980	0.34780	0.35702	0.64480	0.66845	0.81675	0.72088	1.00000		
% HH with Inside-Wate	0.41134	0.44265	0.59216	0.31705	0.38558	0.37318	0.46214	0.41752	0.51800	1.00000	
Hospital + RHC	0.47711	0.42465	0.59562	0.45330	0.37197	0.33016	0.33867	0.34572	0.30970	0.62680	1

	PROVINCE/DISTRICT	WFS RANKING		PROVINCE/DISTRICT	Z-SCORE RANKING
			PUNJAB		
1	Rawalpindi	16.9032	1	Lahore	33.7790
2	Chakwal	16.2396	2	Rawalpindi	21.7602
3	Lahore	15.8617	3	Jhelum	15.1961
4	Jhelum	13.8476	4	Faisalabad	12.4723
5	Gujrat	10.6669	5	Chakwal	11.6895
6	Faisalabad	10.2559	6	Sailkot	10.4392
7	Sailkot	9.5103	7	Gujrat	10.2695
8	Gujranwala	9.0223	8	Gujranwala	8.3997
9	T.T. Singh	8.7161	9	T.T. Singh	7.6672
10	Mandi Baha Uddin	7.8838	10	Shaiwal	6.8214
11	Narowal	7.4406	11	Attock	6.6496
12	Attock	5.4162	12	Multan	5.7214
13	Sargodha	5.0561	13	Sargodha	4.7876
14	Shaiwal	4.3784	14	Narowal	4.5065
15	Khanewal	3.5312	15	Mandi Baha Uddin	4.1047
16	Multan	3.3155	16	Rahim Yar Khan	3.3607
17	Okara	2.8373	17	Mainwalai	3.3278
18	Sheikhupura	2.7449	18	Bhawalpur	3.1852
19	Bahawalnagar	2.1264	19	Khushab	2.2490
20	Mainwalai	1.0231	20	Sheikhupura	1.2868
21	Hafizabad	0.8930	21	Khanewal	-0.1656
22	Vehari	0.3224	22	Bahawalnagar	-0.7517
23	Rahim Yar Khan	0.2881	23	Bhakkar	-0.7959
24	Khushab	0.2413	24	Okara	-0.9460
25	Kasur	0.2153	25	Jhang	-1.1024
26	Layyah	-0.2253	26	Hafizabad	-1.8140
27	Jhang	-0.6348	27	Kasur	-2.0419
28	D.G. Khan	-0.9605	28	Layyah	-2.3279
29	Bhawalpur	-1.4317	29	Vehari	-2.3336
30	Pakpattan	-1.4499	30	D.G. Khan	-2.6532
31	Lodhran	-1.7701	31	Lodhran	-4.8434
32	Muzaffarghar	-2.5598	32	Muzaffarghar	-4.9657
33	Bhakkar	-3.1602	33	Rajanpur	-5.9379
34	Rajanpur	-4.7602	34	Pakpattan	-6.1570
			SINDH		
1	Karachi	26.0147	1	Karachi	15.0423
2	Hyderabad	4.8612	2	Hyderabad	4.0355
3	Naushero Feroze	3.3003	3	Larkana	2.4750
4	Mirpurkhas	1.0353	4	Nawabshah	1.5610
5	Sukkar	0.6430	5	Naushero Feroze	1.3569
6	Khairpur	-0.1975	6	Mirpurkhas	0.4713
7	Nawabshah	-0.1986	7	Khairpur	0.2289
8	Dadu	-2.1306	8	Sukkar	-0.4690
9	Shikarpur	-2.2492	9	Shikarpur	-1.8390
10	Larkana	-3.0215	10	Dadu	-3.0322
11	Sanghar	-3.1303	11	Thatta	-3.0647
12	Thatta	-3.7789	12	Sanghar	-3.7943
13	Tharparkar	-3.9269	13	Badin	-5.3758
14	Badin	-4.8466	14	Jacobabad	-6.1918
15	Jacobabad	-6.5698	15	Tharparkar	-8.9178

TABLE 6
PROVINCE-WISE RANKING OF DISTRICTS

TABLE 6
PROVINCE-WISE RANKING OF DISTRICTS

PROVINCE/DISTRICT	WFS RANKING	PROVINCE/DISTRICT	Z-SCORE RANKING
NWFP			
1 Haripur	6.3132	1 Peshawar	9.6742
2 Nawshera	4.0355	2 Haripur	7.1679
3 Abbottabad	2.7280	3 Abbottabad	5.5262
4 Charsadda	2.3308	4 Nawshera	4.9870
5 Tank	2.2013	5 Kahat	4.0671
6 Malakand	1.6083	6 Charsadda	3.8821
7 Peshawar	1.3097	7 Tank	2.8443
8 Karak	0.7639	8 D.I. Khan	2.7729
9 D.I. Khan	0.6428	9 Chitral	2.4402
10 Swabi	0.5445	10 Karak	2.2741
11 Kahat	0.1457	11 Bannu	1.5821
12 Buner	-1.3008	12 Malakand	1.3358
13 Chitral	-1.5092	13 Lakki	0.6170
14 Mardan	-1.5608	14 Swat	0.4668
15 Bannu	-2.9875	15 Buner	-1.2584
16 Manshera	-3.1704	16 Swabi	-1.6588
17 Swat	-3.1779	17 Mardan	-2.1385
18 Dir	-4.1152	18 Manshera	-3.8104
19 Lakki	-4.4524	19 Dir	-4.7799
20 Kohistan	-7.3670	20 Kohistan	-12.6158
BALOCHISTAN			
1 Quetta	11.4693	1 Quetta	27.1702
2 Barkhan	-3.6361	2 Sibi	5.2867
3 Musa Khail	-3.9667	3 Ziarat	-2.2424
4 Sibi	-4.3073	4 Kohlu	-4.1405
5 Ziarat	-4.3808	5 Chagai	-4.9470
6 Loralai	-4.6029	6 Barkhan	-5.2614
7 Mastung	-4.7734	7 Pishin	-5.4476
8 Pishin	-5.0904	8 Jhalmagsi	-5.6175
9 Chagai	-5.1677	9 Gawader	-6.1616
10 Panjgur	-6.0387	10 Lasbela	-6.7740
11 Kohlu	-6.0408	11 Loralai	-7.7837
12 Gawader	-6.3226	12 Mastung	-7.9594
13 Lasbela	-6.5395	13 Jaffarabad	-9.1419
14 Killa Saifullaha	-6.7825	14 Musa Khail	-9.2995
15 Jaffarabad	-6.8593	15 Bolan	-9.3237
16 Awaran	-7.1243	16 Dera Bugti	-9.4643
17 Kalat	-7.1316	17 Kharan	-9.6348
18 Turbat	-7.2116	18 Khuzdar	-10.1718
19 Kharan	-7.2608	19 Killa Saifullaha	-10.2935
20 Khuzdar	-7.4268	20 Awaran	-10.5132
21 Bolan	-7.5248	21 Kalat	-10.8131
22 Nasirabad	-7.7698	22 Panjgur	-10.8265
23 Zhob	-7.8430	23 Zhob	-11.0581
24 Jhalmagsi	-8.7686	24 Turbat	-11.0819
25 Dera Bugti	-9.4706	25 Nasirabad	-11.1989

skewness in the level of development in Punjab. According to the Z-score out of the 34 districts. 14 have a negative score indicating that these districts are well below the national average.

In Sindh, the five most backward districts include Tharparker. Jacobabad. Badin, Sanghar and Thatta. These districts have a weak economic base with hardly any industrialisation. Tharparkar. in particular, lies in the arid zone of the province and is difficult to service because of accessibility problems. As such it ranks the lowest in almost all of the indicators. Eight out of the fifteen districts in Sindh have a negative z-score.

Backward areas in NWFP include Kohistan, Dir, Mansehra, Mardan. and Swabi. 'these districts alongwith Bunnu have a negative Z-score indicating a low level of development. Except for Quetta and Sibi, all the districts in Balochistan have a very low level of development, with the most backwardness being Nasirabad, Turbat, Zhob, Panjgur and Kalat.

6. CONCLUSIONS

The paper has used eleven indicators relating to the education, health and water supply sectors to rank districts of Pakistan in terms of the level of social development. The paper demonstrates the importance of education indicators in determining the overall level of social development, especially in terms of female literacy and enrollment rates. Also, the ranking demonstrate a close correlation between levels of social and economic development spatially with Pakistan. Overall. Punjab appears to have the highest level of social development followed by NWFP, Sindh and Balochistan. However, the results indicate substantial variation among districts within a province in the level of social development. Least developed districts within each province are identified as targets for special development allocations within SAP.

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TABLE A-1

SNo.	Doctors/ Population [10000pop]		Nurse/ Population [10000pop]		Number of Patients Treated/Population		Total Hospital Beds\Population [1000pop]	
1	Lahore	15.702	Lahore	13.642	Quetta	1.761	Quetta	3.939
2	Rawalpindi	7.075	Rawalpindi	4.000	Charsadda	1.520	Sibi	2.339
3	Bhawalpur	5.478	Sailkot	3.559	Peshawar	1.520	Peshawar	1.854
4	Multan	5.177	Quetta	3.529	Nawshera	1.520	Lahore	1.806
5	Faisalabad	5.151	Multan	3.144	Lahore	1.474	Haripur	1.233
6	Nawabshah	5.036	Gujranwala	2.900	Rahim Yar Khan	1.388	Abbottabad	1.233
7	Quetta	4.855	Bhawalpur	2.898	Kahat	1.376	Bannu	1.103
8	Hyderabad	4.488	Shaiwal	2.628	Rawalpindi	1.059	Lakki	1.103
9	Shaiwal	4.327	Faisalabad	2.415	Chitral	0.978	Jhalmagsi	1.102
10	Jhelum	4.118	Jhelum	2.328	Buner	0.968	Nawabshah	1.033
11	Sailkot	4.096	Attock	2.005	Swat	0.968	Rawalpindi	0.955
12	Mainwalai	3.840	Sheikhupura	1.884	Lakki	0.851	Tank	0.945
13	Thatta	3.734	Jhang	1.804	Bannu	0.851	D.I. Khan	0.945
14	Khushab	3.613	Mainwalai	1.800	Bhawalpur	0.749	Ziarat	0.935
15	Attock	3.547	Gujrat	1.786	Tank	0.714	Kohlu	0.889
16	Larkana	3.405	Nawshera	1.754	D.I. Khan	0.714	Bhakkar	0.837
17	Gujranwala	3.338	Peshawar	1.754	Faisalabad	0.700	Larkana	0.785
18	Peshawar	3.191	Khushab	1.694	Sibi	0.693	Hyderabad	0.733
19	Gujrat	3.159	Rahim Yar Khan	1.618	Gawader	0.621	Bhawalpur	0.730
20	Sargodha	3.117	Sargodha	1.461	Karak	0.615	Malakand	0.713
21	Shikarpur	3.079	T.T. Singh	1.297	Jhelum	0.614	Kahat	0.679
22	Rahim Yar Khan	3.058	Bhakkar	1.241	Ziarat	0.607	Multan	0.655
23	Mirpurkhas	3.019	Rajanpur	1.213	Hyderabad	0.563	Manshera	0.639
24	Badin	2.825	Chakwal	1.079	Chagai	0.555	Swat	0.623
25	T.T. Singh	2.767	D.G. Khan	1.053	Sailkot	0.520	Shaiwal	0.611
26	Chitral	2.739	Kasur	0.979	Larkana	0.511	Jhelum	0.607
27	Bhakkar	2.647	Layyah	0.966	Swabi	0.506	Mandi Baha Uddin	0.604
28	Karachi	2.449	Narowal	0.957	Mardan	0.506	Gujrat	0.604
29	Sukkar	2.322	Larkana	0.930	Mirpurkhas	0.468	Chitral	0.602
30	Malakand	2.189	Bahawalnagar	0.871	Manshera	0.449	Faisalabad	0.544
31	Sheikhupura	2.168	Muzaffarghar	0.806	Gujranwala	0.434	Sailkot	0.539
32	Jhang	2.077	Haripur	0.799	Mainwalai	0.421	Mainwalai	0.526
33	Khairpur	2.064	Abbottabad	0.799	Lasbela	0.419	Attock	0.503
34	Bannu	2.059	Vehari	0.709	Thatta	0.418	Charsadda	0.493
35	Lakki	2.059	Okara	0.695	Dir	0.413	Gujranwala	0.483
36	Dadu	2.040	Khanewal	0.690	Karachi	0.401	Hafizabad	0.483
37	Rajanpur	1.997	Hyderabad	0.682	Sukkar	0.386	Rahim Yar Khan	0.454
38	Haripur	1.923	Lakki	0.628	Shaiwal	0.366	Mardan	0.444
39	Abbottabad	1.923	Bannu	0.628	Abbottabad	0.359	Khushab	0.435
40	Ziarat	1.912	Nawabshah	0.537	Haripur	0.359	Sargodha	0.409
41	Sibi	1.912	Lodhran	0.526	Naushero Feroze	0.346	Dadu	0.385
42	Chakwal	1.909	Tank	0.519	Jhalmagsi	0.342	Chagai	0.382
43	Sanghar	1.883	D.I. Khan	0.519	Pishin	0.340	Thatta	0.379
44	Naushero Feroze	1.810	Karachi	0.500	Kohlu	0.327	Karak	0.375
45	D.G. Khan	1.734	Hafizabad	0.472	Multan	0.306	Rajanpur	0.361
46	Tank	1.731	Pakpattan	0.454	Sargodha	0.302	T.T. Singh	0.358
47	D.I. Khan	1.731	Malakand	0.331	Attock	0.300	Nawshera	0.345
48	Gawader	1.713	Mandi Baha Uddin	0.291	Bahawalnagar	0.296	Chakwal	0.338

NATION-WISE RANKING OF DISTRICTS IN SOCIAL INDICATORS

TABLE A-1

NATION-WISE RANKING OF DISTRICTS IN SOCIAL INDICATORS

SNo.	Doctors/ Population [10000pop]		Nurse/ Population [10000pop]		Number of Patients Treated/Population		Total Hospital Beds\Population [1000pop]	
49	Bahawalnagar	1.645	Kahat	0.279	Badin	0.287	Jhang	0.335
50	Layyah	1.591	Sibi	0.225	Nawabshah	0.285	Karachi	0.329
51	Chagai	1.530	Khairpur	0.186	Khushab	0.273	Mirpurkhas	0.308
52	Jacobabad	1.336	Sukkar	0.180	Gujrat	0.270	Sheikhupura	0.287
53	Muzaffarghar	1.327	Mirpurkhas	0.176	Shikarpur	0.269	Shikarpur	0.283
54	Kahat	1.172	Charsadda	0.134	Bolan	0.262	D.G. Khan	0.268
55	Vehari	1.168	Dir	0.097	Kharan	0.260	Narowal	0.264
56	Karak	1.165	Shikarpur	0.096	D.G. Khan	0.259	Layyah	0.263
57	Lasbela	1.157	Manshera	0.089	Dadu	0.254	Dir	0.252
58	Okara	1.145	Sanghar	0.083	Khairpur	0.254	Sanghar	0.252
59	Khanewal	1.137	Badin	0.075	Sanghar	0.243	Pishin	0.252
60	Kasur	1.127	Thatta	0.045	T.T. Singh	0.237	Sukkar	0.242
61	Narowal	1.102	Dadu	0.045	Chakwal	0.233	Loralai	0.238
62	Jhalmagsi	0.944	Pishin	0.039	Jaffarabad	0.196	Muzaffarghar	0.231
63	Pishin	0.937	Loralai	0.038	Jacobabad	0.178	Khairpur	0.228
64	Kohlu	0.902	Swabi	0.035	Vehari	0.170	Bahawalnagar	0.223
65	Lodhran	0.867	Jacobabad	0.025	Dera Bugti	0.166	Kasur	0.214
66	Charsadda	0.778	Panjaur	0.021	Bhakkar	0.166	Zhob	0.202

TABLE A-1

NATION-WISE RANKING OF DISTRICTS IN SOCIAL INDICATORS

SNo.	Primary Enrollment Rate-Boys		Primary Enrollment Rate-Girls		Sec. Enrollment Rate-Boys		Sec. Enrollment Rate-Girls	
1	Larkana	1.371	Jhelum	1.040	Rawalpindi	0.938	Karachi	0.392
2	Quetta	1.288	Chakwal	0.948	Jhelum	0.829	Faisalabad	0.390
3	Sibi	1.275	Gujrat	0.943	Naushero Feroze	0.751	Lahore	0.347
4	T.T. Singh	1.193	Quetta	0.939	Chakwal	0.744	Rawalpindi	0.320
5	Faisalabad	1.188	Rawalpindi	0.921	Khairpur	0.737	Quetta	0.311
6	Jhelum	1.177	Shaiwal	0.918	Lahore	0.645	Chakwal	0.306
7	Karak	1.136	Narowal	0.875	Gujrat	0.596	Jhelum	0.293
8	Haripur	1.110	T.T. Singh	0.860	Attock	0.581	Gujranwala	0.276
9	Abbottabad	1.080	Sailkot	0.776	Sailkot	0.522	T.T. Singh	0.276
10	Swat	1.076	Attock	0.751	Gujranwala	0.493	Gujrat	0.256
11	Gujrat	1.066	Mandi Baha Uddin	0.724	Karachi	0.485	Mandi Baha Uddin	0.248
12	Chakwal	1.027	Faisalabad	0.680	Quetta	0.483	Sailkot	0.248
13	Rawalpindi	1.021	Sargodha	0.642	Narowal	0.475	Narowal	0.196
14	Narowal	1.019	Lahore	0.626	Haripur	0.474	Shaiwal	0.193
15	Kahat	0.994	Gujranwala	0.618	Karak	0.471	Multan	0.179
16	Jacobabad	0.990	Karachi	0.606	Mainwalai	0.468	Sheikhupura	0.177
17	Barkhan	0.973	Haripur	0.559	Mandi Baha Uddin	0.434	Khanewal	0.176
18	Mandi Baha Uddin	0.959	Hafizabad	0.529	Multan	0.431	Attock	0.172
19	Buner	0.953	Khushab	0.504	T.T. Singh	0.426	Rahim Yar Khan	0.172
20	Chitral	0.953	Mainwalai	0.503	Rahim Yar Khan	0.422	Sargodha	0.172
21	Khairpur	0.940	Abbottabad	0.501	Faisalabad	0.421	Okara	0.148
22	Naushero Feroze	0.938	Karak	0.461	Abbottabad	0.421	Mirpurkhas	0.143
23	Shikarpur	0.937	Malakand	0.446	Chitral	0.419	Bahawalnagar	0.140
24	Shaiwal	0.927	Sheikhupura	0.440	Buner	0.410	Haripur	0.138
25	Attock	0.917	Multan	0.424	Kasur	0.403	Hyderabad	0.137
26	Malakand	0.912	Jhang	0.412	Sibi	0.396	Layyah	0.131
27	Sargodha	0.911	Vehari	0.409	Tank	0.393	D.I. Khan	0.128
28	Khushab	0.908	Bhakkar	0.394	Swabi	0.387	Shikarpur	0.122
29	Charsadda	0.905	Okara	0.380	Khushab	0.383	Vehari	0.121
30	Mirpurkhas	0.887	Nawshera	0.379	Swat	0.375	Malakand	0.121
31	Jhalmagsi	0.850	Khanewal	0.377	D.I. Khan	0.366	Peshawar	0.116
32	Nawshera	0.836	Swabi	0.376	Nawshera	0.365	Kasur	0.116
33	Sanghar	0.834	Bahawalnagar	0.373	Mardan	0.365	Mainwalai	0.115
34	Dera Bugti	0.832	Kahat	0.369	Malakand	0.364	Lodhran	0.113
35	Bannu	0.830	Layyah	0.363	Charsadda	0.360	Bhawalpur	0.111
36	Sukkar	0.830	D.I. Khan	0.351	Sheikhupura	0.348	Tank	0.106
37	D.I. Khan	0.825	Mardan	0.350	Sargodha	0.335	Khushab	0.104
38	Peshawar	0.822	Sibi	0.348	Layyah	0.331	Larkana	0.100
39	Kohlu	0.820	Kasur	0.337	Khanewal	0.320	Jhang	0.098
40	Sailkot	0.814	Tank	0.329	Kahat	0.313	Hafizabad	0.097
41	Swabi	0.811	D.G. Khan	0.326	Shaiwal	0.305	Nawshera	0.094
42	Lakki	0.800	Bhawalpur	0.324	Lakki	0.300	Abbottabad	0.088
43	Bhakkar	0.784	Peshawar	0.317	Peshawar	0.292	Karak	0.083
44	Gujranwala	0.784	Chitral	0.312	Bahawalnagar	0.288	Chitral	0.083
45	Pishin	0.766	Rahim Yar Khan	0.311	Bhawalpur	0.286	Swabi	0.080
46	Mainwalai	0.760	Swat	0.296	Bhakkar	0.282	Sukkar	0.079
47	Khanewal	0.751	Hyderabad	0.289	Jhang	0.267	Muzaffarghar	0.078
48	Sheikhupura	0.743	Manshera	0.277	Ziarat	0.254	Mardan	0.078

TABLE A-1

	NATION-WISE RANKING OF DISTRICTS IN SOCIAL INDICATORS							
SNo.	Primary Enrollment Rate-Boys		Primary Enrollment Rate-Girls		Sec. Enrollment Rate-Boys		Sec. Enrollment Rate-Girls	
49	Dir	0.729	Bannu	0.269	Bannu	0.253	Kahat	0.076
50	Hafizabad	0.724	Buner	0.268	Vehari	0.243	Naushero Feroze	0.076
51	Tank	0.723	Charsadda	0.263	D.G. Khan	0.238	Nawabshah	0.072
52	Jhang	0.711	Lodhran	0.262	Nawabshah	0.236	D.G. Khan	0.069
53	Okara	0.709	Mirpurkhas	0.248	Dir	0.231	Charsadda	0.066
54	Ziarat	0.707	Sukkar	0.234	Hyderabad	0.231	Sibi	0.066
55	Mardan	0.706	Muzaffarghar	0.232	Mirpurkhas	0.229	Dadu	0.062
56	Lasbela	0.703	Khairpur	0.217	Okara	0.227	Khairpur	0.061
57	Dadu	0.702	Larkana	0.216	Sukkar	0.217	Sanghar	0.060
58	Nawabshah	0.696	Ziarat	0.203	Muzaffarghar	0.210	Thatta	0.057
59	Vehari	0.689	Gawader	0.187	Larkana	0.208	Pakpattan	0.057
60	Multan	0.663	Dir	0.180	Dadu	0.207	Ziarat	0.056
61	Karachi	0.661	Thatta	0.180	Hafizabad	0.203	Swat	0.053
62	Kasur	0.661	Chagai	0.179	Chagai	0.183	Bhakkar	0.047
63	Lahore	0.655	Lasbela	0.174	Barkhan	0.178	Buner	0.043
64	Chagai	0.645	Nawabshah	0.169	Kohlu	0.173	Bannu	0.043
65	Lodhran	0.624	Rajanpur	0.164	Jaffarabad	0.170	Manshera	0.040
66	Thatta	0.623	Lakki	0.164	Shikarpur	0.163	Rajanpur	0.034
67	Badin	0.615	Dadu	0.162	Lasbela	0.158	Lasbela	0.027
68	Mastung	0.612	Mastung	0.156	Manshera	0.157	Badin	0.026
69	Layyah	0.582	Pakpattan	0.145	Sanghar	0.151	Chagai	0.023
70	Gawader	0.582	Shikarpur	0.136	Lodhran	0.150	Mastung	0.022
71	Manshera	0.573	Pishin	0.127	Rajanpur	0.143	Jacobabad	0.021
72	Bahawalnagar	0.541	Turbat	0.115	Gawader	0.141	Dir	0.019
73	D.G. Khan	0.533	Naushero Feroze	0.109	Pakpattan	0.135	Pishin	0.017
74	Bhawalpur	0.506	Barkhan	0.104	Dera Bugti	0.132	Panjgur	0.015
75	Rahim Yar Khan	0.498	Sanghar	0.100	Pishin	0.131	Barkhan	0.012
76	Jaffarabad	0.473	Kharan	0.099	Mastung	0.126	Lakki	0.011
77	Hyderabad	0.468	Killa Saifullaha	0.096	Thatta	0.124	Jaffarabad	0.011
78	Bolan	0.465	Badin	0.093	Jacobabad	0.115	Loralai	0.010
79	Muzaffarghar	0.443	Kohlu	0.092	Kharan	0.113	Tharparkar	0.009
80	Rajanpur	0.365	Panjgur	0.090	Badin	0.104	Khuzdar	0.009
81	Loralai	0.364	Jaffarabad	0.088	Khuzdar	0.099	Gawader	0.009
82	Kharan	0.347	Jacobabad	0.086	Jhalmagsi	0.095	Zhob	0.009
83	Pakpattan	0.324	Khuzdar	0.073	Tharparkar	0.095	Killa Saifullaha	0.008
84	Khuzdar	0.316	Loralai	0.071	Awaran	0.091	Kharan	0.008
85	Awaran	0.316	Awaran	0.058	Bolan	0.073	Kohlu	0.007
86	Killa Saifullaha	0.302	Jhalmagsi	0.056	Loralai	0.057	Awaran	0.006
87	Nasirabad	0.271	Zhob	0.054	Nasirabad	0.056	Turbat	0.005
88	Zhob	0.246	Nasirabad	0.048	Killa Saifullaha	0.047	Jhalmagsi	0.005
89	Tharparkar	0.213	Bolan	0.039	Turbat	0.034	Kalat	0.004
90	Kalat	0.189	Musa Khail	0.036	Zhob	0.032	Bolan	0.004
91	Musa Khail	0.184	Tharparkar	0.033	Musa Khail	0.029	Nasirabad	0.002
92	Turbat	0.159	Dera Bugti	0.029	Kalat	0.028	Musa Khail	0.002
93	Panjgur	0.111	Kalat	0.027	Panjgur	0.025	Dera Bugti	0.001
94	Kohistan	0.042	Kohistan	0.007	Kohistan	0.004	Kohistan	0.000
		0.73		0.33		0.29		0.10
		0.08		0.07		0.04		0.01

TABLE A-1

NATION-WISE RANKING OF DISTRICTS IN SOCIAL INDICATORS

SNo.	Literarcy Ratio Male-1981		Literarcy Ratio Female-1981		% of HH With Inside Piped Water 1987	
1	Rawalpindi	60.770	Karachi	48.840	Quetta	71.400
2	Karachi	60.000	Lahore	40.950	Karachi	66.800
3	Chakwal	54.630	Rawalpindi	31.260	Lahore	63.100
4	Lahore	54.580	Haripur	26.600	Peshawar	49.158
5	Jhelum	53.390	Chakwal	25.660	Hyderabad	34.500
6	Quetta	46.300	Jhelum	24.730	Kohlu	33.200
7	Gujrat	42.780	Quetta	23.200	Loralai	32.764
8	Abbottabad	41.640	Nawabshah	23.008	Barkhan	31.999
9	Faisalabad	41.610	Naushero Feroze	23.008	Kahat	31.900
10	T.T. Singh	40.850	Charsadda	21.790	Malakand	31.850
11	Sailkot	40.110	Nawshera	21.790	Musa Khail	31.320
12	Gujranwala	38.170	Faisalabad	20.680	Rawalpindi	31.000
13	Sukkar	37.490	Sailkot	20.560	Nawshera	30.099
14	Attock	36.970	Gujranwala	20.520	Bannu	28.701
15	Hyderabad	36.510	Hyderabad	19.810	Lakki	27.749
16	Khanewal	36.280	T.T. Singh	18.670	Abbottabad	27.385
17	Sargodha	35.870	Gujrat	18.670	Chitral	27.323
18	Shikarpur	35.640	Mandi Baha Uddin	18.670	Sibi	27.237
19	Karak	34.750	Tank	18.430	Swat	27.162
20	Narowal	34.700	Mirpurkhas	16.405	Charsadda	26.760
21	Okara	34.540	Swabi	15.950	Tank	25.957
22	Khairpur	34.230	Narowal	15.470	D.I. Khan	25.172
23	Mainwalai	33.660	Okara	13.740	Chakwal	25.100
24	Mandi Baha Uddin	33.400	Khanewal	13.650	Buner	25.000
25	Larkana	32.630	Multan	12.880	Haripur	24.759
26	Multan	32.610	Sukkar	12.810	Sargodha	24.100
27	Dadu	32.480	Sargodha	12.770	Sailkot	23.503
28	Kahat	32.090	Sheikhupura	12.540	Gujrat	22.225
29	Peshawar	31.270	Bhawalpur	12.210	Karak	21.900
30	Sheikhupura	30.910	Shaiwal	11.680	Pishin	21.600
31	Shaiwal	30.480	Ziarat	11.500	Multan	21.443
32	Jhang	30.040	Attock	11.070	Mirpurkhas	20.343
33	Khushab	30.040	Abbottabad	10.900	Gujranwala	20.321
34	Hafizabad	28.600	Peshawar	10.860	Bahawalnagar	20.100
35	Layyah	28.580	Rahim Yar Khan	10.650	Faisalabad	19.800
36	Sanghar	28.460	Larkana	9.930	Dir	18.900
37	Bahawalnagar	28.330	Hafizabad	9.700	Attock	17.800
38	Rahim Yar Khan	28.030	Bahawalnagar	9.600	Shaiwal	17.563
39	Vehari	27.890	Kasur	9.470	Pakpattan	17.083
40	Bhakkar	27.500	Jhang	9.300	D.G. Khan	16.000
41	Bhawalpur	27.440	Khushab	9.300	Manshera	14.833
42	D.I. Khan	27.240	Vehari	9.190	Sukkar	14.700
43	Bannu	27.140	Chagai	9.000	Jhelum	14.400
44	Kasur	26.850	Buner	8.730	Narowal	13.993
45	Haripur	26.600	Shikarpur	8.730	Kohistan	13.500
46	Thatta	26.470	Dadu	8.610	Nawabshah	13.205
47	Malakand	26.400	Sanghar	8.460	Mastung	13.113
48	Mardan	26.080	D.G. Khan	8.120	Mandi Baha Uddin	12.969

TABLE A-1

	NATION-WISE RANKING OF DISTRICTS IN SOCIAL INDICATORS					
SNo.	Literarcy Ratio Male-1981		Literarcy Ratio Female-1981		% of HH With Inside Piped Water 1987	
49	Muzaffarghar	25.810	Mainwalai	8.030	Hafizabad	12.724
50	Lakki	25.350	D.I. Khan	8.010	Mainwalai	12.100
51	Pakpattan	24.990	Tharparkar	7.890	Okara	11.500
52	Chitral	24.120	Pakpattan	7.800	Naushero Feroze	10.430
53	Tharparkar	23.660	Layyah	7.780	Rajanpur	10.400
54	D.G. Khan	23.200	Thatta	7.720	T.T. Singh	10.100
55	Lodhran	23.060	Khairpur	7.050	Lodhran	10.000
56	Naushero Feroze	23.008	Badin	6.790	Kalat	9.411
57	Nawabshah	23.008	Bhakkar	6.610	Bolan	9.395
58	Badin	21.840	Manshera	6.520	Sheikhupura	9.300
59	Nawshera	21.790	Kahat	6.360	Khushab	9.300
60	Charsadda	21.790	Muzaffarghar	6.330	Mardan	9.076
61	Manshera	20.920	Mastung	6.200	Badin	8.600
62	Tank	18.430	Killa Saifullaha	5.900	Dadu	8.300
63	Sibi	17.600	Gawader	5.800	Bhawalpur	8.300
64	Jacobabad	17.450	Panjgur	5.800	Khanewal	8.200
65	Dir	16.930	Barkhan	5.500	Gawader	8.000
66	Mirpurkhas	16.405	Musa Khail	5.500	Thatta	7.900
67	Swabi	15.950	Malakand	5.410	Sanghar	7.800
68	Rajanpur	15.520	Lodhran	5.340	Jhalmagsi	7.683
69	Swat	15.080	Rajanpur	5.320	Swabi	7.484
70	Pishin	15.000	Mardan	5.100	Chagai	7.100
71	Ziarat	11.500	Jhalmagsi	4.800	Panjgur	7.100
72	Kalat	10.600	Jaffarabad	4.700	Vehari	7.000
73	Lasbela	10.300	Sibi	4.400	Tharparkar	6.915
74	Turbat	9.500	Kharan	4.200	Khuzdar	6.800
75	Chagai	9.000	Awaran	4.200	Rahim Yar Khan	6.600
76	Zhob	9.000	Karak	3.570	Lasbela	6.500
77	Buner	8.730	Bannu	3.420	Ziarat	5.608
78	Loralai	8.700	Jacobabad	3.180	Larkana	5.600
79	Nasirabad	8.100	Chitral	2.930	Bhakkar	5.300
80	Bolan	8.100	Dir	2.770	Turbat	4.900
81	Khuzdar	7.000	Zhob	2.000	Jacobabad	4.800
82	Mastung	6.200	Lakki	1.890	Khairpur	4.400
83	Killa Saifullaha	5.900	Pishin	1.800	Awaran	4.100
84	Kohlu	5.900	Swat	1.730	Nasirabad	3.866
85	Panjgur	5.800	Loralai	1.600	Jhang	3.800
86	Gawader	5.800	Lasbela	1.400	Kasur	3.800
87	Barkhan	5.500	Kalat	1.100	Muzaffarghar	3.700
88	Musa Khail	5.500	Bolan	1.100	Kharan	2.400
89	Jhalmagsi	4.800	Turbat	0.800	Killa Saifullaha	2.295
90	Jaffarabad	4.700	Nasirabad	0.800	Layyah	2.100
91	Kharan	4.200	Kohistan	0.730	Jaffarabad	2.044
92	Awaran	4.200	Khuzdar	0.700	Dera Bugti	1.800
93	Kohistan	1.870	Kohlu	0.600	Zhob	0.784
94	Dera Bugti	0.000	Dera Bugti	0.000	Shikarpur	0.700
		24.52		10.50		16.77
		190.70		76.57		187.31