

# Manufacturing in Sindh: Growth and Spatial Distribution

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**Abstract:** Manufacturing is significantly important in Sindh. It is a major contributor of the GDP along with the agriculture sector. Industrial development of Sindh occurred after the emergence of Pakistan and manufacturing gained considerable size in the recent years as a major economic activity in the province. The paper focuses on chief aspects i.e. growth and concentration pattern. The trends and rate of growth have been analyzed over a period of thirty years beginning 1975-76. The spatial pattern is shown by the technique of location quotient which measures the extent of concentration of manufacturing in the districts of Sindh. Three districts i.e. Karachi, Dadu and Hyderabad emerge as major industrial concentrations.

**Keywords:** Spatial Pattern, Location Quotient, Concentration Index, Value Addition.

## INTRODUCTION

Manufacturing is an important activity in Sindh as it substantially contributes to the GDP. Sindh was basically an agricultural region prior to emergence of Pakistan in 1947. Manufacturing industries were developed gradually so that it acquired the position of second largest economic activity in the province. The paper in hand is concerned with analyzing the pattern of growth and spatial distribution.

## METHODOLOGY

The analysis uses the data published in the various issues of the Census of Manufacturing Industries (CMI). The latest published data relates to the year 2005-06 which may be taken to represent the latest industrial status of the province. Location quotient has been employed to differentiate various levels of concentration of manufacturing activity by districts which are indicated as major and minor areas of concentration.

To acquire the growth pattern and spatial distribution two of the key structural variables i.e. average daily employment and value added, the data of which, have been taken from the CMI issues published for the year 1975-76, 1985-86, 1995-96 and 2005-06. To gain a clear picture of the distribution of manufacturing a data of manufactural establishments has also been utilized.

### Number of Manufacturing Establishments

According to the CMI 2005-06, the number of large scale manufacturing establishments stood at 6,417,

enhanced from 3,248 recorded in the year 1975-76 showing an increase of 49.38 per cent during a span of three decades (Table 1). Punjab and Sindh together possessed about 90 per cent manufacturing establishment of Pakistan in the year 2005-06 the percentage share of the Punjab slightly increased from 53.11 in 1975-76 to 55.95 in 2005-06. In contrast the share percentage of the Sindh province declined steadily from 41.93 in 1975-76 to 28.44 in 2005-06. The gradual decrease in the share percentage of Sindh is attributable to the higher pace of industrialization in Punjab and other provinces, including Islamabad. Thus, the growth in the number of manufacturing units in Sindh was much lower than that in the Punjab and was restricted to a low increase of 463 units from 1975-76 to 2005-06.

### Percentage Distribution of Average Daily Employment

In the year 2005-06 the share of Sindh in average daily employment was 30.85 per cent of the total average daily employment in manufacturing of Pakistan which was roughly half of the percentage share of the Punjab (Table 2). In the year 1975-76, the share percentages of Sindh and Punjab were nearly equal but the percentage share of Sindh in average daily employment showed continuous decrease from 46.29 in 1975-76 to 30.85 in 2005-06. As compared with Punjab, the Sindh province recorded much lower growth in industrial employment from 1975-76 to the year 2005-06.

### Percentage Distribution of Value Added

The share percentage of Sindh in value added was 41.58 recorded in the year 2005-06, which was about 5 per cent less than that of Punjab (Table 3). The year

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**Table 1: Manufactural Establishments and Percentage Distribution in Pakistan, Provinces and Federal Capital of Islamabad 1975-76 to 2005-06**

Year	Pakistan	Punjab	%	Sindh	%	NWFP	%	Balochistan	%	Islamabad	%
1975-76	3,248	1,725	53.11	1,362	41.93	147	4.53	14	0.43		
1985-86	4,349	2,325	53.46	1,609	37.00	311	7.15	61	1.40	43	0.99
1995-96	4,474	2,364	52.84	1,528	34.15	468	10.46	69	1.54	45	1.01
2005-06	6,417	3,590	55.95	1,825	28.44	673	10.49	212	3.30	117	1.82

Source: CMI 1975-76, 1985-86, 1995-96, 2005-06 [1-4].

**Table 2: Average Daily Employment Pakistan, Provinces and Federal Capital, Islamabad 1975-76 to 2005-06**

Year	Pakistan	Punjab	%	Sindh	%	NWFP	%	Balochistan	%	Islamabad	%
1975-76	506,601	235,829	46.55	234,498	46.29	34,790	6.87	1,484	0.29		
1985-86	508,488	234,677	46.15	219,102	43.09	41,666	8.19	9,553	1.88	3,490	0.69
1995-96	562,666	301,094	53.51	202,671	36.02	45,565	8.10	9,792	1.74	3,544	0.63
2005-06	941,283	558,408	59.32	290,376	30.85	62,403	6.63	19,204	2.04	10,892	1.16

Source: CMI 1975-76, 1985-86, 1995-96, 2005-06.

1985-86 may be noted for remarkable higher percentage share i.e. 50.42 in the total value added, ever recorded for Pakistan, during the very span of three decades. The small difference in value added of Sindh Punjab implies that Sindh had much more value-addition manufacturing than the industry in Punjab. The trend of high value-addition manufacturing in Sindh has all along been a dominant feature, of the development of the industry in Pakistan.

#### Growth in Terms of Average Daily Employment

The growth has been quite low in the period from 1975-76, but the late year, particularly after 1995-96 it went up considerable in case of both Pakistan and Sindh. The year 2005-06 recorded a large expansion in manufacturing in both Pakistan and the province of Sindh. The increase in size, as shown by percentage increase, between 1995-96 and 2005-06, was unprecedented. It was primarily due to the revival of the national economy which took place mainly after the year 2000. In Sindh the revival of manufacturing was

equally well marked as indicated by high growth rate in industrial employment (Table 4).

#### Growth in Terms of Value Added

Value added by the industry continued to increase over the years, indicating higher growth rate in value-addition. The year 2005-06 is notable for the largest contribution of value added. The period from 1995-96 to 2005-06 recorded an impressive expansion in value-addition in Pakistan, as well as Sindh, the later indicating lesser percentage increases than Pakistan, and also following the similar growth pattern (Table 5).

#### Spatial Pattern of Manufacturing in Sindh

The spatial pattern of manufacturing in Sindh is shown by the districts' industrial employment (Table 6), and concentration index calculated for the individual district. Among the districts of Sindh, only three districts, namely Karachi, Dadu and Hyderabad are shown to have appreciable concentration. Karachi

**Table 3: Percentage Share of Value Added Provinces and Federal Capital, Islamabad 1975-76 to 2005-06**

Year	Pakistan	Punjab	Sindh	NWFP	Balochistan	Islamabad
1975-76	10,972,423	44.15	44.65	10.90	0.29	
1985-86	55,297,596	38.05	50.42	9.65	1.49	0.39
1995-96	212,558,514	41.20	43.26	13.15	1.28	1.11
2005-06	1,023,559,039	46.25	41.58	5.62	5.94	0.60

Source: CMI 1975-76, 1985-86, 1995-96, 2005-06.

**Table 4: Average Daily Employment, Pakistan and Sindh, 1975-76 2005-06**

Year	Pakistan	Absolute *Incr/Decr	Percentage Over Preceding Year	Sindh	Absolute *Incr/Decr	Percentage Over Preceding Year
1975-76	506,601			234,498		
1985-86	508,488	1,887.0	0.37	219,102	(15,396)	-6.57
1995-96	562,666	54,178.0	10.65	202,671	(16,431)	-7.50
2005-06	941,283	378,617.0	67.29	290,376	87,705	43.27

\*Incr/Decr: increase /decrease.

Source: CMI 1975-76, 1985-86, 1995-96, 2005-06.

**Table 5: Value Added Pakistan and Sindh, 1975-76 to 2005-06 (in Thousand Rupees)**

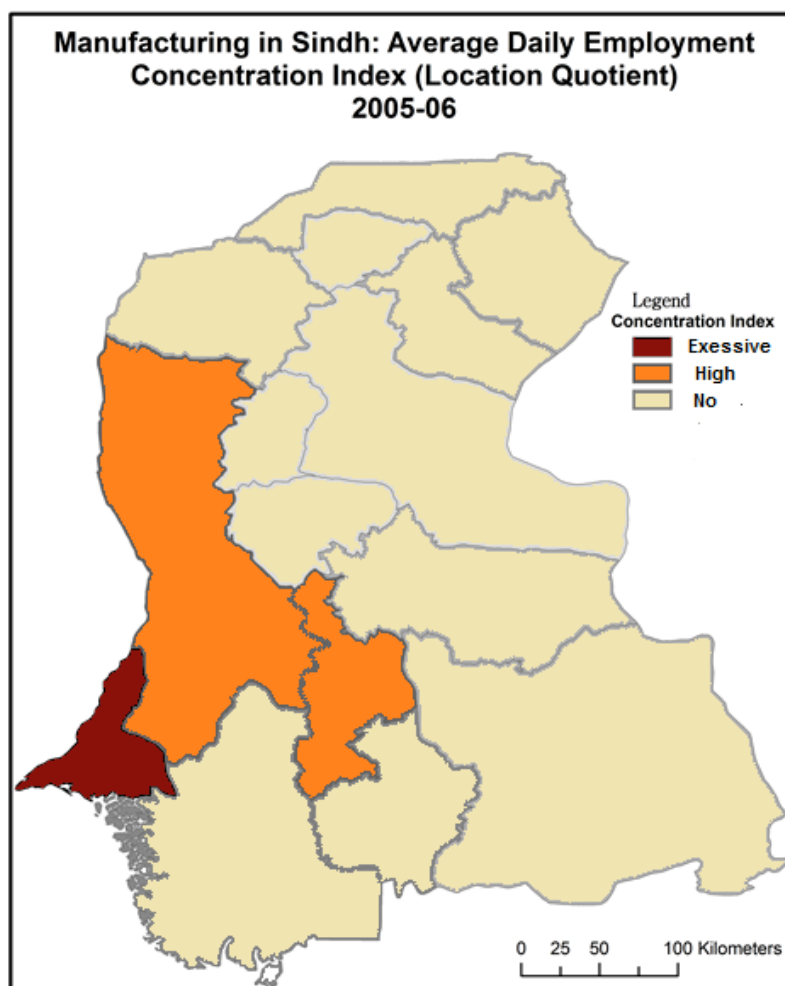
Year	Pakistan	Absolute *Incr/Decr	Percentage *Incr/Decr Over Preceding Year	Sindh	Absolute *Incr/Decr	Percentage Incr/Decr Over Preceding Year
1975-76	10,972,423			4,899,317		
1985-86	55,297,596	44,325,173	403.97	27,880,374	22,981,057	469.07
1995-96	212,558,514	157,260,918	284.39	91,961,237	64,080,863	229.84
2005-06	1,023,559,039	811,000,525	381.54	425,626,555	333,665,318	362.83

\*Incr/Decr: increase /decrease.

Source: CMI 1975-76, 1985-86, 1995-96, 2005-06.

**Table 6: Manufacturing in Sindh: Average Daily Employment Concentration Index (Location Quotient) for Districts of Sindh, 2005-06**

Districts	Average Daily		Concentration Index
	Employment	Percentage	(Location Quotient)
Karachi	199,077	68.56	10.28
Dadu	35,211	12.13	1.82
Hyderabad	24,160	8.32	1.25
Thatta	7,625	2.63	0.39
Badin	4,968	1.71	0.26
Jacobabad	3,435	1.18	0.18
Sukkur	2,893	1.00	0.15
Sanghar	2,767	0.95	0.14
Mirpurkhas & Tharparkar	2,415	0.83	0.12
Ghotki	2,115	0.73	0.11
Larkana	1,949	0.67	0.10
Nawabshah	1,500	0.52	0.08
NausheroFeroz	901	0.31	0.05
Khairpur	788	0.27	0.04
Shikarpur	572	0.20	0.03
	<b>290,376</b>	<b>100.00</b>	



**Source: Author.**

emerges as the largest industrial district with excessively high concentration of manufacturing which surpasses all other districts of Pakistan.

## CONCLUSION

It is concluded that manufacturing industry in Sindh is excessively, highly concentrated in Karachi and then the high concentration is found in the two districts i.e. Dadu and Hyderabad but the other important districts like Thatta, Badin, Jacobabad and Sukkar may be expected to acquire further industrial growth. In

comparison to Punjab the manufacturing in Sindh has much more capability of having value-addition.

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