

**Report on Survey of Manufacturing
Industries 2005-06**

Bangladesh Bureau of Statistics

Executive Summary

The Bangladesh Bureau of Statistics (BBS) has been conducting Survey of Manufacturing Industries (SMI) under the Industrial Statistics Act 1942, on regular basis since 1973-74. The Factories Act covers all units that employ 10 or more workers. These units may or may not use power in their industrial operations.

All manufacturing establishments including handloom establishments with 10 or more persons engaged were within the scope of this survey. As with the earlier SMI the main objectives of the 2005-2006 SMI were to determine the volume of industrial production, fixed capital formation, employment cost and gross value added manufacturing industries. The data on area of Ownership status, Fixed assets by category, Employment by category, Value and quantity of raw material consumed, Employment cost, Operating expenses, Inventories of physical assets, Cost and quantity of fuel consumed, Value of gross output, Value added and indirect taxes, value of gross output etc.

The information collected were ultimately processed and classified by manufacturing sector activities following the Bangladesh Standard Industrial Classification (BSIC) at 4-digit level.

The survey was conducted based on Economic Census 2001 & 2003 which was upgraded in the year 2005-2006. Only 18.5% manufacturing establishments are covered in this survey.

The editing was done and adjustments were made for omissions inconsistencies and information gaps in the filled-in returns.

Accounting periods of the responding units were not uniform, in some cases it was the calendar year and in some cases it was the financial year. Some Steps have been taken to unify the accounting period on the basis of financial year alone at the editing stage.

Values of products reported were also not uniform. The values were reported at production costs and at ex-factory prices.

Two independent list frames one for the handloom establishments and the other for the manufacturing establishments (excluding handloom establishments) were used for the collection of data. For the purpose of choosing the sample manufacturing establishments (other than handloom establishments) were classified as large and medium establishments on the basis of the number of persons engaged. A total number of manufacturing establishments were taken as the sample for this survey of which 748 were handloom establishments. The filled in questionnaire from 6174 establishments were collected from the sample of 11302 establishments.

On the basis of Economic Census,2001 and 2003, 32822 manufacturing establishments registered in the census which was upgraded in the year 2005-2006. On the basis of the previous survey results, this upgraded register of manufacturing industries are divided into two-(a) Large manufacturing industries and (b) Small manufacturing industries. 100 & above number of employment establishments are treated as large manufacturing industries and small manufacturing industries bear 10 to 99 number of employment establishments. On the basis of value added from the previous survey again large manufacturing industries are divided into two –(a) handloom textiles and brick, tiles and non-clay product & (b) rest of the all. This survey mainly targets (a) all the four digit level of manufacturing industry as well as maximum large manufacturing industry and (b) small number of industries covered more.

The data collection/enumeration of large and medium scale establishments (excluding handloom) was done primarily by post mailing method. Questionnaires along with instruction manuals and notice were mailed to the owners/occupiers of listed and sampling establishments accordance with law. They were requested to fill up the questionnaires and return them within 30 days. In case of non-response, reminders were issued and there were also follow-ups over telephone. The officers of Industry & Labour Wing, BBS personally contacted the respondents who were found defaulting even after second reminder. After personal visits returns could be collected from most of defaulting establishments.

Editing and coding of filled in returns was done by manually and data entry process has been done by Computer Wing. For tabulation purposes classification of the manufacturing establishments followed the Bangladesh Standard Industrial Classification (BSIC '2001'), which is developed in conformity with the International Standard Industrial Classification (ISIC) Rev-3.

According to the specified sampling procedures, the basic weight for the establishments in each stratum would be equal to the sampling interval, and the certainty establishments would have a basic weight of 1. It was necessary for adjustment of basic sampling weights (expansion factors) to take into account of non-interview/non-response. Given the different nature of frames, the non-response/non-interview adjustment procedures were different for the establishments in the two survey frame.

Some of these codes applied mostly to the manufacturing necessary for adjustment of basic sampling weights (expansion factors) to take into account of non-interview /non-response. Given the different nature of frames, the non-response/non-interview adjustment procedures were different for the establishments in the two survey frames.

There were 119 manufacturing establishments in government ownership out of a total of 34710 establishments listed in the SMI frame. A total of 34374 establishments were in the private sector and only 217 establishments were under joint-venture ownership.

303 manufacturing establishments were under public limited companies and 119 establishments were under nationalized corporations. The individually owned establishments were as high as 73.38%. Only about 0.87% of the establishments were in the public sector in 2005-2006.

The total fixed assets of the 119 establishments in the public sector were Tk. 65646 million as against Tk. 814321 million for the 34375 establishments in the private sector. The average fixed assets per joint-venture establishment was TK 209.36 million.

The total end year fixed assets in 2005-2006 were Tk. 925189 million of which total physical capital formation acquired through additions was Tk. 69419 million. Thus, the total capital formation was 7.5 % of total net year end value of all fixed assets.

Only 14.23% of the establishments belonged to the fixed assets size class upto Tk 0.1 million, 47.20% were in fixed assets size class of Tk.0.1 to 1.0 million, 28.46 % were fixed assets size class of Tk 1.0 to 10.0 million and about 10.11% of the establishment had fixed assets above Tk. 10.0 million. The end year fixed assets for land, building, machineries & equipments, transport equipments and others were Tk. 54368, Tk. 106008, Tk. 299356, Tk. 433791 and Tk.31667 million respectively.

The total number of persons engaged was 3705884 of which 3335144 were employees. Out of the total persons engaged 2984949 or about 80.55% were production workers.

Of the total persons engaged 2214632 were male workers and 1491253 were female workers. The percentage of female workers was around 40.24%. Textiles and food industries together accounted for 78.93% of the total employment. Among all the establishments 26588 units employed between 10-49 persons. A total number of 5220 establishments or about 15.04% of the units each had employment of more than 100 persons.

The total industrial cost was Tk.1193809 million as against the non-industrial cost of Tk. 19110 million. The indirect taxes was Tk. 68396 million or 3.58% of the gross value of output.

The total employment cost was Tk. 176978 million. Total wages, salaries and others paid to the production workers was Tk. 132890 million (Tk.44520 per worker per annum).

The value of total energy consumed by the manufacturing industries was Tk. 48776 million or 4.09% of the industrial cost.

The value of total electricity consumption was Tk. 22909 million which was around 49.43% of the total cost of the energy consumed.

The total value of gross output was Tk. 1912047 million. The values of gross output in government, private and joint venture establishments were Tk. 28620, Tk. 1822907 and Tk. 60520 million respectively. The value added at factor cost was Tk. 599129 million which was about Tk. 161.67 thousand per person per annum.

The total gross value added was Tk. 290910 million. Gross value added of food beverages and tobacco, jute textiles, cotton textiles/RMGs including leather, chemicals, petroleum & plastic and fabricated metal & machinery were 14.68%, 1.25%, 27.89%, 9.18% and 11.73% respectively.

The total census value added for the manufacturing industries was estimated at Tk. 718239 million in 2005-2006. Gross value added of readymade garments, cigarettes, jute textile, cotton textile and medicine were Tk. 17189226, 63064731, 67554960, 79634792, 117158679, 20679668, 19810587, 21959108, 31485183 and 6804136 million respectively.

Table 1. Summary statistics by different characteristics of 1997-98 and 2001-2002 and 2005-2006 SMIs.

Characteristics	1997-98	1999-2000	2001-2002	2005-06
1. No. of establishments	29573	24752	28065	34710
2. No. of establishments by administrative divisions:				
Total	29573	24752	-	34710
Dhaka	13900	11588	-	16414
Chittagong	4428	4235	-	4841
Khulna	4114	2359	-	2842
Rajshahi	7131	6570	-	10613
3. Ownership of establishments (No.):				
- Government	158	147	138	119
- Private	29347	24520	27833	34374
- Joint venture	68	85	94	217
4. Legal status (No):				
- Individually owned	22708	17930	19440	25480
- Partnership	602	564	658	2141
- Private limited company	5612	4634	7334	6628
- Public limited company	446	432	417	303
- Nationalized corporations	151	137	138	104
- Others	53	55	78	54
5. Fixed assets (Million Tk.):				
- Total	214704	243805	336145	925189
- Land & improvement to land	24011	29543	40795	54368
- Buildings (residential, non-residential & others)	43391	44320	700030	106008
- Machineries & equipments	130257	147680	191812	299356
- Transport and others	17044	22262	33508	465457
6. Persons engaged (No.):				
- Total	2590755	2613564	2819050	3705884
- No. of employees	2104247	2259717	2465697	3335144
- Operatives (production workers)	1838667	2005038	2142401	2984949
7. Number of all employees:				
- Both sexes	2104247	2259717	2465697	3335144
- Male	1394958	1421734	1530588	1927637
- Female	709289	837983	935109	1407507
8. Establishments by employment size (No):				
- Less than 10**	5488	-	-	-
- 10-19	9420	10479	7094	15172
- 20-49	6980	5471	12849	11416
- 50-99	2472	3839	2782	2901
- 100-999	5057	4722	5000	4623
- 1000 and above	156	240	341	598
9. Establishments by fixed asset size				
Up to Tk. 50,000	3229	2052	414	2528
Tk. 50,001 - 100,000	2823	2696	154	2411
Tk. 100,001 - 1,000,000	15978	12228	8646	16383
Tk. 1,000,001 – 10,000,000	6024	5937	7507	9880
Tk. 10,000,001 and over	1520	1838	11343	3508
10. Employment cost (million Tk.)				
Total employment cost	55789	58706	78157	176978
- Wages and salaries	45843	56706	69350	161842
- Other cash benefits and non-cash benefits	8582	1754	7825	13358
- Employer's contribution	1363	246	981	1777

Characteristics	1997-98	1999-2000	2001-2002	2005-06
11. Taxes (million Tk.)				
- Total taxes	27674	32222	32077	8107
- Excise duties	25949	30200	26765	6373
- Sales taxes	1724	2022	5311	1733
12. Value of gross output (million Tk.)	576655	639220	901937	1912048
13. Industrial cost (million Tk.)	372695	403778	611026	1193809
14. Gross value added (million Tk.)	203959	235443	290910	718239
15. Indirect taxes (million Tk.)	27674	32222	32077	68396
16. Value added at factor cost (million Tk.)	133685	155820	198662	599130
17. Fixed assets and output by ownership (million Tk.)				
Government:				
- Fixed assets	88212	83359	804435	65646
- Gross value of output	54471	50266	44480	28620
Private:				
- Fixed assets	116389	150762	249553	814321
- Gross output	481482	548971	828117	1822907
Joint venture:				
- Fixed assets	10102	9684	6157	45222
- Gross value of output	40702	39984	29340	60520

Table 2. Industrial statistics from the year 1973-74 to 2005-2006

(Value in million Tk.)

Period	No. of reporting establishment	Value of fixed assets	Employment		Value of gross output	Gross value added	Value added at factor cost
			All employee (No.)	Operational (No.)			
1973-74	1427	3654	307404	260444	7350	3737	-
1974-75	2847	4640	370097	309515	11800	4569	3431
1975-76	2216	5475	353640	292040	15930	6240	4384
1976-77	2057	6526	347385	281880	18734	6682	4403
1977-78	2728	7693	400670	317623	27120	10263	6694
1978-79	2728	7693	400670	317623	27120	10263	6094
1979-80	3006	8791	417298	330463	34784	13061	9275
1980-81	3152	11509	438044	341425	40717	14130	9579
1981-82	3356	13962	456291	356139	47630	15711	10363
1982-83	3538	14467	448951	348932	50623	18832	13380
1983-84	3740	22873	452436	349660	62042	23068	16913
1984-85	3934	27170	468606	364086	69917	23956	17245
1985-86	4473	30293	466636	369433	75483	29567	20142
1986-87	4519	35520	478696	381669	41216	31954	22404
1987-88	4793	36173	489500	390663	89177	32549	23975
1988-89	23752	83279	991689	822210	177568	60663	47242
1989-90	25283	83393	1084583	910871	201836	65815	47489
1990-91	25890	87758	1110582	941869	208383	66412	45518
1991-92	26446	102415	1156204	984792	222868	73249	51090
1992-93	26677	106312	1248708	1069002	256436	84459	55639
1993-94	27247	126645	1203018	1040804	329682	143572	109515
1995-96	28920	206830	1714039	1486875	508460	182233	121162
1997-98	29573	214704	2104247	1838667	576655	203959	133685
1999-00	24752	243805	2259717	2005038	639220	235443	155820
2001-02	28065	336145	2465397	2142401	901937	290910	198662
2005-06	34710	925189	3335144	2984949	1912048	718239	599130

Table 3. Industrial statistics by employment, gross output, value added by public and private sector from the year 1972-73 to 2005-2006

(Value in million Tk.)

Period	Public (Government)				Private (including joint venture)			
	No. of establishment	All Employee	Gross output	Gross Value added	No. of establishment	All Employee	Gross output	Gross value added
1972-73	136	119069	1705	747	1850	63023	1386	627
1974-75	277	251602	6368	2561	2570	118495	5462	2008
1975-76	291	268330	10001	3045	1925	85310	5929	3195
1976-77	416	272003	10560	3682	1641	75382	8174	3000
1977-78	315	298956	15930	5303	2451	95362	6899	2800
1978-79	303	310188	18591	7065	2425	90482	8529	3198
1979-80	297	316736	23053	8279	2709	100562	11730	4782
1980-81	292	325549	26739	8584	2860	112495	13978	5546
1981-82	290	328906	30235	8679	3066	127385	17395	7032
1982-83	227	246189	27524	9617	3356	202762	23099	9215
1983-84	196	223914	31520	11429	3544	228522	30522	11639
1984-85	194	230159	34043	11357	3740	238447	35875	12599
1985-86	174	217897	34734	13699	4299	248739	40749	15868
1986-87	170	219714	36996	14081	4349	258982	47220	17873
1987-88	167	222994	38913	14496	4626	266506	50263	19054
1988-89	210	277078	47488	23158	23542	714612	130080	37504
1989-90	226	309933	48354	19369	25057	774650	153482	46446
1990-91	230	280230	48816	18972	25660	830352	159568	47440
1991-92	210	280273	45436	16908	26236	1047014	177432	56341
1992-93	235	244337	41516	18567	26442	1004370	214920	65892
1993-94	191	143362	35687	22778	27056	1059655	293994	120793
1995-96	167	182528	42756	20761	28753	1531509	465705	161462
1997-98	158	187376	54471	32769	29415	1916871	522184	171190
1999-00	147	157882	50266	28446	24605	2101835	588955	206998
2001-02	138	138242	44480	20173	27833	2327455	857457	270738
2005-06	119	100904	28620	11544	34591	3604980	1883428	706695