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Role of Women in Bangladesh Manufacturing

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Foreword

"Move over gentlemen, leave economic development of Bangladesh to ladies" would be the first reaction of an observer of the garment, electronic, and fish industries of today.[1] Female workers, without much prior experience, have been instrumental in turning the indicated trio into three young geese of Bangladesh that have been laying golden eggs in the 1980s. Compare the respective ratios of ML2/ML and FL2/FL in these industries to those in the male-dominated industries of jute, furniture, and leather in Table H1).

Unfortunately, light mood is not for the economist! Economics is a serious science. It is quite probable, for instance, that the garment industry has flourished not because of but despite female labor. Therefore, let us see what role female labor is playing in making the indicated industries dynamics. industries are dynamic.

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[1]The simile is derived from Milton Friedman's answer: "Wind up the Planning Commission and leave economic growth to the Punjabis," during his visit to India in 1963 to the question: "What is the most important route to economic development of India?" Even Friedman underestimated the ubiquity of competitive enterprise spirit! The punjabis did it despite the Planning Commission.

Women workers are found in large numbers in newly emerging export industries. Export means competition with foreign suppliers. Competition in export reflects comparative cost advantage (except to the extent export is subsidized). From the nature of labor used in the noted golden geese, Bangladesh's comparative cost advantage seems to lie in cheap labor. A closer look at labor groups indicates that prima facie Bangladesh's women provide much cheaper labor than Bangladesh men. This may be seen from Table H2 (where wage rates are given by subsector, skill-class and gender) and Table HA1 (which presents the same information by size-class). It may be seen from the summary values below that female workers' wage rates are, in general, from a half to one third of those for male workers.

Subsector	Mean Wage Rate in Takas Per Year in 1987-88	
	Male	Female
Agrobased	16475	6150
Electronics	22993	19539
Electrical Appliances	14997	6785
Wooden Furniture	24275	NA
Ready-to-Wear Garments	16939	7407
Tanning and Leather	23180	NA
Fish and Seafood	18597	5198
Light Mech. Engg.	18312	8866
Jute Mills	24464	8919
Cotton Mills	20832	10258
Handloom Industry		
Overall	23154	7561

The wage rates of technical and managerial workers are from twice to 3 times higher than the mean wage rates of the corresponding industries (see Table H2). They are approximately

140 percent higher than the wage rates of skilled operatives. The wage rates of skilled production workers, in turn, are approximately 70 percent higher than those of semi-skilled workers; those of semi-skilled by about 50 percent higher than unskilled workers' wage rates; and those of office workers, on the average, roughly equal to those of skilled workers. The corresponding differences between the wage rates of various categories of female workers are somewhat more pronounced than for male workers.

Wage rates for women can be lower due to the pressure of their supply, possible nonconstancy of work, low skill and poor productivity, or similar reasons. In Bangladesh, skill is defined (by BBS and following that by entrepreneurs) largely by some criteria of service, training, and experience but not formal schooling. According to that definition, the proportion of skilled female workers among their total is higher across almost all industries, except handloom and electronics, as may be seen from the values given below:

Summary of the ratios of skilled labor to total labor, male and female workers HIS: Factory Survey

	Industry	FL2/FL Female	ML2/ML Male
1	Agrobased	.83	.36
2	Electronics	.49	.56
3	Electrical apparatus	.96	.52
4	Wooden furniture	..	.46
5	Readymade garments	.55	.55
6	Tanning and Leather	..	.43
7	Fish and sea food	.80	.55

8	Light Mech. Engg.	.97	.50
9	Jute	.89	.54
10	Textiles	.65	.57
11	Handloom	.44	.86

Technologically, it was fortuitous for women that the garment industry, which suits them, came to Bangladesh with the best-practice technology (see Appendix HB). But even in those industries in which productivity is considerably lower than Bangladesh's competitors--specifically shrimp for which yield per acre is only a small fraction of that in Thailand and even India--low cost female labor makes Bangladesh's shrimp competitive in the world. Ultimately, Bangladesh's comparative advantage will be determined by cost-reducing technological innovations. The garment industry is an example.

Characteristics of female entrepreneurs

The HIID/IND Survey generated data for two groups of women: (a) women entrepreneurs and (b) women workers by skill. In this paper we look at the factory establishment survey. Women in cottage industry will be taken up in a subsequent paper.

1. Women as entrepreneurs

Out of a sample of 592 enterprises, only 7, or 1.18 percent, are women. Salient characteristics of women entrepreneurs are given in Table H3. It may be seen that:

1) 4 of the 7 female entrepreneurs attended school in urban areas; 2 have college education, 2 high school, 2 have 9 years of schooling, and 1 has 6 years of schooling. Of these, 2 have had other training from 6 to 8m months. As against this, about 50 percent of male entrepreneurs have college education.

2) None of the female-managed enterprises are located in industrial estates.

3) 5 enterprises commenced production during 1978-1987 and 6 owners took over enterprises during that period. Thus, female entrepreneured enterprises are relatively of recent growth.

4) 2 are in garment industry, 1 in pesticides, 1 in cutlery, 1 in cookwares, and 1 in textile machinery.

5) 5 (or 71 percent) establishments worked for full 12 months, the other two for 9 and 10 months. Among the male entrepreneured establishments, the ratio of establishments which worked for full 12 months is only 52 pecent.

6) 5 worked 300 shifts in the year, one 450 shifts, and one 250 shifts, or an overall mean of 314 shifts in the past 12 months. As against this, the mean for men entrepreneurs is 281 shifts in electrical appliances, 493 in seafood, 356 in leather, and 221 in the garment industry. (Tables are not reported here.)

7) None of the female entrepreneured firms are divested. Among the 585 male entrepreneured firms, 1 is divested in agrobased industries, 1 in fish and seafood, 13 each in jute and cotton textiles, and 2 in light mechanical engineering.

8) Only 2 out of 7 female entrepreneurs inherited the plant.

9) 3 applied for sanction, 4 did not. It took them from 1 to 6 months to obtain the sanction. The range for men is from zero to 48.

10) 1 is an office-holder of her industrial association.

11) 5 are sole proprietors and 2 are partners.

12) All are new enteprises in ever-open sectors.

13) None of the enterprises has or even had a labor union in it. As against this, 94 out of 585 units entrepreneured by men have labor unions. A total of 57 of these are in jute or cotton mills, as may be seen from Table H4.

14) 1 unit was closed for a short while due to strikes and another due to internal problems during the past 12 months.

15) Of the 6 different problems of judgment, 1 made a misjudgment in accounting for production costs, 1 in managing firm workers, 1 in estimating demand, and 1 in other matters. That is 4 out of 7 made a misjudgment of one kind or another. As against this, 61 out of 585 (or about 10%) male entrepreneurs made misjudgment of one kind or another in the 1980s. New entrepreneurs are expected to make more misjudgments, in that process lies progress.

Out of a total of 957 loans from all kinds of banks/lenders for initial investment, none pertains to a female entrepreneur. See Table HC1 of Appendix HC. From among male entrepreneurs, only 4 borrowed from money lenders and only 3 from the suppliers of raw materials. Approximately 50 percent entrepreneurs

supplied initial investment from their personal savings. The range of the share of equity capital contributed from personal savings varies (for the entire sample of male and female entrepreneurs) from 33 percent for jute mills and 40 percent for fish and seafood to 85 percent for electronics, 75 percent for electrical appliances, and approximately 72 percent for wooden furniture, tanning and leather, ready-to-wear garments, and light mechanical engineering. See Table H5. The next large source of loans is commercial banks with 185 loans, of which 71 are by ready-to-wear garments and 40 by jute mills. Of the 115 loans from DFIs, 60 are by cotton textiles and 41 by jute mills. Of the 25 loans from Krishi Bank, 20 are attributable to fish and seafood industry.

Spatial nature of markets for the products of female entrepreneurs.--Table H6a presents the spatial characteristics of the product market of female entrepreneurs and Table H6b for all entrepreneurs. The former table indicates that as many female entrepreneurs tend to invest in industries with local or *in situ* markets, as in the national market. The ratio of product sold *in situ* to total sales is 67 percent for female entrepreneurs. No firm entrepreneured by a woman is in the export industry. As noted before, female entrepreneur's sample is rather small. On the face of them, the results suggest a low degree of standardization and specialization in female-entrepreneured establishments. As against this, the percentage of overall product of all firms sold in situ is 32% in agrobased industries, 56% in electronics, 50%

in electrical apparatus, zero in ready-to-wear garments, 2.2% in tanning and leather, 3.2% in fish and seafood, 14% in light mechanical engineering, and 90% in wooden furniture. In terms of producing standardized and specialized goods, thus, female entrepreneurs get lower marks--the degree of modernity of their enterprises is, in general, lower than those of male entrepreneurs.

With the exception of the characteristics noted in the preceding paragraph, on the whole female entrepreneurs are just as normally distributed with respect to various industrial characteristics as are male entrepreneurs.

2. Women as industrial workers

As was seen above, women have monopoly of employment in readymade garments, where for every male worker there are approximately 6 female workers. Women also have strong presence in fish and sea food and electronics. Interestingly, these are not small industries. The smallest establishments picked up by the sample survey consist of 20-49 workers (size-class 4) in electronics and 50-99 workers (size-class 5) in ready-made garments. Fish and seafood sample starts with 10-19 workers, but there are no female workers in this class. For every 100 male workers in fish and seafood, there are only 1.4 female workers in size-class 4, 31 in size-class 5, 96 percent in size-class 6, and 227 in size-class 7. Women also have significant representation in the medium-size units in cotton textile mills. Jute mills, wood furniture, and tanning and leather are exclusive domains of male workers.

As between size-classes, the high ratio of female workers is in upper size-classes of the industries predominated by them. In the male-dominated industries, wherever women are employed they are spread from low to middle size-classes, e.g. low in light mechanical engineering and cotton textiles and middle size-classes in furniture and jute.

On the whole, thus, it appears that the gender that predominates an industry does so more decisively in the upper ranges of it. Since large firms have been found technically more efficient than small firms in other parts of this project's research, naturally the employees of an industry's dominant gender move up to bigger firms in larger proportions. In other words, if a gender has a comparative advantage in an industry, it is hired as expected, in larger proportions in the more technically efficient firms of it.

3. Factor intensities and productivities in male-dominated and female-dominated industries

It may be seen from Table H7a that female worker-dominated industries (or those industries which have a conspicuous presence of female workers though not preponderantly so, but which for short we will group together with and denote as female-dominated industries), by and large, outshine male-dominated industries in Q/KK, L/KK, and RR (if we omit the top extreme case of structural metal products for male entrepreneurs, which industry happens to enjoy an unusually good year in 1987-88). Male-dominated

industries have better of the female-dominated ones with regard to VA/Q, X/Q, domestic components of investment and raw materials, Q/L (even when one top industry, such as tanning for men and fish for women, is omitted from each group), and smallness of the industry (S).

When the establishments of female entrepreneurs are tabulated separately (Table H7b), the differences become sharper: these establishments reveal clear-cut superior performance. The output/capital ratio (Q/KK) is roughly 50 percent higher than that in the male-dominated and male-entrepreneured industries. As a matter of fact, the female-entrepreneured firms come out better in almost all desirable ratios of Tables H6a and H6b. One factor that may mellow this finding is that the female entrepreneurs are probably more select a group from among female population than male entrepreneurs are likely to be from among male population. But then female entrepreneurs are also new and less experienced for this profession than male entrepreneurs.

Female workers seem to introduce a comparative cost advantage into the otherwise low-productivity industries. The case in view is fish and seafood industry. With the lowest per acre yield among its neighbors, Thailand and India, the industry probably produces shrimp at lower cost per kilogram than its neighbors. Among the main cost-reducing factors is cheap female labor. To some extent, the same is probably true of garment making. Female-dominated industries seem to experience scale economies, inasmuch as there are few small enterprises in

garment, electronics, and, to some extent, fish and seafood.

As may be seen from the column for FL/ML ratio in Tables H7a and H7b, female entrepreneurs have not entered male-dominated industries.

An overall conclusion of this section is that females as workers and as entrepreneurs clearly preponderate in most of the desirable criteria of Tables H7a and H7b. They are particularly ahead in the two basic criteria of this project, namely output and employment per million taka of capital. Accordingly, the applaud given to the women of Bangladesh in the opening sentence of this study seems fully justified.

VMPs

So far we have looked at mean values of various criteria used to analyze women's role in Bangladesh manufacturing industries. Allocation choices are, however, made in terms of marginal or incremental values. In this final analytical section, therefore, we present value marginal products (VMPs) for male and female workers.

Value marginal products (VMPs) calculated from a fitted Cobb-Douglas production function are presented in Table H8. The VMP to wage ratios are given in Table H9.

Before turning to consider VMPs, a few words about the fit of production functions are in order. This is the first round of production functions. Cobb-Douglas functions were fitted to save

degrees of freedom, as the number of observations at the subsector level is small in many cases. For the fuller study, we plan to fit TL frontier functions. Since that function uses larger degrees of freedom, some aggregation will become necessary. In the meanwhile let us look at the Cobb-Douglas results.

Two of the inputs are highly intercorrelated: working capital and material costs. When material costs are included, they throw most other variables out and have strong tendency to rob. On a close inspection we find that working capital is a very close substitute of material costs and, in several cases that of labor also. Accordingly, we have used working capital to the exclusion of materials. Faced with the shortage of observations, even working capital was summed up with fixed capital. For the same reasons, labor, too, was entered in aggregate, without classifying it by skill classes. But we kept at least female and male labor separate. Both gross output (Q) and value-added (VA) functions are reported. The fitted production functions appear in Appendix HD.

There are only three industries--agrobased, light mechanical engineering, and ready-to-wear garments (export and domestic combined)--in which the coefficients of both female labor and male labor are significant. In others either one or both are not significantly different from zero. Based on the findings of these three industries, the value marginal products of female labor over twice as high in agrobased industries and light

mechanical engineering as the corresponding VMPs of male labor. The differences in the VMPs of male and female labor in ready-to-wear garments are not significantly different from each other. Given the properties of the Cobb-Douglas production function, supply of female labor and probably ultra-economic reasons must be sought to explain low female employment in the former two industries.

The rate of return from capital is inordinately high in Bangladesh manufacturing industries. Note that the relevant rates are given in the upper line for each industry in Table H8, namely those calculated from the value-added functions. These range from 14 percent per year for agrobased industries to 176 percent per year in tanning and leather. The modal rate is around 40 percent.

Strong scale economies are suggested in light mechanical engineering, moderate scale economies in ready-made garments, constant returns in handloom industry, and decreasing returns to scale in tanning and leather. Additional regressions, not reported in Table H8, suggest from 50 percent to 120 percent higher VMP of skilled male labor as compared to aggregate labor. The differential is, by and large, consistent with the wage differentials of these labor categories seen in the early part of the paper.

VMP/w ratios

The ratios of VMPs to the corresponding wage rates are calculated in Table H9. It will be seen that even male worker's

VMPs exceed their wage rates significantly in almost all industries. Female workers' VMPs are higher several times more than their wage rates. Are entrepreneurs not maximizing their profits? That will be a premature conclusion. Probably, the reason is that all of these industries face demand shortage. They have excess capacity and cannot reach the level of capacity utilization where VMP/w = 1, i.e., where output and factor employment are optimized. Some people may interpret the result as an exploitation of female labor. Rather the finding reflects the demand constraint on producers whereby they cannot maximize profits. The result is consistent with the earlier findings (WP #20), where cotton textile manufacturers were found in a similar situation--creating (or simply overstating?) capacity in face of falling sales, proabably to secure entitlement to higher imports of raw materials which fetch lucrative profits from sales without being manufactured. Since such profits will not be disclosed by producers, they cannot be imputed to factors of production.

Conclusions

As expected, Bangladesh female workers have lower average product than male workers. Their wage rates are only one-third to one half of those of male co-workers. On the other hand, surprisingly, female workers' value marginal product (VMP) is significantly higher than the VMP of male workers even in absolute terms. Naturally, their VMP to wage rate ratio is even larger than that for male workers. As entrepreneurs they produce

more output and provide higher employment per million takas of fixed and working capital than do male entrepreneurs. The industries in which they predominate have done relatively much better in the past decade as compared to manufacturing in general. Does one need any more evidence for the relatively high productive role of women in the economic development of Bangladesh?

The puzzle that is created by this result, notably by a ratio of VMP/w much higher than unity, however, is that it indicates that entrepreneurs are not maximizing profits from manufaturing production! For that requires VMP/w $\cong \gamma$, a constant, and will tend to approach unity for each factor. One of the possible reasons for that situation is a constraint on production, which could come from demand or from shortage of raw materials and other inputs or supply constraint of labor of appropriate skill categories. As a result, producers are not able to expand the employment of factors, in particular female labor, to the optimum level. Consequently, they must be suffering from excess capacity. The industry in general must be sick. There is ample evidence to that effect. Additional reason for excess capacity was encountered in WP#20, where it was found, for cotton textile firms in particular, that firms benefit by showing excess capacity, because that brings them enhanced entitlement to raw material imports.

Insofar as female employment and female entrepreneurship are concerned, a part of the reason may come from social mores. The

fact seems to remain that in the current state of economy, increased participation of women in labor force is growth-promoting.

Table H1.—LFBYIM: Female labor/male labor ratios, HIS Factory Establishment Survey, 1987-88

Size-Class		Mean	St. Dev	Cases
		.1819	.9397	340
1	Agrobased	.0889	.2764	76
1.00		.0000	.0000	2
2.00		.1633	.5341	14
3.00		.0603	.1404	37
4.00		.0847	.2207	18
5.00		.1429	.2935	5
2	Electronics	.4297	.4335	9
4.00		.3417	.3830	5
5.00		.5397	.5259	4
3	Electrical apparatus	.0687	.3444	29
1.00		.0000	.0000	1
2.00		.0000	.0000	6
3.00		.0045	.0163	13
4.00		.2763	.6977	7
5.00		.0000	.0000	1
6.00		.0000	.0000	1
4	Wooden furniture	.0004	.0027	40
1.00		.0000	.0000	5
2.00		.0000	.0000	15
3.00		.0000	.0000	8
4.00		.0000	.0000	9
5.00		.0056	.0098	3
5	Readymade garments	5.3072	3.6595	7
5.00		.2895	.0000	1
6.00		6.0822	3.5547	4
7.00		6.2662	3.6090	2
6	Tanning & Leather	.0000	.0000	20
2.00		.0000	.0000	2
3.00		.0000	.0000	12
4.00		.0000	.0000	4
7.00		.0000	.0000	2
7	Fish & sea food	.8724	1.0958	10
3.00		.0000	.0000	2
4.00		.0141	.0000	1
5.00		.3118	.0000	1
6.00		.9625	1.1696	4
7.00		2.2743	.4092	2

Table H1.—Contd

Size-Class		Mean	Std Dev	Cases
8	Light Mech. Engg	.0162	.0831	91
1.00		.0000	.0000	11
2.00		.0395	.1721	19
3.00		.0089	.0263	35
4.00		.0198	.0528	18
5.00		.0087	.0212	6
6.00		.0000	.0000	1
7.00		.0000	.0000	1
9	Jute	.0011	.0023	29
7.00		.0015	.0026	6
8.00		.0010	.0023	23
10	Textiles	.0633	.1850	29
3.00		.8750	.0000	1
4.00		.2632	.3722	2
5.00		.0902	.0444	2
7.00		.0235	.0381	5
8.00		.0072	.0152	19

Total Cases = 340

Table H2.--Wage rates by subsector, gender, and worker category

TOTAL AGROBASED

Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
1	M	115	2775700	24137	143
	F	0	0	0	0
	Total	115	2775700	24137	150
2	M	411	7823910	19036	113
	F	25	312642	12506	208
	Total	436	8136552	18662	116
3	M	339	3730051	11003	65
	F	62	210640	3397	56
	Total	401	3940691	9827	61
4	M	228	3851772	16894	100
	F	0	0	0	0
	Total	228	3851772	16894	105
5	M	112	2148951	19187	114
	F	0	0	0	0
	Total	112	2148951	19187	119
Total 1-5	M	1205	20330384	16872	100
	F	87	523282	6015	100
	Total	1292	20853666	16141	100
6	M	124	--	16872	100
	F	0	--	0	100
	Total	124	--	16872	100

Table H2.--Contd.--2

TOTAL ELECTRONIC

	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
	1	M	45	1868902	41531	181
		F	1	50000	50000	256
		Total	46	1918902	41715	189
	2	M	114	2786958	24447	106
		F	67	1548406	23111	118
		Total	181	4335364	23952	109
	3	M	36	537600	14933	65
		F	27	294200	10896	56
		Total	63	831800	13203	60
	4	M	19	154000	8105	35
		F	4	39300	9825	50
		Total	23	193300	8404	38
	5	M	48	676826	14101	61
		F	1	22000	22000	113
		Total	49	698826	14262	65
Total 1-5		M	262	6024286	22993	100
		F	100	1953906	19539	100
		Total	362	7978192	22039	100
	6	M	15	..	22993	100
		F	0	..	0	0
		Total	15		22993	100

TOTAL ELECTRICAL APPARATUS

	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/nw
	1	M	44	1561730	35494	237
		F	0	0	0	0
		Total	44	1561730	35494	240
	2	M	218	3711696	17026	114
		F	4	28800	7200	106
		Total	222	3740496	16849	114
	3	M	110	1221250	11102	74
		F	9	59400	6600	97
		Total	119	1280650	10762	73
	4	M	133	920550	6921	46
		F	0	0	0	0
		Total	133	920550	6921	47
	5	M	52	937900	18037	120
		F	0	0	0	0
		Total	52	937900	18037	122
Total 1-5		M	557	8353126	14997	100
		F	13	88200	6785	100
		Total	570	8441326	14809	100
	6	M	49	..	14997	100
		F	4	..	6785	100
		Total	56		14809	100

Table H2.--Contd.--4

TOTAL WOODEN FURNITURE

	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
	1	M	39	1513500	38808	160
		F	0	0	0	0
		Total	39	1513500	38808	160
	2	M	219	7521629	34345	141
		F	0	0	0	0
		Total	219	7521629	34345	141
	3	M	235	4167205	17733	73
		F	0	0	0	0
		Total	235	4167205	17733	73
	4	M	67	496550	7411	31
		F	0	0	0	0
		Total	67	496550	7411	31
	5	M	16	283300	17706	73
		F	0	0	0	0
		Total	16	283300	17706	73
Total 1-5		M	576	13982184	24275	100
		F	0	0	0	0
		Total	576	13982184	24275	100
	6	M	57	..	24275	100
		F	1	..	0	0
		Total	58		24275	100

Table H2.--Contd.--5

TOTAL READYMADE GARMENTS

	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
	1	M	31	1556220	50201	296
		F	6	242160	40360	545
		Total	37	1798380	48605	524
	2	M	118	1863965	15796	93
		F	341	4751015	13933	188
		Total	459	6614980	14412	155
	3	M	37	318720	8614	51
		F	161	713100	4429	80
		Total	198	1031820	5211	56
	4	M	55	218760	3977	23
		F	659	2882240	4374	59
		Total	714	3101000	4343	47
	5	M	44	869860	19770	117
		F	7	107050	15293	206
		Total	51	976910	19155	207
Total 1-5		M	285	4827525	16939	100
		F	1174	8695565	7407	100
		Total	1459	13523090	9269	100
	6	M	13	..	16939	100
		F	1	..	7407	100
		Total	14		9269	100

Table H2.--Contd.--6

TOTAL TANNING & LEATHER

	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
	1	M	74	4393500	59372	256
		F	0	0	0	0
		Total	74	4393500	59372	256
	2	M	223	6645000	29798	129
		F	0	0	0	0
		Total	223	6645000	29798	129
	3	M	376	7882800	20965	90
		F	0	0	0	0
		Total	376	7882800	20965	90
	4	M	285	3643100	12783	55
		F	0	0	0	0
		Total	285	3643100	12783	55
	5	M	141	2909900	20638	89
		F	0	0	0	0
		Total	141	2909900	20638	89
Total 1-5		M	1099	25474300	23180	100
		F	0	0	0	0
		Total	1099	25474300	23180	100
	6	M	36	..	23180	100
		F	0	..	0	0
		Total	36		23180	100

Table H2.--Contd.--7

TOTAL FISH & SEA FOOD

	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
	1	M	63	3698756	58710	316
		F	0	0	0	0
		Total	63	3698756	58710	532
	2	M	301	3796468	12613	68
		F	696	3696220	5311	102
		Total	997	7492688	7515	68
	3	M	109	1512829	13879	75
		F	161	747320	4642	89
		Total	270	2260149	8371	76
	4	M	67	954700	14249	77
		F	2	7500	3750	72
		Total	69	962200	13945	126
	5	M	123	2367190	19245	103
		F	2	24351	12176	234
		Total	125	2391541	19132	174
Total 1-5		M	663	12329943	18597	100
		F	861	4475391	5198	100
		Total	1524	16805334	11027	100
	6	M	32	..	18597	100
		F	1	..	5204	100
		Total	33		11034	100

Table H2.--Contd.--8

TOTAL LIGHT MECH. ENGG.

	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
	1	M	117	4618241	39472	216
		F	0	0	0	0
		Total	117	4618241	39472	216
	2	M	817	18816262	23031	126
		F	5	73000	14600	165
		Total	822	18889262	22980	126
	3	M	411	3953282	9619	53
		F	10	60450	6045	68
		Total	421	4013732	9534	52
	4	M	421	3998882	9499	52
		F	1	8400	8400	95
		Total	422	4007282	9496	52
	5	M	144	3590003	24931	136
		F	0	0	0	0
		Total	144	3590003	24931	137
Total 1-5		M	1910	34976670	18312	100
		F	16	141850	8866	100
		Total	1926	35118520	18234	100
	6	M	129	..	18312	100
		F	4	..	8866	0
		Total	133		18234	100

Table H2.--Contd.--9

TOTAL JUTE

	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
	1	M	2586	142626908	55153	225
		F	0	0	0	0
		Total	2586	142626908	55153	226
	2	M	39003	938043281	24051	98
		F	7	224640	32091	360
		Total	39010	938267921	24052	98
	3	M	16986	373627648	21996	90
		F	31	779004	25129	282
		Total	17017	374406652	22002	90
	4	M	11094	234893281	21173	87
		F	0	0	0	0
		Total	11094	234893281	21173	87
	5	M	8620	226097782	26229	107
		F	77	22000	286	3
		Total	8697	226119782	26000	106
Total 1-5		M	78289	1915288900	24464	100
		F	115	1025644	8919	100
		Total	78404	1916314544	24442	100
	6	M	56	..	24464	100
		F	0	..	0	0
		Total	56		24464	100

Table H2.--Contd.--10

TOTAL COTTON TEXTILE

	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
	1	M	677	51725652	76404	367
		F	1	41110	41110	401
		Total	678	51766762	76352	369
	2	M	16378	357077307	21802	105
		F	193	1672803	8667	84
		Total	16571	358750110	21649	104
	3	M	6703	105796613	15783	76
		F	17	135363	7963	78
		Total	6720	105931976	15764	76
	4	M	5227	74429481	14239	68
		F	120	1103201	9193	90
		Total	5347	75532682	14126	68
	5	M	3915	96346725	24610	118
		F	29	740276	25527	249
		Total	3944	97087001	24616	119
Total 1-5		M	32900	685375778	20832	100
		F	360	3692753	10258	100
		Total	33260	689068531	20718	100
	6	M	48	..	20832	100
		F	0	..	0	0
		Total	48		20718	100

[a]Part-time workers were treated equivalent to half-time workers. The five worker categories are defined below:

1: Managerial and technical workers
2: Operatives: skilled
3. Operatives: semi-skilled
4: Operatives: unskilled
5: Clerical and sales workers
6: Unpaid family workers

[b]Unpaid family workers were imputed the mean wage of all other workers.

Table H3.--Certain characteristics of male and female entrepreneurs, HIS Factory Survey

Wooden furniture

	NO OR PERCENTAGE OF ENTREPRENEUR			
	MALE		FEMALE	
YEAR OF PRODUCTION START				
PROD STARTED BEFORE 80	3	1.0%	1	.3%
PROD STARTED SINCE 80	36	11.7%		
YEAR PRESENT OWNER TOOK OVER				
OWNED BEFORE 80	10	3.2%	1	.3%
OWNED SINCE 80	29	9.4%		
PERIOD OF OPERATIONS				
<12 MONTHS IN OPERATION	25	8.1%		
>11 MONTHS IN OPERATION	14	4.5%	1	.3%
11				
9				
NO OF SHIFTS WORKED IN PREVIOUS 12 MONTH				
<250	19	6.2%		
251-300	8	2.6%	1	.3%
301-400	2	.6%		
401-	10	3.2%		
LEVEL OF EDUCATION (ENTREPRENEUR)				
<10 YEARS	19	6.2%	1	.3%
>9 YEARS	20	6.5%		
ATTENDED SCHOOL IN URBAN AREA				
YES	8	3.2%		
NO	20	7.9%	1	.4%
OTHER TRAINING IN MONTHS				
<6 MONTHS	37	12.0%	1	.3%
>5 MONTHS	2	.6%		
FATHERS EDUCATION				
<10 YEARS	26	8.5%		
>9 YEARS	13	4.2%	1	.3%
ESTABLISHMENT ACQUIRED FROM				
INHERITED			1	3.3%
ADVISE RECEIVED FROM				
FAMILY	8	8.9%		
GOVERNMENT				

Table H3--Contd.--2 (conti

INDUSTRY CODE
Wooden furniture

	NO OR PERCENTAGE OF ENTREPRENEUR			
	MALE		FEMALE	
FINANCIAL INST				
APPLIED FOR SANCTION				
YES	4	1.3%		
NO	34	11.2%	1	.3%
TIME TO OBTAIN SANCTION				
<6 MONTHS	1	.3%		
>5 MONTHS	38	12.4%	1	.3%
TIME TO START PRODUCTION				
<6 MONTHS	2	.7%		
>5 MONTHS	37	12.1%	1	.3%
MEMBER OF ASSOCIATION				
YES	22	7.1%		
NO	17	5.5%	1	.3%
OFFICE HOLDER OF ASSOCIATION				
YES	5	2.3%		
NO	18	8.1%		
OWNERSHIP STATUS OF THE ENTERPRISE				
SOLE PROPRIETOR	34	15.0%	1	.4%
TYPE OF ENTERPRISE				
NEW	37	14.1%		
DIVESTED				
LABOUR UNION				
YES				
NO	39	12.7%	1	.3%
MISTAKES CHOOSING CPP				
FREQUENTLY MISTAKES	1	10.0%		
MISTAKES ACCOUNTING PC				
FREQUENTLY MISTAKES	4	16.0%		
MISTAKES FINDING PM				
FREQUENTLY MISTAKES	3	23.1%		
MISTAKES MANAGING FW				
FREQUENTLY MISTAKES	2	11.1%		
INDUSTRY CODE				

Table H3.--Contd.--3

INDUSTRY CODE
Light Mech. Engg

	NO OR PERCENTAGE OF ENTREPRENEUR			
	MALE		FEMALE	
YEAR OF PRODUCTION START				
PROD STARTED BEFORE 80	20	6.5%		
PROD STARTED SINCE 80	68	22.1%	2	.7%
YEAR PRESENT OWNER TOOK OVER				
OWNED BEFORE 80	52	16.9%	2	.6%
OWNED SINCE 80	36	11.7%		
PERIOD OF OPERATIONS				
<12 MONTHS IN OPERATION	40	13.0%	1	.3%
>11 MONTHS IN OPERATION	48	15.6%	1	.3%
11				
12				
NO OF SHIFTS WORKED IN PREVIOUS 12 MONTH				
<250	23	7.5%		
251-300	43	14.0%	1	.3%
301-400	11	3.6%		
401-	11	3.6%	1	.3%
LEVEL OF EDUCATION (ENTREPRENEUR)				
<10 YEARS	34	11.0%	1	.3%
>9 YEARS	54	17.5%	1	.3%
ATTENDED SCHOOL IN URBAN AREA				
YES	43	17.0%	1	.4%
NO	26	10.3%	1	.4%
OTHER TRAINING IN MONTHS				
<6 MONTHS	80	26.0%	2	.6%
>5 MONTHS	8	2.6%		
FATHERS EDUCATION				
<10 YEARS	61	19.9%	1	.3%
>9 YEARS	27	8.8%	1	.3%
ESTABLISHMENT ACQUIRED FROM				
INHERITED	13	43.3%	1	3.3%
ADVISE RECEIVED FROM				
FAMILY	20	22.2%	1	1.1%
GOVERNMENT	1	1.1%		

(contin-

Table H3.--Contd.--4

INDUSTRY CODE
Light Mech. Engg

	NO OR PERCENTAGE OF ENTREPRENEUR			
	MALE		FEMALE	
FINANCIAL INST				
APPLIED FOR SANCTION				
YES	35	11.6%	1	.3%
NO	53	17.5%	1	.3%
TIME TO OBTAIN SANCTION				
<6 MONTHS	17	5.6%	1	.3%
>5 MONTHS	71	23.2%	1	.3%
TIME TO START PRODUCTION				
<6 MONTHS	10	3.3%		
>5 MONTHS	78	25.4%	2	.7%
MEMBER OF ASSOCIATION				
YES	51	16.6%	1	.3%
NO	37	12.0%	1	.3%
OFFICE HOLDER OF ASSOCIATION				
YES	16	7.2%		
NO	36	16.2%	1	.5%
OWNERSHIP STATUS OF THE ENTERPRISE				
SOLE PROPRIETOR	77	34.1%	2	.9%
TYPE OF ENTERPRISE				
NEW	73	27.9%	2	.8%
DIVESTED	2	.8%		
LABOUR UNION				
YES	7	2.3%		
NO	81	26.3%	2	.6%
MISTAKES CHOOSING CPP				
FREQUENTLY MISTAKES	4	40.0%		
MISTAKES ACCOUNTING PC				
FREQUENTLY MISTAKES	5	20.0%		
MISTAKES FINDING PM				
FREQUENTLY MISTAKES	5	38.5%	-	
MISTAKES MANAGING FW				
FREQUENTLY MISTAKES	4	22.2%	1	5.6%
INDUSTRY CODE				

Note: The percentages are with respect to total sample size.

Table H4.--RECORD 1, UNIONIZED FIRMS, HIID/IND

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Fish and Sea Foods	3114	1	1.1	1.1	1.1
Edible Oils	3116	1	1.1	1.1	2.1
Grain milling(Flour)	3118	1	1.1	1.1	3.2
Bakery products	3122	2	2.1	2.1	5.3
Edible Salt	3128	4	4.3	4.3	9.6
Cotton Textiles	3201	24	25.5	25.5	35.1
Woolen Textiles	3202	1	1.1	1.1	36.2
Jute Textiles	3203	28	29.8	29.8	66.0
Silk & synth Text	3204	2	2.1	2.1	68.1
Handloom Textiles	3206	1	1.1	1.1	69.1
Knitting mills	3213	1	1.1	1.1	70.2
Tanning & Finish	3231	2	2.1	2.1	72.3
Leather Products	3233	1	1.1	1.1	73.4
Jute press & bail	3253	1	1.1	1.1	74.5
Saw & planning mills	3311	1	1.1	1.1	75.5
Print & publish Book	3422	5	5.3	5.3	80.9
Allopath & Medicine	3501	1	1.1	1.1	81.9
Matches manufact	3525	1	1.1	1.1	83.0
Iron,Steel Re-roll	3713	1	1.1	1.1	84.0
Furnit,Fixtur,metal	3804	1	1.1	1.1	85.1
Utensil-aluminium	3809	3	3.2	3.2	88.3
Fabri metal prd nec	3819	1	1.1	1.1	89.4
Agri. machi equip.	3822	1	1.1	1.1	90.4
Textile machinery	3824	1	1.1	1.1	91.5
Industrial mach	3825	1	1.1	1.1	92.6
Radio and Television	3832	1	1.1	1.1	93.6
Electric bulb,tube	3835	1	1.1	1.1	94.7
Electric appar nec	3839	1	1.1	1.1	95.7
Jewelleries(G Smith)	4412	4	4.3	4.3	100.0
	TOTAL	94	100.0	100.0	

Mean	3344.936	Mode	3203.000	Std Dev	309.668
Minimum	3114.000	Maximum	4412.000	Sum	314424.000

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Table H5.—Source of Credit by male and female entrepreneurs, HIS Factory Survey

Subsector	Source of equity %			Source of credit %						
	Personal savings	Other	Total	Com bank	DFIs	BKB	Money lender	RM Suppl-ier	Other	Total
1. Agrobased										
Male	60.76	39.24	100	7.63	2.63	1.32	1.32	0	87.1	100
Female										
2. Electronics										
Male	85	15	100	25	0	0	0	0	75	100
Female										
3. Electr. appliances										
Male	75	25	100	3.45	3.45	0	0	0	93.1	100
Female										
4. Wooden furniture										
Male	72.44	27.56	100	2.36	0	0	2.56	2.56	92.52	100
Female	100	0	100							
5. RM Garments										
Male	71.43	28.57	100	71.43	0	0	0	0	28.57	100
Female										
6. Tanning & leather										
Male	72.5	27.5	100	3	7.5	2.5	0	2	85	100
Female										
7. Fish & sea food										
Male	40	60	100	10	0	20	0	0	70	100
Female										
8. Light Mech. Engg.										
Male	72.44	27.56	100	2.56	0	0.57	0	0	96.87	100
Female	100	0	100							
9. Jute										
Male	33.33	66.67	100	34.93	49.25	0	0	0.86	14.96	100
Female										
10. Cotton										
Male	56.25	43.75	100	18.75	59.38	0	0	0	21.87	100
Female										
11. Handloom tex.										
Male	62.09	37.91	100	5.91	5.45	1.82	10.45	1.82	74.55	100
Female										
Total										
Male	63.75	36.25	100	9.55	11.61	2.38	13.02	0.66	62.78	100
Female	100	0	100	0	0	0	0	0	0	0

Table 116a

F29.--Output: Special Nature of Major Product Market : Female entrepreneurs

Size-Class	Industry	Total	In Situ	Locally	Region-ally	Nation-ally	Abroad	Not Known
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
3	TEXTILE MACHINERY	609000	0	0	152250	456750	0	0
4	KNITTING MILLS	232800	232800	0	0	0	0	0
3	HEATING & COOKING EQUIP.	3200000	3200000	0	0	0	0	0
6	OTHER MFG. INDUSTRY	41800	0	41800	0	0	0	0
3	CUTLERY	5148660	0	0	0	5148660	0	0
2	PESTICIDES, INSECTICIDES	1746570	0	0	0	1746570	0	0
5	WOODEN FURNITURE	11985000	11985000	0	0	0	0	0

Table #6b

~~529~~.--Output:Spatial Nature of Major Product Market, entire sample

Industry	Size-Class	Total	In Situ	Locally	Region-ally	Nation-ally	Abroad	Not Known
		1	2	3	4	5	6	7
Agrobased	1	3546430	0	10500	3535930	0	0	0
	2	1129574	774074	206267	149233	0	0	0
	3	2859374	2019787	343486	476559	19542	0	0
	4	6244642	2890553	750900	912010	1469767	0	222222
	5	15676330	3871560	6640215	816304	4348252	0	0
	6							
	7							
	8							
Electro-nics	1							
	2							
	3							
	4	5917672	5917672	0	0	0	0	0
	5	16728750	6746407	0	0	9982343	0	0
	6							
	7							
	8							
Electri-cal Apparatus.	1	300000	0	0	0	0	0	0
	2	1358652	816291	0	100927	440833	0	0
	3	1923719	655523	328615	849038	83155	7387	0
	4	4133756	2283756	0	0	1850000	0	0
	5	5687500	5687500	0	0	0	0	0
	6	8566950	0	0	0	8566950	0	0
	7							
	8							

Table H6b—Contd—2

Industry	Size-Class	Total	In Situ	Locally	Region-ally	Nation-ally	Abroad	Not Known
		1	2	3	4	5	6	7
Readymade Garments	1							
	2							
	3							
	4							
	5							
	6	24164359	0	0	0	0	24164359	0
	7	34500000	0	0	0	0	34500000	0
	8							
Tanning & Leather	1							
	2	7184625	0	0	7184625	0	0	0
	3	43674172	2373983	139583	360000	292067	40217497	0
	4	87153013	1195313	0	0	0	85957700	0
	5							
	6							
	7	221000000	0	0	0	95000000	126000000	0
	8							
Fish & Sea Food	1							
	2							
	3	435000	75000	0	360000	0	0	0
	4	5224800	5224800	0	0	0	0	0
	5							
	6	160000000	0	0	0	0	160000000	0
	7							
	8							

Table H6b-- Contd.--3

Industry	Size-Class	Total	In Situ	Locally	Region-ally	Nation-ally	Abroad	Not Known
		1	2	3	4	5	6	7
Light Mech.Engg	1	150935	108982	24554	12400	4545	455	0
	2	707793	521292	28336	36438	121728	0	0
	3	1594427	1100182	1857	483067	22431	0	0
	4	4064743	1492558	12000	1294022	1266163	0	0
	5	11949601	1700000	0	1200000	9049601	0	0
	6	15990000	15990000	0	0	0	0	0
	7	105000000	0	0	0	105000000	0	0
	8							
Wooden Furniture	1	125895	118695	7200	0	0	0	0
	2	345415	314409	30994	0	0	0	0
	3	1375124	749233	11850	614041	0	0	0
	4	2634213	2405880	0	50556	177778	0	0
	5	7295001	6795000	0	500000	0	0	0
	6							
	7							
	8							

SOURCE:DUE.9.4.

Table H7a.--Factor intensities and productivities by male-dominated and female-dominated industries, HIS: Factory Establishment Survey: Bigger 30 industries

INDUSTRY	Q/KK	L/KK	VA/Q'	X/Q	INV RATIO	RM RATIO	LF/LM	Q/L in 100	RR	S
Ratios										
A. Male dominated industries										
3203 Jute	1.71	3.09	0.39	0.877	0.96	0.94	0.001	553	-0.09	0.00
3231 Tanning & Finish	3.40	0.19	0.34	0.715	1.00	0.95	0.000	17689	1.10	0.62
3321 Wooden Furniture	2.62	2.38	0.43	0.000	1.00	0.93	0.002	1100	0.59	0.70
3805 Structural Metal Prod.	4.45	1.43	0.78	0.000	1.00	0.88	0.000	3123	3.25	0.85
3819 Febricated Metal Prod.	0.48	0.41	0.30	0.000	0.97	0.06	0.010	1190	0.06	0.80
Simple mean	2.53	1.50	0.45	0.318	0.99	0.75	.003	4731	0.98	0.59
								(1492)	(0.41)	
B. Female dominated industries										
3114 Fish & Sea Food	2.36	0.52	0.10	0.464	0.91	1.00	1.235	4502	0.17	0.20
3201 Cotton Textile	2.40	2.18	0.40	0.059	0.96	0.35	0.011	1101	0.52	0.03
3221 Readymade Garments	4.39	3.61	0.30	0.925	0.29	0.26	3.943	1216	0.99	0.00
3223 Local Garments	2.55	3.86	0.48	0.000	0.13	0.79	0.195	660	0.84	0.85
3832 Radio & Television	1.82	0.69	0.28	0.000	1.00	0.07	0.360	2624	0.36	0.00
Simple mean	2.70	2.17	0.31	0.290	0.66	0.49	1.149	2021	0.58	0.22
								(1400)	(0.47)	

Ranks

INDUSTRY	Q/KK	L/KK	VA/Q'	X/Q	INV RATIO	RM RATIO	LF/LM	Q/L	RR	S	R
A. Male dominated industries											
3203 Jute	19	6	12	2	4	5	22	28	29	28	17
3231 Tanning & Finish	8	30	14	3	1	3	30	1	3	21	2
3321 Wooden Furniture	10	8	10	30	1	6	21	18	11	17	14
3805 Structural Metal Prod.	5	16	1	30	1	8	30	5	1	9	1
3819 Febricated Metal Prod.	27	27	15	30	2	26	19	15	26	11	29
B. Female dominated industries											
3114 Fish & Sea Food	14	25	27	4	5	1	3	3	18	25	7
3201 Cotton Textile	13	11	11	5	3	19	18	17	13	27	21
3221 Readymade Garments	6	5	16	1	11	21	1	14	5	30	4
3223 Local Garments	11	4	5	30	12	13	7	25	7	7	13
3832 Radio & Television	18	21	17	30	1	25	5	8	15	29	22

Table H7b.—Desirable ratios by Female Entrepreneur,MIS:Factory Establishments

INDUSTRY	Q/KK	L/KK	WA/Q	X/Q	INV RATIO	RM RATIO	Q/L LF/LM	in 100's	RR
3213 Knitting Mills	5.54	76.19	0.63	0	1	0.31	15.00	72.75	0.20
3321 Wooden Furniture	3.55	1.78	0.63	0	1	0.92	0.02	2000	1.48
3515 Pesti,Insecti	4.57	2.23	0.51	0	1	1.00	0.13	2054.78	3.32
3801 Cutlery	4.02	1.25	0.16	0	1	0.06	0.07	3217.91	0.42
3807 Heat,Cook Equip.	4.64	2.46	0.30	0	1	0.86	0.06	1882.35	1.08
3824 Textile Machinery	4.54	7.46	0.52	0	1	1.00	0.11	609	0.99
3949 Other Mgf Ind (B&B)	0.68	175.12	0.86	0	1	1.00	106	3.90654	-0.14

Table H8.—VMPs[a]

Sub-Sector	Dep Var	VMP of Variable										No. Obs.
		Coeff	VA/K, Q/K	VMP (%)	Coeff	VA/ML, Q/ML (000's)	VMP (000's)	Coeff	VA/FL, Q/ML (000's)	VMP (000's)	Sum Coeff	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Agro	VA	.25*	.55	.138	.74*	73	54	.07	287	..	1.06	76
	Q	.34*	3.70	1.128	.53*	490	260	.29*	1932	560	1.16	76
Electronics	VA	.59*	1.36	.802	.45	556	..	.31	790	..	..	9
	Q	.30	4.06	1.218	1.22	1661	..	.57	2359	..	..	9
Elec.Appar.	VA	.69*	.69	.476	.03	109	..	.09	439	..	..	29
	Q	.61*	2.71	1.653	-.04	427	..	-.26	1726	..	..	29
Wooden Furn.	VA	.32*	1.37	.438	.71*	63	45	NA	263	..	1.03	40
	Q	.55*	3.80	2.09	.55*	176	96.8	NA	729	..	1.10	40
Tann. & Leth.	VA	.89*	1.42	1.26	-.12	571	..	NA	3368	..	.89	20
	Q	1.00*	7.04	7.04	-.19	2837	..	NA	16736	..	1.00	20
Fish & Seafo.	VA	.58	.58	..	-.54	104	..	.26*	279	73	..	10
	Q	.79	3.60	..	.93	847	..	.09	1741	..	..	10
Light Me.Eng.	VA	.35*	.68	.238	.71*	66	47	.70*	139	97	1.91	91
	Q	.36*	2.27	0.817	.71*	220	156.2	.70*	..	667.1	1.92	91
Readymad Gar.	VA	.08	1.28	..	.66*	43	28.38	.55*	83	45.65	1.21	34
	Q	.59*	3.67	2.17	.26*	123	31.98	.36*	238	85.68	1.21	34
Jute	VA	.12	1.25	..	.86*	45	39	.18	26109	..	..	29
	Q	-.005	5.00	..	.77*	173	133	.10	99870	..	..	29
Cotton Text	VA	.09	.69	..	.68*	59	40	.17	8146	..	..	29
	Q	-.01	4.13	..	.91*	351	..	..	33152	..	..	29
Handloom	VA	.25	2.17	.543	.58*	129		.16	92	..	.99	55
	Q	.24*	9.1	2.18	.70*	540		.007	384	..	.94	55
Overall[b]	VA	.44*	.51	.223	.38*	31	12	.15	304	47	.97	592
				(14.1)			(9.85)			(3.92)	(.45)[b]	

Coefficients with stars are significant at the half of 1 percent level.

K = Fixed capital

ML = Male labor

FL = Female labor

[a] The sum of coefficients is tested against unity. The VMP of labor is measured in thousands of Takas per worker per year and the VMP of capital in Takas per taka per year.

[b] The numbers in parentheses are approximate t values

Table H9.—VMPs of male and female labor relative to their wage rates

	Wage Rate (Tk 000)		VMP (Tk 000)		VMP/w	
	Male (1)	Female (2)	Male (3)	Female (4)	Male (5)	Female (6)
Agro	16.5	8.2	54	..(20)	3.27	2.43
Elec.	23.0	19.5	..	..	..	..
Elec. appliances	15.0	6.8	..	..	..	..
Wooden Furn.	24.3	..	45	..	1.85	..
Tanning	23.2	..	..	..	..	..
Fish	18.6	5.2	..	73	..	14.1
Light Mech.Eng.	18.3	8.9	47	97	2.57	10.9
Readymade gar.	16.9	7.4	28	46	1.66	6.22
Jute	24.5	8.9	39	..	1.59	..
Cotton	20.8	10.3	40	..	1.92	..
Handloom	9.8	4.0	75	..	..	..

A P P E N D I X E S

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APPENDIX HA

WAGE RATES BY SIZE-CLASS, SUBSECTOR, WORKER CATEGORY, AND GENDER

Table HA1.--Wage rates by subsector, worker category, gender and size-class

AGROBASED

Size Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
1	1	M	0	0	0	0
		F	0	0	0	0
		Total	0	0	0	0
	2	M	2	30800	15400	100
		F	0	0	0	0
		Total	2	30800	15400	100
	3	M	0	0	0	0
		F	0	0	0	0
		Total	0	0	0	0
	4	M	0	0	0	0
		F	0	0	0	0
		Total	0	0	0	0
	5	M	0	0	0	0
		F	0	0	0	0
		Total	0	0	0	0
Total 1-5		M	2	30800	15400	100
		F	0	0	0	0
		Total	2	30800	15400	100
	6	M	4	..	15400	100
		F	0	..	0	100
		Total	4	..	15400	100

Table HA1.--Contd.--2

AGROBASED

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
2	1	M	5	115700	23140	228
		F	0	0	0	0
		Total	5	115700	23140	237
	2	M	33	327300	9918	98
		F	1	8300	8300	170
		Total	36	335600	9322	96
	3	M	27	226750	8398	83
		F	5	21040	4208	86
		Total	30	247790	8260	85
	4	M	8	63200	7900	78
		F	0	0	0	0
		Total	8	63200	7900	81
	5	M	3	38000	12667	125
		F	0	0	0	0
		Total	3	38000	12667	130
Total 1-5		M	76	770950	10144	100
		F	6	29340	4890	100
		Total	82	800290	9760	100
	6	M	19	..	10144	100
		F	0	..	4890	100
		Total	19	..	9760	100

Table HA1.--Contd.--3

AGROBASED

Size-Class	Worker Category	Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
3	1 M	27	626200	23184	167
	F	0	0	0	0
	Total	27	626200	23184	173
	2 M	165	2468220	14959	108
	F	2	10000	5000	108
	Total	167	2478220	19959	149
	3 M	127	1133950	8929	64
	F	22	100600	4573	99
	Total	149	1234550	13501	101
	4 M	55	585800	10651	77
	F	0	0	0	0
	Total	55	585800	10651	80
	5 M	60	1205990	20100	145
	F	0	0	0	0
	Total	60	1205990	20100	150
Total 1-5	M	434	6020160	13871	100
	F	24	110600	4608	100
	Total	458	6130760	13386	100
	6 M	58	..	13871	100
	F	0	..	4608	100
	Total	58	..	13386	100

Table HA1.--Contd.--4

AGROBASED

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
4	1	M	33	735900	22300	128
		F	0	0	0	0
		Total	33	735900	22300	74
	2	M	163	3235477	19850	114
		F	17	261142	15361	122
		Total	180	3496619	35211	117
	3	M	86	1133950	13185	76
		F	5	17000	3400	27
		Total	91	1150950	16585	55
	4	M	161	2681906	16658	96
		F	0	0	0	0
		Total	161	2681906	16658	55
	5	M	18	244650	13592	78
		F	0	0	0	0
		Total	18	244650	13592	45
Total 1-5		M	461	8031883	17423	100
		F	22	278142	12643	100
		Total	483	8310025	30066	100
	6	M	29	..	17423	100
		F	0	..	12643	100
		Total	29	..	30066	100

Table HA1.--Contd.--5

AGROBASED

Size Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
5						
	1	M	50	1297800	25956	156
		F	0	0	0	0
		Total	50	1297800	25956	169
	2	M	78	1762113	22591	136
		F	3	32700	10900	344
		Total	81	1794813	22158	144
	3	M	99	1115531	11268	68
		F	30	72000	2400	76
		Total	129	1187531	9206	60
	4	M	62	493866	7966	48
		F	0	0	0	0
		Total	62	493866	7966	52
	5	M	31	660295	21300	128
		F	0	0	0	0
		Total	31	660295	21300	138
Total 1-5		M	320	5329605	16655	100
		F	33	104700	3173	100
		Total	353	5434305	15395	100
	6	M	14	..		100
		F	0	..		100
		Total	14	..		100

Table HAI.--Contd.--6

ELECTRONICS

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
4	1	M	15	730500	48700	258
		F	0	0	0	0
		Total	15	730500	48700	158
	2	M	28	661200	23614	125
		F	7	145600	20800	175
		Total	35	806800	44414	144
	3	M	25	366000	14640	78
		F	19	172400	9074	76
		Total	44	538400	23714	77
	4	M	19	154000	8105	43
		F	4	39300	9825	82
		Total	23	193300	17930	58
	5	M	20	107600	5380	29
		F	0	0	0	0
		Total	20	107600	5380	17
Total 1-5		M	107	2019300	18872	100
		F	30	357300	11910	100
		Total	137	2376600	30782	100
	6	M	10	..	18872	100
		F	0	..	11910	100
		Total	10	..	17347	100

Table HA1.--Contd.--7

ELECTRONICS

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
5	1	M	13	1138402	87569	302
		F	1	50000	50000	219
		Total	14	1188402	137569	265
	2	M	86	2125758	24718	85
		F	60	1402806	23380	103
		Total	146	3528564	48098	93
	3	M	11	171600	15600	54
		F	8	121800	15225	67
		Total	19	293400	30825	59
	4	M	0	0	0	0
		F	0	0	0	0
		Total	0	0	0	0
	5	M	28	569226	20330	70
		F	1	22000	22000	96
		Total	29	591226	42330	82
Total 1-5		M	138	4004986	29022	100
		F	70	1596606	22809	100
		Total	208	5601592	51830	100
	6	M	5	..	29022	100
		F	0	..	22809	100
		Total	5	..	51830	100

Table HA1.--Contd.--8

LIGHT MECH.ENGG.

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
1	1	M	1	24000	24000	254
		F	0	0	0	0
		Total	1	24000	24000	254
	2	M	11	113090	10281	109
		F	0	0	0	0
		Total	11	113090	10281	109
	3	M	4	15300	3825	40
		F	0	0	0	0
		Total	4	15300	3825	40
	4	M	0	0	0	0
		F	0	0	0	0
		Total	0	0	0	0
	5	M	2	18000	9000	95
		F	0	0	0	0
		Total	2	18000	9000	95
Total 1-5		M	18	170390	9466	100
		F	0	0	0	0
		Total	18	170390	9466	100
	6	M	13	..	9466	100
		F	0	..	0	0
		Total	13	..	9466	100

Table HA1.--Contd.--9

LIGHT MECH.ENGG.

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
2	1	M	5	115200	23040	142
		F	0	0	0	0
		Total	5	115200	23040	141
	2	M	46	1133100	24633	151
		F	3	54000	18000	100
		Total	49	1187100	24227	148
	3	M	20	145900	7295	45
		F	0	0	0	0
		Total	20	145900	7295	45
	4	M	21	103300	4919	30
		F	0	0	0	0
		Total	21	103300	4919	30
	5	M	0	0	0	0
		F	0	0	0	0
		Total	0	0	0	0
Total 1-5		M	92	1497500	16277	100
		F	3	54000	18000	100
		Total	95	1551500	16332	100
	6	M	24	..	16277	100
		F	0	..	0	100
		Total	24	..	16332	100

Table HA1.--Contd.--10

LIGHT MECH.ENGG.

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
3	1	M	22	510900	23223	152
		F	0	0	0	0
		Total	22	510900	23223	152
	2	M	174	3788270	21772	142
		F	1	6000	6000	83
		Total	175	3794270	21682	142
	3	M	141	1381866	9800	64
		F	0	0	0	0
		Total	141	1381866	9800	64
	4	M	54	282500	5231	34
		F	1	8400	0	0
		Total	55	290900	5289	35
	5	M	15	247600	16507	108
		F	0	0	0	0
		Total	15	247600	16507	108
Total 1-5		M	406	6211136	15298	100
		F	2	14400	7200	100
		Total	408	6225536	15259	100
	6	M	51	..	15298	100
		F	1	..	0	100
		Total	52	..	15298	100

Table HA1.--Contd.--11

LIGHT MECH.ENGG.

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/nw
4	1	M	42	1486860	35401	201
		F	0	0	0	0
		Total	42	1486860	35401	203
	2	M	195	4431798	22727	129
		F	1	13000	13000	185
		Total	196	4444798	22678	130
	3	M	176	1478302	8399	48
		F	5	29250	5850	83
		Total	181	1507552	8329	48
	4	M	39	356310	9136	52
		F	0	0	0	0
		Total	39	356310	9136	52
	5	M	48	1035236	21567	123
		F	0	0	0	0
		Total	48	1035236	21567	124
Total 1-5		M	500	8788506	17577	100
		F	6	42250	7042	100
		Total	506	8830756	17452	100
	6	M	27	..	17577	100
		F	3	..	7042	100
		Total	30	..	17452	100

Table HA1.--Contd.--12

LIGHT MECH.ENGG.

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
5	1	M	32	1493081	46659	270
		F	0	0	0	0
		Total	32	1493081	46659	271
	2	M	258	4248004	16465	95
		F	0	0	0	0
		Total	258	4248004	16465	96
	3	M	70	931920	13313	77
		F	4	31200	7800	100
		Total	74	963120	13015	76
	4	M	93	657956	7075	41
		F	0	0	0	0
		Total	93	657956	7075	41
	5	M	35	1115747	31878	184
		F	0	0	0	0
		Total	35	1115747	31878	185
Total 1-5		M	488	8446708	17309	100
		F	4	31200	7800	100
		Total	492	8477908	17232	100
	6	M	10	..	17309	100
		F	0	..	7800	100
		Total	10	..	17232	100

Table HA1.--Contd.--13

LIGHT MECH.ENGG.

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
6	1	M	13	822000	63231	199
		F	0	0	0	0
		Total	13	822000	63231	199
	2	M	82	2222000	27098	85
		F	0	0	0	0
		Total	82	2222000	27098	85
	3	M	0	0	0	0
		F	0	0	0	0
		Total	0	0	0	0
	4	M	0	0	0	0
		F	0	0	0	0
		Total	0	0	0	0
	5	M	26	810000	31154	98
		F	0	0	0	0
		Total	26	810000	31154	98
Total 1-5		M	121	3854000	31851	100
		F	0	0	0	0
		Total	121	3854000	31851	100
	6	M	0	..	31851	100
		F	0	..	0	100
		Total	0	..	31851	100

Table HA1.--Contd.--14

LIGHT MECH.ENGG.

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
7	1	M	2	166200	83100	531
		F	0	0	0	0
		Total	2	166200	83100	531
	2	M	150	2880000	19200	123
		F	0	0	0	0
		Total	150	2880000	19200	123
	3	M	0	0	0	0
		F	0	0	0	0
		Total	0	0	0	0
	4	M	214	2598816	12144	78
		F	0	0	0	0
		Total	214	2598816	12144	78
	5	M	18	363420	20190	129
		F	0	0	0	0
		Total	18	363420	20190	129
Total 1-5		M	384	6008436	15647	100
		F	0	0	0	0
		Total	384	6008436	15647	100
	6	M	4	..	15647	100
		F	0	..	0	0
		Total	4	..	15647	100

Table HA1.--Contd.--15

FISH & SEA FOOD

Size-Class	Worker Category	Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/nw
3	1 M	3	176000	58667	222
	F	0	0	0	0
	Total	3	176000	58667	222
	2 M	7	121800	17400	66
	F	0	0	0	0
	Total	7	121800	17400	66
	3 M	3	58500	19500	74
	F	0	0	0	0
	Total	3	58500	19500	74
	4 M	3	55200	18400	70
	F	0	0	0	0
	Total	3	55200	18400	70
	5 M	1	38000	38000	144
	F	0	0	0	0
	Total	1	38000	38000	144
Total 1-5	M	17	449500	26441	100
	F	0	0	0	0
	Total	17	449500	26441	100
	6 M	3	..	26441	100
	F	0	..	0	100
	Total	3	..	26441	100

Table HA1.--Comtd.--16

FISH & SEA FOOD

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
4	1	M	1	58000	58000	236
		F	0	0	0	0
		Total	1	58000	58000	248
	2	M	6	203200	33867	138
		F	0	0	0	0
		Total	6	203200	33867	145
	3	M	22	481800	21900	89
		F	0	0	0	0
		Total	22	481800	21900	94
	4	M	4	67500	16875	69
		F	1	7500	7500	200
		Total	9	75000	8333	36
	5	M	1	23400	23400	95
		F	0	0	0	0
		Total	1	23400	23400	100
Total 1-5		M	34	833900	24526	100
		F	2	7500	3750	100
		Total	36	841400	23372	100
	6	M	1	..	24526	100
		F	0	..	0	100
		Total	1	..	24526	100

Table HA1.--Contd.--17

FISH & SEA FOOD

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
5	1	M	11	331500	30136	123
		F	0	0	0	0
		Total	11	331500	30136	126
	2	M	10	204800	20480	83
		F	13	283000	21769	100
		Total	23	487800	21209	89
	3	M	2	39000	19500	79
		F	0	0	0	0
		Total	2	39000	19500	82
	4	M	0	0	0	0
		F	0	0	0	0
		Total	0	0	0	0
	5	M	17	408200	24012	98
		F	0	0	0	0
		Total	17	408200	24012	100
Total 1-5		M	40	983500	24588	100
		F	13	283000	21769	100
		Total	53	1266500	23896	100
	6	M	6	..	24588	100
		F	0	..	21769	100
		Total	6	..	23896	100

Table HA1.--Contd.--18

FISH & SEA FOOD

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
6	1	M	32	2023530	63235	306
		F	0	0	0	0
		Total	32	2023530	63235	509
	2	M	164	2537900	15475	75
		F	258	684320	2652	84
		Total	422	3222220	7636	61
	3	M	40	576960	14424	70
		F	41	257080	0	0
		Total	81	834040	10297	83
	4	M	40	520000	0	0
		F	0	0	0	0
		Total	40	520000	0	0
	5	M	60	1286200	21437	104
		F	0	0	0	0
		Total	60	1286200	21437	173
Total 1-5		M	336	6944590	20668	100
		F	299	941400	3148	100
		Total	635	7885990	12419	100
	6	M	15	..	20668	100
		F	0	..	3148	100
		Total	15	..	12419	100

Table HA1.--Contd.--19

FISH & SEA FOOD

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
7	1	M	16	1109726	69358	525
		F	0	0	0	0
		Total	16	1109726	69358	853
	2	M	114	728768	6393	48
		F	424	2728900	6436	108
		Total	538	3457668	6427	79
	3	M	42	356569	8490	64
		F	120	490240	0	0
		Total	162	846809	5227	64
	4	M	20	312000	0	0
		F	0	0	0	0
		Total	20	312000	0	0
	5	M	44	611309	13893	105
		F	2	24351	0	0
		Total	46	635660	13819	170
Total 1-5		M	236	3118372	13213	100
		F	546	3243491	5940	100
		Total	782	6361863	19153	100
	6	M	7	..	13213	100
		F	0	..	5940	100
		Total	7	..	19153	100

Table HA1.--Contd.--20

JUTE

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
7	1	M	307	13750047	44788	224
		F	0	0	0	0
		Total	307	13750047	44788	224
	2	M	3177	60625757	19083	95
		F	0	0	0	0
		Total	3177	60625757	19083	95
	3	M	1391	21213449	15251	76
		F	0	0	0	0
		Total	1391	21213449	15251	76
	4	M	663	10236002	15439	77
		F	0	0	0	0
		Total	663	10236002	15439	77
	5	M	887	22569471	25445	127
		F	12	366209	30517	100
		Total	899	22935680	25512	128
Total 1-5		M	6425	128394726	19984	100
		F	12	366209	30517	100
		Total	6437	128760935	20003	100
	6	M	4	..	19984	100
		F	0	..	0	100
		Total	4	..	19984	100

Table HA1.--Contd.--21

JUTE

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
8	1	M	2279	128876816	56550	227
		F	0	0	0	0
		Total	2279	128876816	56550	227
	2	M	35826	877417524	24491	98
		F	7	224640	32091	131
		Total	35833	877642164	24493	99
	3	M	15595	352414199	22598	91
		F	31	779004	25129	103
		Total	15626	353193203	22603	91
	4	M	10432	224657279	21535	87
		F	0	0	0	0
		Total	10432	224657279	21535	87
	5	M	7733	203528311	26319	106
		F	65	1512014	23262	95
		Total	7798	205040325	26294	106
Total 1-5		M	71865	1786894129	24865	100
		F	103	2515658	24424	100
		Total	71968	1789409787	24864	100
	6	M	52	..	24865	100
		F	0	..	0	100
		Total	52	..	24865	100

Table HA1.--Contd.--22

WOODEN FURNITURE

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
1	1	M	0	0	0	0
		F	0	0	0	0
		Total	0	0	0	0
	2	M	5	33000	6600	96
		F	0	0	0	0
		Total	5	33000	6600	96
	3	M	1	8050	8050	118
		F	0	0	0	0
		Total	1	8050	8050	118
	4	M	0	0	0	0
		F	0	0	0	0
		Total	0	0	0	0
	5	M	0	0	0	0
		F	0	0	0	0
		Total	0	0	0	0
Total 1-5		M	6	41050	6842	100
		F	0	0	0	0
		Total	6	41050	6842	100
	6	M	6	..	6842	100
		F	0	..	0	0
		Total	6	..	6842	100

Table HA1.--Contd.--23

WOODEN FURNITURE

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
2	1	M	0	0	0	0
		F	0	0	0	0
		Total	0	0	0	0
	2	M	44	781725	17766	125
		F	0	0	0	0
		Total	44	781725	17766	125
	3	M	27	302575	11206	79
		F	0	0	0	0
		Total	27	302575	11206	79
	4	M	8	41450	5181	37
		F	0	0	0	20
		Total	8	41450	5181	37
	5	M	1	7000	7000	49
		F	0	0	0	0
		Total	1	7000	7000	49
Total 1-5		M	80	1132750	14159	100
		F	0	0	0	0
		Total	80	1132750	14159	100
	6	M	18	..	14159	100
		F	0	..	0	0
		Total	18	..	14159	100

Table HA1.--Contd.--24

WOODEN FURNITURE

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
3	1	M	6	190900	31817	149
		F	0	0	0	0
		Total	6	190900	31817	149
	2	M	27	780800	28919	135
		F	0	0	0	0
		Total	27	780800	28919	135
	3	M	47	890550	18948	89
		F	0	0	0	0
		Total	47	890550	18948	89
	4	M	16	172500	10781	51
		F	0	0	0	0
		Total	16	172500	10781	51
	5	M	4	100000	25000	117
		F	0	0	0	0
		Total	4	100000	25000	117
Total 1-5		M	100	2134750	21348	100
		F	0	0	0	0
		Total	100	2134750	21348	100
	6	M	16	..	21348	100
		F	0	..	0	0
		Total	16	..	21348	100

Table HA1.--Contd.--25

WOODEN FURNITURE

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
4	1	M	17	581600	34212	130
		F	0	0	0	0
		Total	17	581600	34212	130
	2	M	83	3040104	36628	140
		F	0	0	0	0
		Total	83	3040104	36628	140
	3	M	64	1246830	19482	74
		F	0	0	0	0
		Total	64	1246830	19482	74
	4	M	28	252600	9021	34
		F	0	0	0	0
		Total	28	252600	9021	34
	5	M	9	150300	16700	64
		F	0	0	0	0
		Total	9	150300	16700	64
Total 1-5		M	201	5271434	26226	100
		F	0	0	0	0
		Total	201	5271434	26226	100
	6	M	11	..	26226	100
		F	0	..	0	0
		Total	11	..	26226	100

Table HA1.--Contd.--26

WOODEN FURNITURE

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
5	1	M	16	741000	46313	162
		F	0	0	0	0
		Total	16	741000	46313	162
	2	M	60	2886000	48100	168
		F	0	0	0	0
		Total	60	2886000	48100	168
	3	M	96	1719200	17908	63
		F	0	0	0	0
		Total	96	1719200	17908.3333	63
	4	M	15	30000	2000	7
		F	0	0	0	0
		Total	15	30000	2000	7
	5	M	2	26000	13000	45
		F	0	0	0	0
		Total	2	26000	13000	45
Total 1-5		M	189	5402200	28583	100
		F	0	0	0	0
		Total	189	5402200	28583	100
	6	M	6	..	28583	100
		F	1	..	0	0
		Total	7	..	28583	100

Table HA1.--Contd.--27

ELECTRICAL APPARATUS

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/aw
1	1	M	0	0	0	0
		F	0	0	0	0
		Total	0	0	0	0
	2	M	0	0	0	0
		F	0	0	0	0
		Total	0	0	0	0
	3	M	0	0	0	0
		F	0	0	0	0
		Total	0	0	0	0
	4	M	1	10400	10400	103
		F	0	0	0	0
		Total	1	10400	10400	103
	5	M	0	0	0	0
		F	0	0	0	0
		Total	0	0	0	0
Total 1-5		M	1	10100	10100	100
		F	0	0	0	0
		Total	1	10100	10100	100
	6	M	2	..	10100	100
		F	0	..	0	0
		Total	2	..	10100	100

Table HA1.--Contd.--28

ELECTRICAL APPARATUS

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
2	1	M	2	28600	14445	98
		F	0	0	0	0
		Total	2	28600	14445	98
	2	M	24	375484	8054	55
		F	0	0	0	0
		Total	24	375484	8054	55
	3	M	7	93300	13329	90
		F	0	0	0	0
		Total	7	93300	13329	90
	4	M	1	6000	6000	41
		F	0	0	0	0
		Total	1	6000	6000	41
	5	M	1	13000	13000	88
		F	0	0	0	0
		Total	1	13000	13000	88
Total 1-5		M	35	516384	14754	100
		F	0	0	0	0
		Total	35	516384	14754	100
	6	M	11	..	14754	100
		F	0	..	0	0
		Total	11	..	14754	100

Table HA1.--Contd.--29

ELECTRICAL APPARATUS

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/nw
3	1	M	8	222130	27766	193
		F	0	0	0	0
		Total	8	222130	27766	193
	2	M	70	1121000	16014	111
		F	0	0	0	0
		Total	70	1121000	16014	111
	3	M	40	452450	11311	79
		F	0	0	0	0
		Total	40	452450	11311	79
	4	M	18	129700	7206	50
		F	0	0	0	0
		Total	18	129700	7206	50
	5	M	7	130200	18600	129
		F	0	0	0	0
		Total	7	130200	18600	129
Total 1-5		M	143	2055480	14374	100
		F	0	0	0	0
		Total	143	2055480	14374	100
	6	M	19	..	14374	100
		F	1	..	0	0
		Total	20	..	14374	100

Table HA1.--Contd.--30

ELECTRICAL APPARATUS

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
4	1	M	13	731000	56231	359
		F	0	0	0	0
		Total	13	731000	56231	250
	2	M	85	1312512	15441	99
		F	4	28800	7200	106
		Total	89	1341312	22641.3176	101
	3	M	40	371500	9288	59
		F	9	59400	6600	97
		Total	49	430900	15888	71
	4	M	43	304450	7080	45
		F	0	0	0	0
		Total	43	304450	7080	32
	5	M	12	304450	25371	162
		F	0	0	0	0
		Total	12	304450	25371	113
Total 1-5		M	193	3023912	15668	100
		F	13	88200	6785	100
		Total	206	3112112	22453	100
	6	M	13	..	15668	100
		F	3	..	6785	100
		Total	16	..	22453	100

Table HA1.--Contd.--31

ELECTRICAL APPARATUS

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
5	1	M	12	150000	12500	134
		F	0	0	0	0
		Total	12	150000	12500	134
	2	M	9	114700	12744	136
		F	0	0	0	0
		Total	9	114700	12744	136
	3	M	8	70000	8750	94
		F	0	0	0	0
		Total	8	70000	8750	94
	4	M	30	100000	3333	36
		F	0	0	0	0
		Total	30	100000	3333	36
	5	M	23	331200	14400	154
		F	0	0	0	0
		Total	23	331200	14400	154
Total 1-5		M	82	765900	9340	100
		F	0	0	0	0
		Total	82	765900	9340	100
	6	M	3	..	9340	100
		F	0	..	0	0
		Total	3	..	9340	100

Table HA1.--Contd.--32

ELECTRICAL APPARATUS

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
6	1	M	9	430000	47778	240
		F	0	0	0	0
		Total	9	430000	47778	240
	2	M	30	780000	26000	131
		F	0	0	0	0
		Total	30	780000	26000	131
	3	M	15	234000	15600	78
		F	0	0	0	0
		Total	15	234000	15600	78
	4	M	40	370000	9250	47
		F	0	0	0	0
		Total	40	370000	9250	47
	5	M	9	234000	26000	131
		F	0	0	0	0
		Total	9	234000	26000	131
Total 1-5		M	103	2048000	19883	100
		F	0	0	0	0
		Total	103	2048000	19883	100
	6	M	0	..	19883	100
		F	0	..	0	0
		Total	0	..	19883	100

Table HA1.--Contd.--33

READYMADE GARMENTS

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
5	1	M	3	90000	30000	208
		F	0	0	0	0
		Total	3	90000	30000	125
	2	M	50	810000	16200	113
		F	5	81000	16200	167
		Total	55	891000	32400	135
	3	M	10	72000	7200	50
		F	15	108000	7200	74
		Total	25	180000	14400	60
	4	M	6	27000	4500	31
		F	0	0	0	0
		Total	6	27000	4500	19
	5	M	5	66000	13200	92
		F	2	24000	12000	124
		Total	7	90000	25200	105
Total 1-5		M	74	1065000	14392	100
		F	22	213000	9682	100
		Total	96	1278000	24074	100
	6	M	2	..	14392	100
		F	0	..	9682	100
		Total	2	..	13313	100

Table HA1.--Contd.--34

READYMADE GARMENTS

Size-Class	Worker Category	Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
6	1 M	23	1046220	45488	260
	F	6	242160	40360	491
	Total	29	1288380	85848	334
	2 M	38	621965	16368	93
	F	266	3662015	13767	168
	Total	304	4283980	30134	117
	3 M	27	246720	9138	52
	F	121	550600	4550	55
	Total	148	797320	13688	53
	4 M	32	104160	3255	19
	F	266	935840	3518	43
	Total	298	1040000	6773	26
	5 M	23	484660	21072	120
	F	1	30250	30250	368
	Total	24	514910	51322	200
Total 1-5	M	143	2503725	17509	100
	F	660	5420865	8213	100
	Total	803	7924590	25722	100
	6 M	7	..	17509	100
	F	1	..	8213	100
	Total	8	..	25722	100

Table HA1.--Contd.--35

READYMADE GARMENTS

Size-Class	Worker Category	Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
7	1 M	5	420000	84000	454
	F	0	0	0	0
	Total	5	420000	84000	1089
	2 M	30	432000	14400	78
	F	70	1008000	14400	231
	Total	100	1440000	28800	373
	3 M	0	0	0	0
	F	25	54500	2180	35
	Total	25	54500	2180	28
	4 M	17	87600	5153	28
	F	393	1946400	4953	80
	Total	410	2034000	10106	131
	5 M	16	319200	19950	108
	F	4	52800	13200	212
	Total	20	372000	33150	430
Total 1-5	M	68	1258800	18512	100
	F	492	3061700	6223	100
	Total	560	4320500	7715	100
	6 M	4	..	18512	100
	F	0	..	6223	100
	Total	4	..	7715	100

Table HA1.--Contd.--36

TANN.& LEATH.

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
2	1	M	0	0	0	0
		F	0	0	0	0
		Total	0	0	0	0
	2	M	5	138000	27600	102
		F	0	0	0	0
		Total	5	138000	27600	102
	3	M	1	24800	24800	91
		F	0	0	0	0
		Total	1	24800	24800	91
	4	M	0	0	0	0
		F	0	0	0	0
		Total	0	0	0	0
	5	M	0	0	0	0
		F	0	0	0	0
		Total	0	0	0	0
Total 1-5		M	6	162800	27133	100
		F	0	0	0	0
		Total	6	162800	27133	100
	6	M	5	..	27133	100
		F	0	..	0	0
		Total	5	..	27133	100

Table HA1.--Contd.--37

TANN.& LEATH.

Size-Class	Worker Category	Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
3	1 M	12	735000	61250	182
	F	0	0	0	0
	Total	12	735000	61250	182
	2 M	84	2913000	34679	103
	F	0	0	0	0
	Total	84	2913000	34679	103
	3 M	37	1231800	33292	99
	F	0	0	0	0
	Total	37	1231800	33292	99
	4 M	15	177600	11840	35
	F	0	0	0	0
	Total	15	177600	11840	35
	5 M	10	253000	25300	75
	F	0	0	0	0
	Total	10	253000	25300	75
Total 1-5	M	158	5310400	33610	100
	F	0	0	0	0
	Total	158	5310400	33610	100
	6 M	15	..	33610	100
	F	0	..	0	0
	Total	15	..	33610	100

Table HA1.--Contd.--38

TANN.& LEATH.

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
4	1	M	12	603500	50292	209
		F	0	0	0	0
		Total	12	603500	50292	209
	2	M	19	604000	31789	132
		F	0	0	0	0
		Total	19	604000	31789	132
	3	M	38	776200	20426	85
		F	0	0	0	0
		Total	38	776200	20426	85
	4	M	10	85500	8550	36
		F	0	0	0	0
		Total	10	85500	8550	36
	5	M	14	167400	11957	50
		F	0	0	0	0
		Total	14	167400	11957	50
Total 1-5		M	93	2236600	24049	100
		F	0	0	0	0
		Total	93	2236600	24049	100
	6	M	6	..	24049	100
		F	0	..	0	0
		Total	6	..	24049	100

Table HA1.--Contd.--39

TANN.& LEATH.

Size-Class	Worker Category	Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
7	1 M	50	3055000	61100	290
	F	0	0	0	0
	Total	50	3055000	61100	290
	2 M	115	2990000	26000	123
	F	0	0	0	0
	Total	115	2990000	26000	123
	3 M	300	5850000	19500	92
	F	0	0	0	0
	Total	300	5850000	19500	92
	4 M	260	3380000	13000	62
	F	0	0	0	0
	Total	260	3380000	13000	62
	5 M	117	2489500	21278	101
	F	0	0	0	0
	Total	117	2489500	21278	101
Total 1-5	M	842	17764500	21098	100
	F	0	0	0	0
	Total	842	17764500	21098	100
	6 M	10	..	21098	100
	F	0	..	0	0
	Total	10	..	21098	100

Table HA1.--Contd.--40

TEXTILE

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
3	1	M	3	47400	15800	137
		F	0	0	0	0
		Total	3	47400	15800	178
	2	M	2	13600	6800	59
		F	1	6200	6200	100
		Total	3	19800	13000	147
	3	M	0	0	0	0
		F	6	37200	6200	100
		Total	6	37200	6200	70
	4	M	1	3750	3750	33
		F	0	0	0	0
		Total	1	3750	3750	42
	5	M	1	15800	15800	137
		F	0	0	0	0
		Total	1	15800	15800	178
Total 1-5		M	7	80550	11507	100
		F	7	43400	6200	100
		Total	14	123950	8854	100
	6	M	1	..	11507	100
		F	0	..	6200	100
		Total	1	..	8854	100

Table HA1.--Contd.--41

TEXTILE

Size-Class	Worker Category	Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
4	1 M	3	73500	24500	295
	F	0	0	0	0
	Total	3	73500	24500	348
	2 M	28	220500	7875	95
	F	6	15600	2600	119
	Total	34	236100	10475	149
	3 M	3	13200	4400	53
	F	2	3800	1900	87
	Total	5	17000	6300	90
	4 M	2	3700	1850	22
	F	2	2500	1250	57
	Total	4	6200	3100	44
	5 M	2	4900	2450	29
	F	0	0	0	0
	Total	2	4900	2450	35
Total 1-5	M	38	315800	8311	100
	F	10	21900	2190	100
	Total	48	337700	7035	100
	6 M	3	..	8311	100
	F	0	..	2433	100
	Total	3	..	7185	100

Table HA1.--Contd.--42

TEXTILE

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
5	1	M	7	134334	19191	162
		F	0	0	0	0
		Total	7	134334	19191	89
	2	M	117	1349500	11534	97
		F	9	90900	10100	103
		Total	126	1440400	21634	100
	3	M	0	0	0	0
		F	0	0	0	0
		Total	0	0	0	0
	4	M	8	59710	7464	63
		F	4	36400	9100	93
		Total	12	96110	16564	77
	5	M	4	69266	17317	146
		F	0	0	0	0
		Total	4	69266	17317	80
Total 1-5		M	136	1612810	11859	100
		F	13	127300	9792	100
		Total	149	1740110	21651	100
	6	M	6	..	11859	100
		F	0	..	9792	100
		Total	6	..	21651	100

Table HA1.--Contd.--43

TEXTILE

Size-Class	Worker Category	Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
7	1 M	73	9483540	129912	535
	F	0	0	0	0
	Total	73	9483540	129912	544
	2 M	1323	28417021	21479	88
	F	50	141502	2830	31
	Total	1373	28558523	24309	102
	3 M	529	10608627	20054	83
	F	8	80858	10107	110
	Total	537	10689485	30161	126
	4 M	618	9855208	15947	66
	F	4	79576	19894	217
	Total	622	9934784	35841	150
	5 M	448	14242235	31791	131
	F	16	414659	25916	282
	Total	464	14656894	57707	242
Total 1-5	M	2991	72606631	24275	100
	F	78	716595	9187	100
	Total	3069	73323226	23892	100
	6 M	10	..	24406	100
	F	0	..	9953	100
	Total	10	..	24064	100

Table HA1.--Contd.--44

TEXTILE

Size-Class	Worker Category		Full-Time Equiv. Workers[a]	W	Wage Rate[b] w	Wage Ratio w/mw
8	1	M	591	41986877	71044	346
		F	1	41110	41110	390
		Total	592	42027987	112154	548
	2	M	14908	327076686	21940	107
		F	127	1418628	11170	106
		Total	15035	328495314	33110	162
	3	M	6171	95174785	15423	75
		F	1	13505	13505	128
		Total	6172	95188290	28928	141
	4	M	4598	64507113	14029	68
		F	116	984725	8489	81
		Total	4714	65491838	22518	110
	5	M	3460	82014524	23704	115
		F	19	325617	17138	163
		Total	3479	82340141	40841	200
Total 1-5		M	29728	610759985	20545	100
		F	264	2783585	10544	100
		Total	29992	613543570	20457	100
	6	M	28	..	20545	100
		F	0	..	10544	100
		Total	28	..	20457	100

APPENDIX HB

THE NEW TECHNOLOGY IN APPAREL INDUSTRY

A.S.M.Quasem

I. INTRODUCTION :

Till about the end of the seventies, the technology used in making apparels in Bangladesh used to be tailor-shop oriented. Organized mass production facilities were practically non-existent. There were only small and medium sized tailor-shops geared to do job orders of the customers. Consumers were so used to customized tailoring that the concept of wearing ready made garments of standard size specifications were beyond their comprehension. The initial efforts of popu)arizing ready made garments to the local consumers, thus, did not see the light of much success.

The first thought of mass producing apparels in Bangladesh emerged from the prospect of export potentials inspired by the success stories of countries like China, Hongkong, South Korea, Malaysia, Philippines and Taiwan.

II. HOW TECHNOLOGY WAS TRANSFERRED :

In the mid seventies, a handful of entrepreneurs took up the challenge to develop export oriented apparel industries in Bangladesh. They had to toil hard to remove bottlenecks of know-how transfer, streamline procedures for imports of raw materials and attract customers to this new and unknown source of supply of apparels. Factories were set up in joint venture. Desh Garments Ltd, a company established in joint venture with Daewoo of Korea sent a large number of workers, supervisors and mid level managerial staff to South Korea to master high productivity apparel manufacturing skills. When the euphoria of setting up apparel industries spread in the subsequent years, these trained personnel gradually migrated and became carriers of technology to the new manufacturing units. They acted as seeds and in turn proliferated their newly acquired

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know-how down to the operational level through development of supervisors, line chiefs and quality control inspectors.

Grounds were thus made for the foreign buyers to come and place orders here. The rest of the technology transfer took place through the technical staff of the foreign buyers who started being posted here to ensure quality control. The buyers provided designs, patterns and markers and taught local technicians in the use of folders etc to achieve high degree of productivity.

III. THE TECHNOLOGY :

The technology involved in apparel manufacturing is highly labour intensive. The technology takes advantage of human nature of achieving high productivity in repetitive jobs. Unlike in a tailor shop where all the operations involved in making an apparel is performed by one tailor, here a set of workers are put in a line and each operator is required to perform only one operation. A complete apparel comes out at the end of the line. The technology also incorporates use of some sophisticated high performance labour saving machines for making button holes, attaching buttons and also for making shirt fronts. In the plain sewing machine operations, use of folders and templates greatly enhance productivity.

It is said that an apparel manufacturer makes his profits in the cutting room. Here, a large degree of economy is achieved by maximizing utilization of fabric with the help of pre-designed markers. Markers are drawn on papers and optimum marker lengths are arrived at by trial and error by mixing various sizes of parts and changing their location in the marker itself. As a result of this, when the fabric is cut, various parts of a particular apparel may be coming from different sections of the fabric roll. Thus quality of fabric as far as the uniformity of shades of color is concerned is

of paramount importance. Sewing of all parts of an apparel from the same roll of fabric is ensured by bundling the parts roll-wise and using separate bundle numbers for each of them. One very important job of the supervisors is the ensure that the bundles don't get mixed up. If this happens, shadings in the apparel will occur. The size mix ups are also controlled by the same bundle card system.

IV. WHAT TECHNOLOGY THEY REPLACED :

The line production system of apparel manufacturing replaced the age old tailor shop technology. Use of high performance electric machines replaced old manual machines.

V. ROUGHLY BY HOW MUCH THE UNIT COST HAS BEEN REDUCED :

The unit cost of production of an apparel out of a factory using line production method is substantially low. To give an example, tailoring shops now-a-days charge about Taka 100.00 to Taka 150.00 for making a shirt, excluding the cost of fabric. Assuming that the enterprise charges 100% on account of overhead and profit, the actual cost of production will be about Taka 50.00 to Taka 75.00. Compared to this figure, the cost of making a similar shirt out of a medium sized factory will be in the region of Taka 15.00 to Taka 20.00. Moreover, the savings in fabric consumption will further result in cost savings to the extent of Taka 10.00 to Taka 12.00 (assuming fabric to be solid coloured TC). The total cost of production of a shirt using solid coloured TC fabric out of a mechanized factory will range from Taka 63.00 to Taka 68.00 compared to Taka 110.00 to Taka 135.00 from a tailoring shop (Prices are excluding import duties and taxes leviable on imported fabric).

February 23, 1990

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APPENDIX HC

SOURCES OF EQUITY CAPITAL

Table HC1.--Sources of equity by male and female entrepreneurs, HIS Factory Survey

	NO OR PERCENTAGE OF ENTREPRENEUR	
	MALE	FEMALE
AGE		
Mean	43	.
EVER CLOSED FOR		
Mean	0	.
FROM PERSONAL SAVING		
Mean	61	.
Received credit from:		
FROM COMMERCIAL BANK		
Mean	8	.
FROM GOVT DEV BANKS		
Mean	3	.
FROM KRISHI BANK		
Mean	1	.
FROM MONEY LENDERS		
Mean	1	.
FROM SUPPLIERS OF RAW MATERIALS		
Mean		.

Table HC1.--Contd.--2

INDUSTRY CODE
Electronics

	NO OR PERCENTAGE OF ENTREPRENEUR	
	MALE	FEMALE
AGE		
Mean	44	.
EVER CLOSED FOR		
Mean		.
FROM PERSONAL SAVING		
Mean	85	.
Received credit from:		
FROM COMMERCIAL BANK		
Mean	35	.
FROM GOVT DEV BANKS		
Mean		.
FROM MRIGHI BANK		
Mean		.
FROM MONEY LENDERS		
Mean		.
FROM SUPPLIERS OF RAW MATERIALS		
Mean		.

Table HC1.--Contd.--3

INDUSTRY CODE
Electrical apparatus

	NO OR PERCENTAGE OF ENTREPRENEUR	
	MALE	FEMALE
AGE		
Mean	39	.
EVER CLOSED FOR		
Mean		.
FROM PERSONAL SAVING		
Mean	75	.
Received credit from:		
FROM COMMERCIAL BANK		
Mean	3	.
FROM GOVT DEV BANKS		
Mean	3	.
FROM KRISHI BANK		
Mean		.
FROM MONEY LENDERS		
Mean		.
FROM SUPPLIERS OF RAW MATERIALS		
Mean		.

Table HC1.--Contd.--4

INDUSTRY CODE
Wooden furniture

	NO OR PERCENTAGE OF ENTREPRENEUR	
	MALE	FEMALE
AGE Mean	36	48
EVER CLOSED FOR Mean	0	.
FROM PERSONAL SAVING Mean	72	100
Received credit from:		
FROM COMMERCIAL BANK Mean	3	
FROM GOVT DEV BANKS Mean		
FROM KRISHI BANK Mean		
FROM MONEY LENDERS Mean	3	
FROM SUPPLIERS OF RAW MATERIALS Mean	3	

Table HC1.--Contd.--5

INDUSTRY CODE
Readymade garments

	NO OR PERCENTAGE OF ENTREPRENEUR	
	MALE	FEMALE
AGE		
Mean	47	.
EVER CLOSED FOR		
Mean		.
FROM PERSONAL SAVING		
Mean	71	.
Received credit from:		
FROM COMMERCIAL BANK		
Mean	71	.
FROM GOVT DEV BANKS		
Mean		.
FROM KRISHI BANK		
Mean		.
FROM MONEY LENDERS		
Mean		.
FROM SUPPLIERS OF RAW MATERIALS		
Mean		.

Table HC1.--Contd.--6

INDUSTRY CODE
Tanning & Leather

	NO OR PERCENTAGE OF ENTREPRENEUR	
	MALE	FEMALE
AGE		
Mean	47	.
EVER CLOSED FOR		
Mean		.
FROM PERSONAL SAVING		
Mean	73	.
Received credit from:		
FROM COMMERCIAL BANK		
Mean	3	.
FROM GOVT DEV BANKS		
Mean	[illegible]	.
FROM KRISHI BANK		
Mean	[illegible]	.
FROM MONEY LENDERS		
Mean		.
FROM SUPPLIERS OF RAW MATERIALS		
Mean	2	.

Table HC1.--Contd.--7

INDUSTRY CODE
Fish & sea food

	NO OR PERCENTAGE OF ENTREPRENEUR	
	MALE	FEMALE
AGE Mean	43	.
EVER CLOSED FOR Mean		.
FROM PERSONAL SAVING Mean	40	.
FROM COMMERCIAL BANK Mean	10	.
Received credit from: FROM GOVT DEV BANKS Mean		.
FROM KRISHI BANK Mean	20	.
FROM MONEY LENDERS Mean		.
FROM SUPPLIERS OF RAW MATERIALS Mean		.

Table HC1.--Contd.--8

INDUSTRY CODE
Light Mech. Engg

	NO OR PERCENTAGE OF ENTREPRENEUR	
	MALE	FEMALE
AGE Mean	42	50
EVER CLOSED FOR Mean	0	
FROM PERSONAL SAVING Mean	69	
Received credit from:		
FROM COMMERCIAL BANK Mean	2	
FROM GOVT DEV BANKS Mean		
FROM KRISHI BANK Mean	1	
FROM MONEY LENDERS Mean		
FROM SUPPLIERS OF RAW MATERIALS Mean		

Table HC1.--Contd.--9

INDUSTRY CODE
Jute

	NO OR PERCENTAGE OF ENTREPRENEUR	
	MALE	FEMALE
AGE		
Mean	64	.
EVER CLOSED FOR		
Mean		.
FROM PERSONAL SAVING		
Mean	23	.
Received credit from:		
FROM COMMERCIAL BANK		
Mean	40	.
FROM GOVT DEV BANKS		
Mean	41	.
FROM KRISHI BANK		
Mean		.
FROM MONEY LENDERS		
Mean		.
FROM SUPPLIERS OF RAW MATERIALS		
Mean	1	.

Table HC1.--Contd.--10

INDUSTRY CODE
Cotton Textiles

	NO OR PERCENTAGE OF ENTREPRENEUR	
	MALE	FEMALE
AGE		
Mean	43	.
EVER CLOSED FOR		
Mean		.
FROM PERSONAL SAVING		
Mean	53	.
Received credit from:		
FROM COMMERCIAL BANK		
Mean	20	.
FROM GOVT DEV BANKS		
Mean	60	.
FROM KRISHI BANK		
Mean		.
FROM MONEY LENDERS		
Mean		.
FROM SUPPLIERS OF RAW MATERIALS		
Mean		.

```
Process if (b eq 8).
Reg var=lnq lnVA lnML2 lnML3 lnML lnFL2 lnFL3 lnFL lnKK
 lnM lnWK Dum2 Dum1 Dum3
 /dep=lnVA
 /method=enter lnML LnFL lnKK Dum1
 /Missing=Means
 /dep=lnQ
 /method=enter lnML lnFL lnKK Dum1
 /Missing=Means.
Light Mech. Engg. Industry   4/18/90
```

* * * * M U L T I P L E R E G R E S S I O N * * * *

Mean Substituted for Missing Data

Equation Number 1 Dependent Variable.. LNVA Value added

Beginning Block Number 1. Method: Enter LNML LNFL
LNKK DUM1

Variable(s) Entered on Step Number

1..	DUM1	Dummy for Fem. Entr
2..	LNML	All Male Labor
3..	LNFL	All Female Labor
4..	LNKK	Capital Stock

Multiple R	.82790
R Square	.68541
Adjusted R Square	.67078
Standard Error	.92593

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	4	160.64652	40.16163
Residual	86	73.73204	.85735

F = 46.84395 Signif F = .0000

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
DUM1	.84478	.66683	.07716	1.267	.2086
LNML	.70668	.15389	.47485	4.592	.0000
LNFL	.69675	.39568	.10707	1.761	.0818
LNKK	.35027	.09653	.37501	3.629	.0005
(Constant)	6.30677	1.03093		6.118	.0000

Equation Number 2 Dependent Variable.. LNQ Output

Beginning Block Number 1. Method: Enter LNML LNFL
LNKK DUM1

Variable(s) Entered on Step Number	1..	DUM1	Dummy for Fem. Entr
	2..	LNML	All Male Labor
	3..	LNFL	All Female Labor
	4..	LNKK	Capital Stock

Multiple R	.86595
R Square	.74987
Adjusted R Square	.73823
Standard Error	.79580

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	4	163.27561	40.81890
Residual	86	54.46399	.63330

F = 64.45407 Signif F = .0000

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
DUM1	.57483	.57312	.05448	1.003	.3187
LNML	.70914	.13226	.49438	5.362	.0000
LNFL	.69873	.34007	.11140	2.055	.0429
LNKK	.35691	.08296	.39645	4.302	.0000
(Constant)	7.41573	.88604		8.370	.0000

```
Process if (b eq 9).
Reg var=lnq lnVA lnML2 lnML3 lnML lnFL2 lnFL3 lnFL lnKK
 lnM lnWK Dum2 Dum1 Dum3
 /dep=lnVA
 /method=enter lnML LnFL lnKK Dum2
 /Missing=Means
 /dep=lnQ
 /method=enter lnML lnFL lnKK Dum2
 /Missing=Means.
Jute Industry   4/18/90
```

```
* * * *   M U L T I P L E   R E G R E S S I O N   * * * *

Mean Substituted for Missing Data

Equation Number 1    Dependent Variable..   LNVA   Value added

Beginning Block Number  1.  Method:  Enter      LNML      LNFL
LNKK      DUM2


Variable(s) Entered on Step Number  1..    DUM2      Dummy for public se
                                    2..    LNKK      Capital Stock
                                    3..    LNFL      All Female Labor
                                    4..    LNML      All Male Labor


Multiple R            .78364
R Square              .61410
Adjusted R Square     .54978
Standard Error        .78559

Analysis of Variance
                     DF       Sum of Squares       Mean Square
Regression            4             23.57004           5.89251
Residual             24             14.81163            .61715

F =        9.54792        Signif F =  .0001
------------------ Variables in the Equation ------------------

Variable                B         SE B        Beta          T  Sig T

DUM2                .40197       .31177      .17208      1.289  .2096
LNKK                .11618       .19154      .08263       .607  .5499
LNFL                .17926       .21864      .11049       .820  .4204
LNML                .86270       .19204      .65122      4.492  .0002
(Constant)         8.45886      3.23870                  2.612  .0153
```

Equation Number 2 Dependent Variable.. LNQ Output

Beginning Block Number 1. Method: Enter LNML LNFL
LNKK DUM2

Variable(s) Entered on Step Number

1..	DUM2	Dummy for public se
2..	LNKK	Capital Stock
3..	LNFL	All Female Labor
4..	LNML	All Male Labor

Multiple R	.93100
R Square	.86676
Adjusted R Square	.84456
Standard Error	.30851

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression		14.85994	3.71499
Residual	24	2.28422	.09518

F = 39.03288 Signif F = .0000

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
DUM2	.15671	.12243	.10038	1.280	.2128
LNKK	4.773211E-03	.07522	5.0797E-03	.063	.9499
LNFL	.09719	.08586	.08963	1.132	.2688
LNML	.76841	.07542	.86789	10.189	.0000
(Constant)	12.65968	1.27186		9.954	.0000

```
Process if (b eq 10).
Reg var=lnq lnVA lnML2 lnML3 lnML lnFL2 lnFL3 lnFL lnKK
 lnM lnWK Dum2 Dum1 Dum3
 /dep=lnVA
 /method=enter lnML LnFL lnKK Dum2
 /Missing=Means
 /dep=lnQ
 /method=enter lnML lnFL lnKK Dum2
 /Missing=Means.
Cotton Tex. Industry   4/18/90
```

* * * * M U L T I P L E R E G R E S S I O N * * * *

Mean Substituted for Missing Data

Equation Number 1 Dependent Variable.. LNVA Value added

Beginning Block Number 1. Method: Enter LNML LNFL
LNKK DUM2

Variable(s) Entered on Step Number

1..	DUM2	Dummy for public [illegible]
2..	LNFL	All Female Labor
3..	LNKK	Capital Stock
4..	LNML	All Male Labor

Multiple R	.79358
R Square	.62977
Adjusted R Square	.56806
Standard Error	1.09564

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	4	49.00574	12.25144
Residual	24	28.81015	1.20042

F = 10.20593 Signif F = .0001

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
DUM2	.24568	.45403	.07459	.541	.5934
LNFL	.17280	.13453	.16167	1.284	.2112
LNKK	.09007	.29992	.07934	.300	.7665
LNML	.68434	.27296	.68299	2.507	.0193
(Constant)	9.94739	3.76358		2.643	.0142

Equation Number 2 Dependent Variable.. LNQ Output

Beginning Block Number 1. Method: Enter LNML LNFL
LNKK DUM2

Variable(s) Entered on Step Number

1..	DUM2	Dummy for public se
2..	LNFL	All Female Labor
3..	LNKK	Capital Stock
4..	LNML	All Male Labor

Multiple R	.93062
R Square	.86605
Adjusted R Square	.84372
Standard Error	.63364

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	4	62.29839	15.57460
Residual	24	9.63594	.40150

F = 38.79128 Signif F = .0000

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
DUM2	-.03465	.26258	-.01094	-.132	.8961
LNFL	.09305	.07780	.09055	1.196	.2434
LNKK	-9.70724E-03	.17345	-8.893E-03	-.056	.9558
LNML	.91153	.15786	.94620	5.774	.0000
(Constant)	12.23993	2.17658		5.623	.0000

```
Process if (b eq 11).
Reg var=lnq lnVA lnML2 lnML3 lnML lnFL2 lnFL3 lnFL lnKK
 lnM lnWK Dum2 Dum1 Dum3
 /dep=lnVA
 /method=enter lnML LnFL lnKK Dum1
 /Missing=Means
 /dep=lnQ
 /method=enter lnML lnFL lnKK Dum1
 /Missing=Means.
Handloom Industry    4/18/90
```

* * * * M U L T I P L E R E G R E S S I O N * * * *

Mean Substituted for Missing Data

Equation Number 1 Dependent Variable.. LNVA Value added

The following variables are constants or have missing correlations:

DUM1

They will be deleted from the analysis.

Beginning Block Number 1. Method: Enter LNML LNFL LNKK DUM1

Variable(s) Entered on Step Number			
	1..	LNKK	Capital Stock
	2..	LNFL	All Female Labor
	3..	LNML	All Male Labor

Multiple R	.62610
R Square	.39201
Adjusted R Square	.35624
Standard Error	.84044

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	3	23.22627	7.74209
Residual	51	36.02335	.70634

F = 10.96085 Signif F = .0000

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
LNKK	.24580	.15590	.24562	1.577	.1211
LNFL	.16010	.11631	.15688	1.377	.1747
LNML	.58168	.22348	.40553	2.603	.0121
(Constant)	7.60826	1.55049		4.907	.0000

APPENDIX HD

Production Functions with male and female labor and capital

```
Reg var=lnq lnVA lnML2 lnML3 lnML lnFL2 lnFL3 lnFL lnKK
The raw data or transformation pass is proceeding
     34 cases are written to the uncompressed active file.
 lnM lnWK Dum1 Dum3
 /dep=lnVA
 /method=enter lnML LnFL lnKK Dum3
 /Missing=Means
 /dep=lnQ
 /method=enter lnML lnFL lnKK Dum3
 /Missing=Means.
Readymade garments    4/18/90

* * * *  M U L T I P L E   R E G R E S S I O N   * * * *

Mean Substituted for Missing Data

Equation Number 1    Dependent Variable..   LNVA   Value added

The following variables are constants or have missing correlations:

  DUM3

They will be deleted from the analysis.

Beginning Block Number  1.  Method:  Enter      LNML      LNFL      LNKK
DUM3


Variable(s) Entered on Step Number  1..   LNKK     Capital Stock
                                    2..   LNML     All Male Labor
                                    3..   LNFL     All Female Labor


Multiple R            .89658
R Square              .80385
Adjusted R Square     .78423
Standard Error        .97657

Analysis of Variance
                     DF       Sum of Squares       Mean Square
Regression            3            117.24909          39.08303
Residual             30             28.61077            .95369

F =       40.98076        Signif F =  .0000
```

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
LNKK	.07624	.32940	.06209	.231	.8185
LNML	.66226	.26745	.37603	2.476	.0191
LNFL	.55173	.20944	.53743	2.634	.0132
(Constant)	9.64161	3.65451		2.638	.0131

Equation Number 2 Dependent Variable.. LNQ Output

The following variables are constants or have missing correlations:

DUM3

They will be deleted from the analysis.

Beginning Block Number 1. Method: Enter LNML LNFL
LNKK DUM3

Variable(s) Entered on Step Number 1.. LNKK Capital Stock
2.. LNML All Male Labor
3.. LNFL All Female Labor

Multiple R .94336
R Square .88994
Adjusted R Square .87893
Standard Error .72523
Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	3	127.58210	42.52737
Residual	30	15.77893	.52596

F = 80.85597 Signif F = .0000

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
LNKK	.59706	.24462	.49049	2.441	.0208
LNML	.26313	.19862	.15070	1.325	.1952
LNFL	.35620	.15553	.34998	2.290	.0292
(Constant)	5.03058	2.71396		1.854	.0737

Var	Mean	N	Name
LNFL	1.27	34	All Female Labor
LNML	1.93	34	All Male Labor
LNKK	12.82	34	Capital Stock
DUM3	.00	34	Dummy for Loc Garments

```
Process if (b eq 1).
Reg var=lnq lnVA lnML2 lnML3 lnML lnFL2 lnFL3 lnFL lnKK
 lnM lnWK Dum1 Dum3
 /dep=lnVA
 /method=enter lnML LnFL lnKK Dum1
 /Missing=Means
 /dep=lnQ
 /method=enter lnML lnFL lnKK Dum1
 /Missing=Means.
Agrobased Industry   4/18/90
```

* * * * M U L T I P L E R E G R E S S I O N * * * *

Mean Substituted for Missing Data

Equation Number 1 Dependent Variable.. LNVA Value added

The following variables are constants or have missing correlations:

DUM1

They will be deleted from the analysis.

Beginning Block Number 1. Method: Enter LNML LNFL LNKK DUM1

Variable(s) Entered on Step Number	1..	LNKK	Capital Stock
	2..	LNFL	All Female Labor
	3..	LNML	All Male Labor

Multiple R	.68501
R Square	.46924
Adjusted R Square	.44713
Standard Error	.89740

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	3	51.26246	17.08749
Residual	72	57.98300	.80532

F = 21.21827 Signif F = .0000

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
LNKK	.24692	.09838	.26169	2.510	.0143
LNFL	.07109	.16232	.03811	.438	.6627
LNML	.74121	.15266	.50087	4.855	.0000
(Constant)	7.64354	1.18242		6.464	.0000

Equation Number 2 Dependent Variable.. LNQ Output

The following variables are constants or have missing correlations:

DUM1

They will be deleted from the analysis.

Beginning Block Number 1. Method: Enter LNML LNFL
LNKK DUM1

Variable(s) Entered on Step Number 1.. LNKK Capital Stock
2.. LNFL All Female Labor
3.. LNML All Male Labor

Multiple R	.66709
R Square	.44502
Adjusted R Square	.42189
Standard Error	.91792

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	3	48.64518	16.21506
Residual	72	60.66608	.84258

F = 19.24443 Signif F = .0000

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
LNKK	.33878	.10063	.35893	3.367	.0012
LNFL	.29161	.16603	.15627	1.756	.0833
LNML	.53331	.15615	.36027	3.415	.0011
(Constant)	8.73033	1.20947		7.218	.0000

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```
Process if (b eq 2).
Reg var=lnq lnVA lnML2 lnML3 lnML lnFL2 lnFL3 lnFL lnKK
The raw data or transformation pass is proceeding
    422 cases are written to the uncompressed active file.
 lnM lnWK Dum1 Dum2 Dum3
 /dep=lnVA
 /method=enter lnML LnFL lnKK Dum2
 /Missing=Means
 /dep=lnQ
 /method=enter lnML lnFL lnKK Dum2
 /Missing=Means.
Electronics

* * * *   M U L T I P L E   R E G R E S S I O N   * * * *

Mean Substituted for Missing Data

Equation Number 1    Dependent Variable..   LNVA   Value added

Beginning Block Number  1.  Method:  Enter      LNML      LNFL
LNKK      DUM2


Variable(s) Entered on Step Number  1..    DUM2      Dummy for public se
                                    2..    LNKK      Capital Stock
                                    3..    LNML      All Male Labor
                                    4..    LNFL      All Female Labor


Multiple R            .76262
R Square              .58159
Adjusted R Square     .16319
Standard Error       1.08552


Analysis of Variance
                     DF       Sum of Squares       Mean Square
Regression            4             6.55173           1.63793
Residual              4             4.71341           1.17835

F =        1.39002        Signif F =  .3787
------------------ Variables in the Equation ------------------

Variable                B         SE B        Beta          T  Sig T

DUM2             -1.38630      1.34577     -.38942     -1.030  .3612
LNKK               .59038       .28045      .73108      2.105  .1031
LNML               .45064       .63324      .24496       .712  .5160
LNFL               .30690       .35542      .31475       .863  .4366
(Constant)        4.05285      4.50189                   .900  .4189
```


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Equation Number 2 Dependent Variable.. LNQ Output

Beginning Block Number 1. Method: Enter LNML LNFL
LNKK DUM2

Variable(s) Entered on Step Number

1..	DUM2	Dummy for public se
2..	LNKK	Capital Stock
3..	LNML	All Male Labor
4..	LNFL	All Female Labor

Multiple R	.77706
R Square	.60382
Adjusted R Square	.20764
Standard Error	1.24521

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	4	9.45277	2.36319
Residual	4	6.20215	1.55054

F = 1.52411 Signif F = .3465

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
DUM2	-.43629	1.54374	-.10396	-.283	.7915
LNKK	.30051	.32171	.31567	.934	.4031
LNML	1.21818	.72640	.56171	1.677	.1688
LNFL	.57449	.40771	.49980	1.409	.2316
(Constant)	6.72406	5.16415		1.302	.2628

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```
Process if (b eq 3).
Reg var=lnq lnVA lnML2 lnML3 lnML lnFL2 lnFL3 lnFL lnKK
 lnM lnWK Dum2 Dum1 Dum3
 /dep=lnVA
 /method=enter lnML LnFL lnKK Dum2
 /Missing=Means
 /dep=lnQ
 /method=enter lnML lnFL lnKK Dum2
 /Missing=Means.
```

Electrical apparatus

* * * * M U L T I P L E R E G R E S S I O N * * * *

Mean Substituted for Missing Data

Equation Number 1 Dependent Variable.. LNVA Value added

The following variables are constants or have missing correlations:

DUM2

They will be deleted from the analysis.

Beginning Block Number 1. Method: Enter LNML LNFL LNKK DUM2

Variable(s) Entered on Step Number	1..	LNKK	Capital Stock
	2..	LNFL	All Female Labor
	3..	LNML	All Male Labor

Multiple R	.84477
R Square	.71363
Adjusted R Square	.67927
Standard Error	.63452

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	3	25.08259	8.36086
Residual	25	10.06528	.40261

F = 20.76660 Signif F = .0000

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
LNKK	.69018	.15763	.82303	4.379	.0002
LNFL	.08936	.31764	.03799	.281	.7808
LNML	.02789	.23438	.02361	.119	.9062
(Constant)	3.49941	1.73953		2.012	.0551

Equation Number 2 Dependent Variable.. LNQ Output

The following variables are constants or have missing correlations:

DUM2

They will be deleted from the analysis.

Beginning Block Number 1. Method: Enter LNML LNFL
LNKK DUM2

Variable(s) Entered on Step Number 1.. LNKK Capital Stock
2.. LNFL All Female Labor
3.. LNML All Male Labor

Multiple R	.74912
R Square	.56118
Adjusted R Square	.50853
Standard Error	.73165

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	3	17.11453	5.70484
Residual	25	13.38264	.53531

F = 10.65717 Signif F = .0001

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
LNKK	.61178	.18176	.78318	3.366	.0025
LNFL	-.26014	.36627	-.11872	-.710	.4841
LNML	-.04400	.27026	-.03998	-.163	.8720
(Constant)	6.16615	2.00581		3.074	.0050

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```
Process if (b eq 4).
Reg var=lnq lnVA lnML2 lnML3 lnML lnFL2 lnFL3 lnFL lnKK
 lnM lnWK Dum2 Dum1 Dum3
 /dep=lnVA
 /method=enter lnML LnFL lnKK Dum1
 /Missing=Means
 /dep=lnQ
 /method=enter lnML lnFL lnKK Dum1
 /Missing=Means.
```

Wooden furniture

```
* * * *   M U L T I P L E   R E G R E S S I O N   * * * *

Mean Substituted for Missing Data

Equation Number 1    Dependent Variable..   LNVA   Value added

The following variables are constants or have missing correlations:

  LNFL

They will be deleted from the analysis.

Beginning Block Number  1.  Method:  Enter      LNML      LNFL
LNKK      DUM1


Variable(s) Entered on Step Number  1..    DUM1      Dummy for Fem. Entr
                                    2..    LNML      All Male Labor
                                    3..    LNKK      Capital Stock


Multiple R            .84111
R Square              .70746
Adjusted R Square     .68308
Standard Error        .77958

Analysis of Variance
                     DF       Sum of Squares       Mean Square
Regression            3            52.91102          17.63701
Residual             36            21.87903           .60775

F =       29.02012        Signif F =  .0000
```


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---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
DUM1	1.33842	.83295	.15282	1.607	.1168
LNML	.70709	.14397	.55444	4.911	.0000
LNKK	.32040	.11717	.31194	2.734	.0096
(Constant)	6.99199	1.32932		5.260	.0000

Equation Number 2 Dependent Variable.. LNQ Output

The following variables are constants or have missing correlations:

LNFL

They will be deleted from the analysis.

Beginning Block Number 1. Method: Enter LNML LNFL
LNKK DUM1

Variable(s) Entered on Step Number 1.. DUM1 Dummy for Fem. Entr
2.. LNML All Male Labor
3.. LNKK Capital Stock

Multiple R	.86862
R Square	.75451
Adjusted R Square	.73405
Standard Error	.72294

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	3	57.82799	19.27600
Residual	36	18.81532	.52265

F = 36.88142 Signif F = .0000

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
DUM1	.45531	.77244	.05135	.589	.5592
LNML	.54975	.13351	.42583	4.118	.0002
LNKK	.54660	.10866	.52570	5.030	.0000
(Constant)	5.53517	1.23274		4.490	.0001

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```
Process if (b eq 6).
Reg var=lnq lnVA lnML2 lnML3 lnML lnFL2 lnFL3 lnFL lnKK
 lnM lnWK Dum2 Dum1 Dum3
 /dep=lnVA
 /method=enter lnML LnFL lnKK Dum2
 /Missing=Means
 /dep=lnQ
 /method=enter lnML lnFL lnKK Dum2
 /Missing=Means.
Tanning and leather    4/18/90
```

* * * * M U L T I P L E R E G R E S S I O N * * * *

Mean Substituted for Missing Data

Equation Number 1 Dependent Variable.. LNVA Value added

The following variables are constants or have missing correlations:

LNFL DUM2

They will be deleted from the analysis.

Beginning Block Number 1. Method: Enter LNML LNFL
LNKK DUM2

Variable(s) Entered on Step Number 1.. LNKK Capital Stock
2.. LNML All Male Labor

Multiple R	.84383
R Square	.71204
Adjusted R Square	.67817
Standard Error	1.23091

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	2	63.69106	31.84553
Residual	17	25.75735	1.51514

F = 21.01823 Signif F = .0000

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
LNKK	.88982	.15681	.87921	5.675	.0000
LNML	-.12744	.28669	-.06887	-.445	.6623
(Constant)	1.51987	2.14102		.710	.4874

Equation Number 2 Dependent Variable.. LNQ Output

The following variables are constants or have missing correlations:

LNFL DUM2

They will be deleted from the analysis.

Beginning Block Number 1. Method: Enter LNML LNFL
LNKK DUM2

Variable(s) Entered on Step Number 1.. LNKK Capital Stock
2.. LNML All Male Labor

Multiple R	.93286
R Square	.87023
Adjusted R Square	.85496
Standard Error	.82595

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	2	77.76907	38.88453
Residual	17	11.59732	.68220

F = 56.99913 Signif F = .0000

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
LNKK	.99582	.10522	.98439	9.464	.0000
LNML	-.18919	.19237	-.10229	-.983	.3392
(Constant)	1.64216	1.43664		1.143	.2689

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```
Process if (b eq 7).
Reg var=lnq lnVA lnML2 lnML3 lnML lnFL2 lnFL3 lnFL lnKK
 lnM lnWK Dum2 Dum1 Dum3
 /dep=lnVA
 /method=enter lnML LnFL lnKK Dum1
 /Missing=Means
 /dep=lnQ
 /method=enter lnML lnFL lnKK Dum1
 /Missing=Means.
Fish and Sea food   4/18/90
```

* * * * M U L T I P L E R E G R E S S I O N * * * *

Mean Substituted for Missing Data

Equation Number 1 Dependent Variable.. LNVA Value added

The following variables are constants or have missing correlations:

DUM1

They will be deleted from the analysis.

Beginning Block Number 1. Method: Enter LNML LNFL LNKK DUM1

Variable(s) Entered on Step Number			
	1..	LNKK	Capital Stock
	2..	LNFL	All Female Labor
	3..	LNML	All Male Labor

Multiple R	.76887
R Square	.59117
Adjusted R Square	.38675
Standard Error	1.00974

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	3	8.84572	2.94857
Residual	6	6.11742	1.01957

F = 2.89198 Signif F = .1243

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
LNKK	.57926	.40771	.67959	1.421	.2052
LNFL	.26490	.15979	.53402	1.658	.1484
LNML	-.53763	.58991	-.43591	-.911	.3972
(Constant)	6.59433	5.31618		1.240	.2611

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Equation Number 2 Dependent Variable.. LNQ Output

The following variables are constants or have missing correlations:

DUM1

They will be deleted from the analysis.

Beginning Block Number 1. Method: Enter LNML LNFL
LNKK DUM1

Variable(s) Entered on Step Number			
	1..	LNKK	Capital Stock
	2..	LNFL	All Female Labor
	3..	LNML	All Male Labor

Multiple R	.91155
R Square	.83093
Adjusted R Square	.74639
Standard Error	1.23037

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	3	44.63981	14.87994
Residual	6	9.08293	1.51382

F = 9.82939 Signif F = .0099

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
LNKK	.79343	.49679	.49127	1.597	.1614
LNFL	.08920	.19470	.09490	.458	.6630
LNML	.93418	.71882	.39974	1.300	.2414
(Constant)	.14003	6.47781		.022	.9835

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Equation Number 2 Dependent Variable.. LNQ Output

The following variables are constants or have missing correlations:

DUM1

They will be deleted from the analysis.

Beginning Block Number 1. Method: Enter LNML LNFL
LNKK DUM1

Variable(s) Entered on Step Number

1..	LNKK	Capital Stock
2..	LNFL	All Female Labor
3..	LNML	All Male Labor

Multiple R	.75566
R Square	.57102
Adjusted R Square	.54578
Standard Error	.63802

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	3	27.63438	9.21146
Residual	51	20.76057	.40707

F = 22.62869 Signif F = .0000

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
LNKK	.24459	.11835	.27043	2.067	.0439
LNFL	6.639944E-03	.08829	7.1993E-03	.075	.9403
LNML	.70465	.16965	.54356	4.153	.0001
(Constant)	8.90353	1.17706		7.564	.0000