5

The Rural Weaving Industry and Social Stratification

In this chapter, an investigation will be made of the background to the continuation of small business management in relation to the landownership and non-weaving occupations of weavers and textile traders. Then the discussion will turn to the reasons why small-scale weavers have not been transformed into wage laborers, or rather why petty commodity production has not changed over to factory production.

Side Occupations and Social Stratifications

Landownership and Side Occupations among Weavers

Table 5–1 shows the various occupations engaged in by the heads of the seventyone households surveyed during the year previous to the time at which each household was surveyed (during September and October of 1986) and statistical data on occupational mixes and landownership in the case of agriculture. The occupations have been ranked—primary, second, third, fourth—according to the length of time the household heads spent working at them. The landownership figures have been averaged for household groups with the same occupational mix and for household groups with the same primary occupation. Other than the twenty-one households in the table with weaving as their occupations, an additional three households were weaving as the occupation engaged in non-household-head family members (including weaving done by married sons of weavers), bringing the weaver households in the sample to twenty-four.

The table also shows that both land owned and land cultivated by weavers (fifteen households) was extremely small in area, coming to averages of 0.02 ha and 0.03 ha, respectively. This low level of landownership was rivaled only by those households engaged in *becak* (pedicab) driving and agricultural wage labor.

Primary	Second	Third	Fourth	No. of House-	Average per Occupation ^a		Average per Primary Occu- pation Group	
Occu- pation	Occu- pation	Occu- pation	Occu- pation	House- holds	Land Owned (Ha)	Land Culti- vated (Ha)	Land Owned (Ha)	Land Culti- vated (Ha)
Weaving	_	_	_	4	0	0		
Weaving	Owner farming			3	0.05	0.09		
Weaving	Agricultural wage labor	—		3	0	0		
Weaving	Becak driving		—	1	0	0		
Weaving	Becak driving	Agricultural wage labor	—	1	0	0		
Weaving	Tenant farming	Agricultural wage labor		1	0	0.18		
Weaving	Agricultural	Owner farming wage labor		1	0.08	0.08		
Weaving	Village secutiry official (HANSIP)	—	—	1	0	0	0.02	0.03
Owner farming	Weaving	_	—	1	0.53	0.53		
Owner farming	Weaving	Agricultural wage labor	—	1	0.11	0.11		
Owner farming	Agricultural wage labor	—	—	1	0.32	0.32		
Owner fish breeding	Government pension	—	—	1	0.16	0.16	0.28	0.28
Owner/tenant farming	Owner fish breeding	—	—	1	0.54	0.73		
Owner/tenant farming	Owner/tenant fish breeding	Village civil service	—	1	1.52	2.40		
Owner/tenant farming	Agricultural wage labor	Weaving	—	1	0.24	0.30		
Owner/tenant farming	Agricultural wage labor	Headman of RT	Slaugh -tering	1	0.24	0.13	0.64	0.89
Tenant farming	—	—	_	2	0	0.16		
Tenant farming	Agricultural wage labor			1	0	0.96		
Tenant farming	Koran recital instructor	—	—	1	0	0.10	0	0.34
Textile trading				4	0.01	0.01		
Textile trading	Owner farming	—	_	4	0.24	0.24		
Textile trading	Owner/tenant farming	_		1	0.34	0.48		
Textile trading	Agricultural wage labor	—	—	1	0	0	0.13	0.14
Agricultural wage labor	—	—	—	2	0	0		
Agricultural wage labor	Owner farming	—	—	3	0.13	0.08		
Agricultural wage labor	Tenant farming	_	—	2	0.05	0.34		

TABLE 5-1

PRIMARY AND SECONDARY OCCUPATIONS OF HOUSEHOLDS HEADS AND LANDOWNERSHIP, 1985–86

Primary	Second	Third	Fourth	No. of	Average per Occupation ^a		Average per Primary Occu- pation Group	
Occu- pation	Occu- pation	u- Occu- Occu- H on pation pation h		House- holds	Land Owned (Ha)	Land Culti- vated (Ha)	Land Owned (Ha)	Land Culti- vated (Ha)
Agricultural wage labor	Pirn winding (homework)	Rice flour mill	 rk)	1	0	0		
Agricultural wage labor	Domestic wage labor	Pirn winding (homework)		1	0	0	0.05	0.10
Becak driving	Weaving	Agricultural wage labor	—	2	0	0		
Becak driving	Weaving	Agricultural wage labor	Weaving wage labo	1 or	0	0		
Becak driving	Agricultural wage labor	Owner farming	g —	1	0.14	0.14		
Becak driving	Noodle-stand owner	Agricultural wage labor	—	1	0	0	0.03	0.03
Daily-goods store	Owner farming	—	—	1	0.72	0.32		
Fry broker Noodle-stand	Owner farming Agricultural wage labor		_	1 1	0.32 0	0.32 0		
Soft-drinks stand owner	Owner farming	_	_	1	0.22	0.22		
Auto-parts stand owner	—	—	—	1	0	0	0.25	0.17
Textile-factory worker	Yarn trader	—		1	0	0		
Weaving-factory worker	Owner farming	_	—	1	0.11	0.11		
Government wor	ker —		_	1	0	0		
Bandung city guardsman	Night watchman of factory	—	—	1	0	0		
Gas station attendant	Owner fish breeding	Owner farming	g —	1	0.08	0.08	0.04	0.04
Manager of in- formal coope- ratives	Apparel business manager	—	—	1	6.69	0		
HANSIP	Agricultural wage labor	Construction wage labor	Gauze pac aging (ho	k- 1 mework)	0	0		
Shaman	Sewing (homework)) —		1	0	0.11		
Retired soldier	Village civil service	—	—	1	0	0		
Pirn winding (homework)	—	—	—	1	0.06	0		
Sewing (homewo	ork) —			1	0	0		
Unemployed (wi	dow) —	_		4	0	0		
Total househo	lde			71				
Overall average	res			/1	0.20	0.14	0.20	0.14
o . eran u , erag	, - ··				J U	U. I. I.	0.20	U. 4 I

TABLE 5-1 (Continued)

Source: Field survey by the author. ^a This average is for households whose heads' combination of occupation is identical.

RURAL WEAVING INDUSTRY

As to the background to such a scarcity of land owned by so many households engaged in weaving, we should cite the fact that even though the kampong surveyed is not an urban area, its population density is very high. The number of households owning no agricultural land (44, or 62 per cent of the sample) and the number of households that do not cultivate the land (39, or 55 per cent of the sample) are extremely large; and as Table 5–1 clearly shows, the scale of landownership and cultivation even for the households which own or cultivate agricultural land is very small. It is no wonder that most of the peasants in the survey were part-time (second, third, fourth occupation) cultivators. The surveyed kampong is therefore a common case of the features related in Chapter 2 characterizing the Priangan plateau basin region, in which landless households account for from 25 per cent to 60 per cent of the total households. It is the majority of these landless households that no doubt forms the off-farm sector of the region, and weaving and its related work dominate the occupations and business opportunities of the off-farm sector in the survey area.

With respect to the cloth-weaving industry of small self-employed businesses run with family labor, as seen in the preceding chapter, supporting the livelihood of weavers plagued by low incomes, insufficient gross margins, and placed in constant danger of losing their working capital are such part-time and secondary occupations as agriculture, weaving, and the urban informal sector.

Of the twenty-four weavers in our sample, there were only two households that could make ends meets through either weaving only or weaving plus closely related occupations like warp-pirn winding. On the other hand, weaving households whose members were also engaged in farming numbered ten: six of which were owner operators, three of which were tenants, and one of which did a little of both. We should mention here, however, that with the exception of the two households engaged primarily in farming (one owner, one owner-tenant), cultivation was done on very small-scale plots of less than 0.02 ha, and 0.01 ha or less in most cases.

Six of the twenty-four weaver households in our sample had members occupied as becak drivers on the side. Usually it was the male household head who would travel to Bandung on Saturdays and cycle a cab during the afternoons or from evening until morning each day, then return to the kampong on Tuesday or Wednesday morning. Villagers can borrow becaks from a local Sundanese owner from Tasikmalaya for Rp. 500 per day. Villagers first got involved in becak driving during the weaving crisis of 1973-74 (see Chapter 3); however, even after the industry got back on its feet, weavers continued their part-time becak occupations, which at the time of our survey were providing six weaver households with average daily gross incomes of Rp. 3,900 during the month prior to the survey. Three or four days of becak driving per week can bring to a kampong household a net income (after vehicle rental, food and travel expenses are deducted) of about Rp. 5,900. In comparison, it takes about seven weeks to weave one warp-beam, which helps produce a weaving income ranging between Rp. 27,000 and Rp. 32,000, while seven weeks of becak income will bring in about Rp. 40,000. Sources of income from such side occupations as becak driving subsidize the working capital that is in danger of disappearing due to occasion mentioned in the previous chapter. The function of side occupations in the

weaver household was evident during the rise in the cost of raw materials relative to product prices that occurred after the devaluation of the rupiah in September of 1986.¹ At that time we observed a significant increase in weavers departing for Bandung to pedal *becaks* (*becak* drivers are exposed to traffic accidents and rain which are dangerous to their health and the occupation is being placed under more and more strict government restrictions).

In addition, there were seven of the twenty-four weaver households surveyed who were engaged in dishcloth hem stitching homework. Fifteen households were involved in agricultural wage labor, and weaving-related wage labor was being done by two households. Now let us look at the income that accrues to the sample households as the result of such multiple occupations.

Table 5–2 shows the previous year's income from household occupations (income sources) listed according to household-head primary occupation, the share occupied by each occupation in household total income, and how much these occupations are contributing to keeping each household above the poverty line (called here the poverty-line realization rate). Household income consists of estimates of the earnings of all members from all occupations and work over the year preceding the date of the survey and any assistance or pension payments received from outside the household over the same period.² The poverty line was measured as income equivalent to 320 kilograms of hulled rice per household member. The corresponding figures in the table represent each income type as a percentage of this poverty-line figure, and thus show the contribution it makes to the household's economic welfare regardless of the number of family members.

The table shows first of all that the occupation of weaving in no case exceeded the poverty-line figure and is therefore incapable of keeping households out of poverty. However, after comparing Tables 5–1 and 5–2, we find that (1) regardless of the primary occupation of their household heads, all weaving households in the survey turned to occupational multiplicity to make ends meet and (2) weaving contributed more to reaching the poverty line than either *becak* driving or farming.

As mentioned above, over half of the kampong's weavers are neither landowners nor cultivators. Moreover, the land that is held by weavers is often located in lowproductivity dry fields around the kampong's periphery; and as will be pointed out in Chapter 6, in terms of peasants with secondary occupations, the kampong weavers surveyed do not fit the pattern of working at side occupations during the agricultural off-season,³ but rather exhibit a pattern of farming to supplement their weaving livelihood.

Weaving is part of an employment mix that includes piece-work opportunities like *becak* driving and hem stitching, small-scale farming and wage labor, a combination of occupations that supplement the low gross profits on sales from and working capital to continue weaving. It has been argued in many quarters under the concept of "proto-industrialization" that such part-time or secondary occupations offered by rural industries tend to promote population increase, which in turn supports the development of local industry (Saitō 1985: 112–14); however, in the densely populated area of the kampong we surveyed, we observed a deepening of the occupational

Household- Head Primary Occupation	No. of House- hold	Farming	Agric. Wage Labor	Weaving	Weaving Related Homework	Weaving Wage Labor	<i>Becak</i> Driving	Civil Service	Subsidies/ Cash Remittances	Other	Total
Weaving	15										
Average per household income (Rp.)		15,141	11,831	251,533	8,080	1,740	25,333	800	13,333	0	327,792
Share of total income (%)		4.6	3.6	76.7	2.5	0.5	7.7	0.2	4.1	0	100
Poverty-line index (%)		3.9	3.1	65.5	2.1	0.5	6.6	0.2	3.5	0	85.4
Becak driving	4										
Average per household income (Rp.)		2,875	49,472	208,107	1,050	0	203,875	0	0	0	465,379
Share of total income (%)		0.6	10.6	44.7	0.2	0	43.8	0	0	0	100
Poverty-line index (%)		0.5	9.2	38.5	0.2	0	37.8	0	0	0	86.2
Farming	4										
Average per household income (Rp.)		141,460	7,447	172,926	88,963	0	50,000	2,000	1,250	1,750	465,796
Share of total income (%)		30.4	1.6	37.1	19.1	0	10.7	0.4	0.3	0.4	100
Poverty-line index (%)		21.7	1.1	26.5	13.6	0	7.7	0.3	0.2	0.3	71.4
Agricultural wage labor	1										
Average per household income (Rp.)		0	89,520	251,910	0	0	0	0	0	0	341,430
Share of total income (%)		0	26.2	73.8	0	0	0	0	0	0	100
Poverty-line index (%)		0	16.6	46.7	0	0	0	0	0	0	63.2
All weaving households	24										
Average per household income (Rp.)		33,519	20,611	231,210	20,052	1,088	58,146	833	8,542	292	374,292
Share of total income (%)		9.0	5.5	61.8	5.4	0.3	15.5	0.2	2.3	0.1	100
Poverty-line index (%)		7.3	4.5	50.1	4.3	0.2	12.6	0.1	1.9	0.1	81.1

TABLE 5–2
PER OCCUPATION YEARLY INCOME OF VILLAGE WEAVER HOUSEHOLDS AND THEIR POVERTY-LINE INDICES
GROUPED ACCORDING TO PRIMARY OCCUPATION OF HOUSEHOLD HEAD

Source: Field interview conducted by the author.

Note: Poverty-line index indicates to what degree household and occupational income contributes to a total yearly income sufficient to supply each household member with 320 kilograms of hulled rice per year.

multiplicity involving a work force consisting of household members mobilized for mainly family-managed weaving activities engaged in part-time, secondary petty commodity production and/or wage labor.

Social Stratification among Weaving Households

In order to identify social differences among the weavers in the survey kampong, we examined our sample with respect to the number of looms in operation, land-ownership, and household incomes.

Looms in operation

From the detailed data presented in the second section of Chapter 4 on business operations conducted by twenty-three weavers in our sample, we know that seven households were operating two looms, while the rest had only one loom in operation.

Let us examine, then, whether social differences exist between these two groups of weavers. First, let us look at gross profit figures. Table 5-3 summarizes sales volumes, manufacturing costs and gross profits on sales for one-loom and two-loom weavers engaged in lightweight (low-density) dishcloth production. This table is similar to Table 4-2 in describing the accounts for the whole weaving process from yarn purchases and preparation through the weaving of warp beams. The table shows that despite the fact that two-loom weavers enjoy sales volumes 2.09 times greater than one-loom weavers, their gross profits on sales come to only 1.56 times greater, and on a daily basis only 1.16 times greater. Looking at the manufacturing cost figures, we find that the most significant difference between the two groups is the cost of weaving wage labor. In fact, the difference between the two groups in the combined shares of manufacturing costs occupied by weaving labor's wages and wages paid to warp-pirn winders accounts for just about all of the difference between the two groups in manufacturing cost share of sales volume. The two-loom weavers employing wage labor in the actual weaving process numbered two households, who, while realizing double the sales volume of one-loom households, were only able to reap gross daily profits of 1.16 times greater, due to more days spent in production. The reason for the inordinately greater amount of time required is that the second loom was being operated by female household heads, wives, and children, who cannot maintain the pace of faster adult males.

Yearly sales-volume figures in the table, found by multiplying sales volume by the number of weaving production cycles completed during the year, show two-loom households with only 1.23 times larger volumes than one-loom households. The important factor here is of course time; that is, how many production cycles can be completed by the two groups in one year: 5.9 for two-loom weavers, and 7.7 for their one-loom counterparts.⁴ What we can conclude from these figures is that extremely small-scale weaving operations in the kampong surveyed are seriously plagued by diminishing returns to scale.

It is clear, therefore, that the income of two-loom households is not much higher than one-loom households; moreover, although not shown in Table 5–3, the total income of two-loom households from all occupations indicated a poverty-line real-

TABLE 5–3 Profit and Loss Statement for Lightweight-Dishcloth Independent Weavers in Terms of Looms in Operation

	One-Loom	Household	Two-Loom H	Iousehold
	Amount (Rp.)	% of Sales	Amount (Rp.)	% of Sales
No. of looms owned	1	.25		2
No. of looms in operation	1			2
Sales volume	114,994	100	238,962	100
Manufacturing cost:	86,860	75.5	194,863	81.5
Material cost:				
Warp yarn	36,575	31.8	81,150	34.0
Weft yarn	42,742	37.2	84,300	35.3
Dye	2,520	2.2	4,450	1.9
Sizing	951	0.8	3,138	1.3
Firewood	758	0.7	1,275	0.5
Bleach	120	0.1	0	0
Labor cost:				
Weaving wage workers	0	0	12,675	5.3
Expenses:				
Shuttle depreciation	383	0.3	450	0.2
Wages for warp winders	1,113	1.0	4,950	2.1
Warper charges	242	0.2	625	0.3
Raw material procure-				
ment transportation	1,421	1.2	1,713	0.7
Other	25	0.0	50	0.0
Gross profit on sales	28,135	24.5	43,849	18.3
Total work days:	42	2.9	4	55.1
Work days of preparation	8	3.6	1	10.8
Work days for weaving	34	1.3	2	14.3
Gross profit on sales	688	2	70	95
Production cycles per vear		, 		50
Troduction cycles per year		• *		
Total yearly gross profit on sales	212,214		261,602	
Sample size	12	2		4

Source: Survey done by the author.

Notes: 1. Wages for the weavers and their families are not included in expenses.

2. On September 12, 1986 the rupiah was devaluated from Rp. 1,134 to U.S.\$1 to Rp. 1,644.

ization rate of only 77.4 per cent, compared to the 82.1 per cent rate for one-loom households, who receive a greater amount of income from secondary occupations. Our conclusion, therefore, is that the number of hand-looms owned does not reflect social stratification among weavers.

No. of House- hold	Farming	Agric. Wage Labor	Weaving	Weaving- Related Homework	Weaving Wage Labor	<i>Becak</i> Driving	Civil Service	Subsidies/ Cash Remi- ttances	Other	Total
1										
	30/ 180	0	230,000	153 600	0	0	0	0	0	687 780
	304,180 AA 3	0	230,000	22.3	0	0	0	0	0	100
	44.J	0	42.6	22.5	0	0	0	0	0	127 4
	50.4		42.0	20.4	0	0	0	0		127.4
3										
	00 (10	57 (04	202 125	(0.117	0	140.224	0	0	0 0 0 0	5 (0.000
	88,618	57,694	203,125	68,117	0	148,334	0	0	2,333	568,220
	15.0	10.2	35.7	12.0	0	20.1	0	0	0.4	100
	11.0	/.1	25.1	8.4	0	18.3	0	0	0.5	59.2
3										
	63,035	9,259	195,376	0	0	0	0	0	0	267,669
	23.5	3.5	73.0	0	0	0	0	0	0	100
	19.1	2.8	59.2	0	0	0	0	0	0	81.1
3										
	15,106	1,667	312,547	0	0	0	2,667	68,333	0	400,320
	3.8	0.4	78.1	0	0	0	0.7	17.1	0	100
	3.4	0.4	69.5	0	0	0	0.6	15.2	0	89.1
14										
11										
	0	20.629	227,564	8,807	1.864	67.893	857	0	0	327,614
	0	6.3	69.4	2.7	0.6	20.7	0.3	0	0	100
	0	5.0	55.3	2.1	0.5	16.5	0.2	0	0	74.6
	No. of House- hold	No. of House- hold Farming 1 304,180 44.3 56.4 3 88,618 15.6 11.0 3 63,035 23.5 19.1 3 15,106 3.8 3.4 14 0 0 0 0 0	$\begin{array}{c cccc} \text{No. of} & \text{Farming} & \text{Agric.} \\ \text{Wage} \\ \text{Labor} \\ \end{array} \\ \begin{array}{c} 1 \\ 304,180 \\ 44.3 \\ 0 \\ 56.4 \\ 0 \\ \end{array} \\ \begin{array}{c} 3 \\ 88,618 \\ 15.6 \\ 10.2 \\ 11.0 \\ 7.1 \\ 3 \\ \end{array} \\ \begin{array}{c} 63,035 \\ 23.5 \\ 3.5 \\ 19.1 \\ 2.8 \\ \end{array} \\ \begin{array}{c} 3 \\ 3 \\ 3 \\ 15,106 \\ 3.8 \\ 0.4 \\ 3.4 \\ 0.4 \\ \end{array} \\ \begin{array}{c} 1 \\ 14 \\ 14 \\ \end{array} \\ \begin{array}{c} 0 \\ 20,629 \\ 0 \\ 6.3 \\ 0 \\ 5.0 \\ \end{array} \end{array}$	$\begin{array}{c ccccc} No. of \\ House-hold \\ \hline Parming \\ Mage \\ Labor \\ \hline Wage \\ Labor \\ \hline Weaving \\ \hline Weaving \\ \hline Weaving \\ \hline Weaving \\ \hline 0 \\ 230,000 \\ 44.3 \\ 0 \\ 33.4 \\ 56.4 \\ 0 \\ 42.6 \\ \hline 3 \\ \hline 3 \\ \hline 88,618 \\ 57,694 \\ 10.2 \\ 35.7 \\ 11.0 \\ 7.1 \\ 25.1 \\ \hline 3 \\ \hline 3 \\ \hline 63,035 \\ 23.5 \\ 3.5 \\ 73.0 \\ 19.1 \\ 2.8 \\ 59.2 \\ \hline 3 \\ \hline 3 \\ \hline 15,106 \\ 1,667 \\ 312,547 \\ 3.8 \\ 0.4 \\ 78.1 \\ 3.4 \\ 0.4 \\ 69.5 \\ \hline 14 \\ \hline 0 \\ 20,629 \\ 227,564 \\ 0 \\ 6.3 \\ 69.4 \\ 0 \\ 5.0 \\ 55.3 \\ \hline \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

TABLE 5-4 WEAVER-HOUSEHOLD INCOME, INCOME SOURCES, AND POVERTY-LINE INDICES ACCORDING TO LANDOWNERSHIP STATUS

Source: Interviews conducted by the author. Note: See note to Table 5–2 for the definition of poverty-line index.

CHAPTER 5

Primary Occupation	Second	No. of	Avera Occupa	age Per tion ^a (Ha)	Average per Primary Occupation Group (Ha)	
	Occupation	Households	Land Owned	Land Cultivated	Land Owned	Land Cultivated
Small-scale textile trading	_	3	0.01	0.01		
Small-scale textile trading	Owner farming	1	0.09	0.09		
Small-scale textile trading	Agricultural wage labor	1	0	0	0.02	0.02
Medium-scale textile trading	_	1	0	0		
Medium-scale textile trading	Owner farming	2	0.26	0.26		
Medium-scale textile trading	Owner and tenant farming	1	0.34	0.48	0.22	0.25
Large-scale textile trading	Owner farming	1	0.32	0.32	0.32	0.32
G 5111	•					

 TABLE 5–5
 Surveyed, 1985–86

Source: Field survey results.

^a This average is for households whose heads' combination of occupations is identical.

Landownership and supplementary income

While we have found little difference between weaver households in terms of income from their primary occupation, it may be possible to identify socioeconomic differences in relation to the land they own and the secondary occupations that they are engaged in. Let us look first at the scale of landownership among the kampong's weavers.

Table 5–4 summarizes the yearly income of weaver households categorized according to landownership in terms of occupation/income source, listing the shares occupied by each source and the contribution it makes towards realizing the poverty line. We were unable to infer any socioeconomic differences among weavers according to average income or poverty-line indices.

Concerning the influence of farm income on social stratification, Table 5–4 shows that only the income of households owning 0.5 ha or more was significantly enhanced by farming. Looking at individual household data not contained in the table, there were two households receiving more income from farming than weaving: one owning 0.5 ha of farm land, and one owning 0.24 ha of farm land and cultivating 0.3 ha. The other eight weaver households that were engaged in farming received less income from farming than weaving, and in most cases weaving constituted the main income of the household. We can conclude, therefore, that farming as a side occupation to weaving has no influence on a household's socioeconomic status among weavers.

As shown in Table 5–2, regardless of the weaver household-head's primary occupation, the household income falls below the poverty line at an average index of 81.1 per cent. Incidentally, looking at data not appearing in the above table, nine out of the twenty-four weaver households in the sample earned enough income to be placed above the poverty level. Of the nine, two households owned agricultural land, while the remaining non-owner weaver households included a *hirkup* wage weaver (1), two-loom operators (3), and *becak* drivers (2). It is therefore difficult to extract common features characterizing these nine households.

In sum, despite the existence of households above the poverty line, including a few owning land on a "medium" scale, the kampong's weaver households for the most part are embedded in its low-income stratum. We will return to the social position of weavers in the whole kampong community later.

Landownership and Side Occupations of Textile Traders

Now let us look at which village social stratum is occupied by the local sellers of dishcloths and gauze. Average figures concerning landownership scale among ten textile-trader households are presented in Table 5–1. Based on the classification of traders into small-, medium-, and large-scale businessmen carried out in the previous chapter, we further categorized them according to household head occupations and came up with the groups in Table 5–5. Landownership and cultivation data concerning these groups appears in the table. The average figures for medium- and large-scale textile traders is above the overall averages for the seventy-one households

surveyed (see Table 5–1). The one twenty-eight-year-old medium-scale trader (household No. 64 of RK2) in Table 5–5, who reported no land in his possession, also told us that his father (household No. 88 of RK1), a large-scale gauze trader, had extensive land holdings, answering that he will inherit some property in the future. The most common secondary occupations of medium- and large-scale traders were owner farming and owner farming *cum* tenant farming. As shown by the concrete examples offered in Chapter 4, the land in question was purchased by these traders as the result of either thriving trading activities or former success in the weaving business. Furthermore, at times when trading or weaving has declined in the kampong, these are the households that return to farming and occupy the mid- and upper-strata of the agricultural sector.

The landholding of small-scale traders is similar to that of the kampong's weavers, averaging 0.02 ha per household. Their average operating profit of Rp. 98,000 per month is a little larger than weaver households who engage in *becak* driving on the side.

Table 5–6 shows income by occupation and poverty-line indices for the two groups of medium- and large-scale traders and small-scale traders. Here we observe that (1) the occupational patterns of trader households are not as variegated as weaver households, (2) income from trading activities occupies a very large proportion of total household income, (3) income from farming accounts for a low percentage of medium- and large-scale trader household income, but absolute income from farming for medium- and large-scale trader household is more than that for weaver households who are farming as the first occupation, (4) in general traders' household income tends to be higher than weavers' household income, and (5) the kampong's medium- and large-scale traders are enjoying lifestyles far above the poverty line. However, individual household data not contained in the table shows that there are

TABLE 5–6
TEXTILE-TRADER HOUSEHOLD INCOME, INCOME SOURCES, AND POVERTY-LINE INDICES
According to Primary Occupation, 1985–86

Primary Occupation	No. of Households	Farming	Fish Breeding	Agric. Wage Labor	Textile Trading	Total
Small-scale textile trading	5					
Average per house- hold income (Rp.)		13,658	4,823	794	651,782	671,056
Share of total income (%)	2.0	0.7	0.1	97.2	100
Poverty-line index (%)		3.0	1.1	0.2	144.8	149.1
Middle- and large-scale textile trading	5					
hold income (Rp.)		156,580	0	0	2,106,354	2,262,966
Share of total income (%)	6.9	0	0	93.1	100
Poverty-line index (%)	*	19.8	0	0	266.0	285.7

Source: Interviews conducted by the author.

Note: See note to Table 5-2 for the definition of poverty-line index.

several small-scale traders who have not attained either the income level or povertyline index of some weaver households. In other words, there tends to be a continuum, at least in terms of income, between weavers and small-scale traders.

Rural Stratification in Relation to Initial Fixed and Working Capital

The occupation of weaving is one business and employment opportunity opened to the lower strata of rural society, due in part to the small amount of capital, called *modal*, necessary to start a business.⁵

There are various ways in which villagers can minimize the cost of *modal*. For example, if one employs the method described in the previous chapter concerning independent dishcloth weavers trying to minimize working capital outlays, a house-hold that already owns a hand-loom can start weaving operations with as little as Rp. 50,000 to cover the cost of 15 kilograms of warp and 4 kilograms of weft yarn, in addition to small amounts of dye and starch. For a person who decides to go into weaving, initial fixed capital of from Rp. 10,000 to 15,000 is required for the purchase of a loom and various accessory equipment. If the loom can be operated in the weaver's home, factory and land rental can be eliminated. Therefore, entry into the weaving industry by even the poorest strata of rural society is a relatively simple task; the problem is the industry's instability in maintaining a continuous input-out-put cycle of working capital.

Figure 5–1 also shows the minimum initial investment (*modal*) necessary for the households in our sample to enter their respective occupations. In the case of small-scale traders, *modal* comes to about Rp. 173,000, including funds to purchase a minimum amount of pre-finished dishcloth and gauze, cover processing costs, and pay minimum selling expenses for transportation and lodging. This amount is further reduced by traders who conclude credit arrangements with weavers concerning payment after sale. We also know of one large-scale trader among the samples interviewed investing Rp. 3.34 million to organize fifteen *hirkup* wage weavers to supply them with dishcloth material and also to buy pre-finished dishcloth, and then there is the survey kampong's largest dishcloth wholesaler, who needs to put out at least Rp. 8 million to start a business that now includes sixty *hirkup* wage-weaving households. *Modal* in the case of medium-scale traders comes to about Rp. 570,000 on the average, also putting them in between small- and large-scale traders in terms of initial capital investment.

The term "large-scale owner farming"⁶ in the figure indicates farming by a villager who purchased 1 ha of *sawah*. *Sawah* is obtained in the survey kampong through inheritance, donation, etc., but can also be acquired through purchasing and pawning. The most common means were inheritance and outright purchase (Mizuno 1993a: 127–34). As shown by case studies (to be presented in the next chapter) of weavers and short-term *becak* labor migration with secondary occupations, there are many households in the kampong that expect to receive either no or extremely small inheritances of land from their parents. Furthermore, the purchase price for 1 ha of *sawah* of between Rp. 12.5 million and Rp. 18.75 million is virtually beyond the

Fig. 5–1. Fixed Capital and Initial Working Capital (*Modal*) Paid Out by Surveyed-Household Members

Amount (Rp.)		Occupation
0	Т	Wage labor (weaving and agricultural)
3,000	+	Pirn winding (homework)
4,000	+	Becak driving
15,000	+	Hirkup wage weaving
25,000	+	Hem stitching (homework)
50,000	+	Independent weaving (minimum initial working capital for loom owner)
52,000	+	Sharecropping (0.3 ha of sawah)
122,000	#+	Independent weaving (cost of loom equipment + average initial working capital)
173,000	+	Small-scale dishcloth/gauze trading
570,000	*	Mid-scale dishcloth/gauze trading
3,346,000	+	Large-scale dishcloth/gauze trading
3,865,000	+	Small-scale owner farming (0.3 ha of sawah)
8,000,000	+	Largest-scale dishcloth/gauze trading
12,920,000	₩	Large-scale owner farming (1.0 ha of sawah)

Source: Field survey by the author.

reach of lower- and middle-class villagers in the area (Mizuno 1993a: 145–55).⁷ The cost of starting a weaving business is definitely lower than the *modal* required for going into farming (even taking into consideration that the cost of mechanical farm equipment is virtually zero in this region).

Size of *Sawah* per capita in this region is very small, and the possibility of tenancy is very limited. The relationships between farmers and the agricultural laborers they employ tend to be perpetual, meaning that only a very limited portion of the kampong's population can be permanently engaged in agricultural wage labor.⁸

Modal differ greatly depending on both the occupation and business scale chosen, and these differences clearly reflect the socioeconomic stratification characteristic of the rural society. On the other hand, *modal* requirements among the various occupations engaged in by the lower and middle classes of the kampong do not differ greatly, suggesting a social continuum. Moreover, we cannot identify the formation of a fixed strata of artisans and traders, like independent weavers, weaving wage laborers, and textile traders, in which barriers exist to entry and exit, and there are no fixed concepts about "family occupation,"⁹ meaning that occupations in the kampong are very mobile and that the decisions to enter them are greatly influenced by the ability to pay initial capital outlays (that in turn correspond to village socioeconomic position) and by expectations about their future profitability.

Table 4-1 and Table 5-7, which lists the occupations of weavers before going into

 TABLE
 5–7

 Previous Occupations of Weavers Surveyed in Relation to Date of Weaving Business Establishment

	1950s	1960s	1970s	1980s	Total
 Hand-loom wage labor in or around the survey village Family labor in father's 	1	2	4	4	11
weaving operation	0	4	1	2	7
3. Wage labor at a weaving factory in Bandung	1	1	0	4	6
4. Other	0	1	1	4	6
5. Unemployed	0	1	2	0	3

Source: Field work by the author.

Note: The data includes multiple responses.

the business, show that there are many weavers active today whose fathers were not weavers, and that the number of weavers who purchased their own hand-looms exceeds those who inherited their looms from their fathers. The percentage of weavers who learned their trade from their fathers is smaller than those who apprenticed as weaving wage laborers in the factories around the kampong or worked in the powerloom factories of Bandung. These facts attest once more to the absence of either entry/exit barriers or a long tradition of artisan families in the rural weaving industry.

As a result, the members of the lower village social strata become independent small-scale weavers, and in the case of business success transform themselves into small-scale textile traders. This is one reason why so many small-scale traders come into existence in the kampong. Of five such traders interviewed, two said that they had formerly been small-scale weavers; one had been a *becak* driver, one a weaving wage laborer, and one an unemployed son of a weaver engaged in supplementary occupations. What these responses tell us is that all of the small-scale traders changed over from occupations requiring smaller amounts of *modal* than trading. Looking at the occupations of the fathers of ten of these traders, we find six were weavers (four carrying on farming simultaneously), one fish broker, one agricultural laborer, and one unclear. Only one trader was from a family in the textile-selling business, indicating that textile trading is a business with no entry/exit barriers or longstanding commercial traditions. We also notice a continuum existing between the capital of weavers and that of small traders.

The Nature of Petty Business

Let us consider why weavers continue to produce on a small scale and choose not to expand to factory production, or choose not to become wage laborers. In other words, why does wage labor (excepting agriculture) exist outside the village (in Bandung and Majalaya, which will be discussed later) and not come into existence within rural industry, thus helping transform rural industry into the factory mode of production.

RURAL WEAVING INDUSTRY

Petty Business and Rural Village Household Formation

Let us first look at the time of weaver business establishment in relation to time of marriage. Of the twenty-three weaver households surveyed, business establishment occurred within three years after marriage in twelve cases and within three years before marriage in another five cases. Then there is the case of a female household head who returned to the kampong after a divorce and started a weaving business with her children. Another family went into weaving when they returned from another village to the survey kampong. Therefore, we have nineteen cases (86.6 per cent of the sample) of business formation more or less coinciding with the formation of the household itself. The reason for this correspondence is as follows.

Among the Sundanese, who make up the majority of the population of West Java, age of marriage is quite young, especially for women (Igarashi 1988: 600–613); and residentially speaking, marriage is matrilocal. However, within one year of marriage, frequently as early as two or three months, the newlyweds are expected to form an independent household. Since we observe newlyweds living with their parents for as long as two or three years, the practice is not a firm rule, but rather the usual pattern or expectation.¹⁰ However, there is a clear tendency for couples, including first sons and their wives, to form independent households at an early stage in their marriages; and from the time of their residence with parents, the couple engages in some self-employed occupation (often one different from the parents) as a team in preparation for the anticipated move to their own home.

In order to satisfy this Sundanese custom of early marital independence, the middle and lower strata of the survey kampong, which consists of many landless households, cannot go wrong with choosing a trade like weaving, which requires a relatively small *modal* to get started in business. The means of production can easily be purchased by the newlyweds or given as a gift from parents. The weaving process itself, which requires winding weft yarn on pirns at the same time as the loom work, is well-suited to a labor force consisting of husband and wife. The elements of the work schedule and who is to perform the work are quite flexible, thus allowing the husband to engage in work outside the village for short periods of time.

The children of weavers can easily form an independent household through weaving at an early stage in their marriages, but because of the absence of entry barriers, we also observe many weaver households whose parents were not similarly employed. Tables 5–1 and 5–7 indicate this latter point and show that the number of weavers who purchased their own means of production is greater that those who were given them by their parents or in-laws. Here we see how the tendency to make occupational choices based on the required amount of *modal* is linked with the social custom of forming independent households as soon after marriage as possible.

Self-Employed Weavers, Factory Production, and Wage Labor

One question that arises at this stage is why a family would choose to set up an independent weaving business, when there may be opportunities for employment like in weaving factories around Majalaya. Indeed, why has not the petty commodity

						(Rp.)
		Lightwe	ight Dishcloth		Belacu	Lightweight Dishcloth
	Inde- pendent Weaver (1)	Subcont- ractor Factory (2)	Factory (Yarn Purchased in Quantity) (3)	Factory (Low- est-Grade Yarn Purchased) (4)	Subcont- ractor Factory (5)	Wholesaler- Run Factory (6)
Sales	145,986	771,000	2,998,333	2,355,833	2,800,000	4,069,167
Manufacturing costs	113.832	648,100	2,700,165	3.059.965	2,538,500	2.860.370
Material cost:	105,441	0	2,041,265	2,401,065	2,026,667	2,055,400
Yarn	100,850	0	1,888,950	2,248,750	2,026,667	1,888,950
Dye, starch, etc.	4,591	0	152,315	152,315	0	166,450
Labor cost:	3,168	472,900	477,900	477,900	389,333	492,900
Cloth wage weavers	3,168	436,900	436,900	436,900	336,000	436,900
Bleaching, warp-yarn	,	,	,	,	,	,
preparation, etc.	0	36,000	41,000	41,000	53,334	56,000
Expenses:	5,223	175,200	181,000	181,000	122,500	312,070
Subcontractor wages and commissions	2,072	152,000	152,000	152,000	100,000	283,070
varn purchasing	1 /19/	1 200	3 000	3 000	2 500	3 000
Shuttle depreciation	400	10,000	10,000	10,000	2,500	10,000
Firewood etc	1 257	12,000	16,000	16,000	20,000	16,000
Gross profit on sales	32 154	122,000	298 168	-704 132	261 500	1 208 796
Selling expenses etc	0	5 000	54 972	5 000	145,000	307 756
Operating profit	32,154	117,900	243,196	-709,132	116,500	901,040
1. Total production days	45.5	35	35	35	36	45
2. Per day operating profit	707	3,369	6.948	-20.261	3.236	20.023
3. Looms in operation	1.3	20	20	20	20	20
4. No. of wage weavers		20	20	20	20	20
5. No. of pirn-winding/ reeling workers	_	15	15	15	10	15
No. of warping and preparation workers	_	2	2	2	3	6

 TABLE 5–8

 Income and Capital Statement for Weavers According to Enterprise Form and Product

	Lightweight Dishcloth				Belacu	Lightweight Dishcloth
	Inde- pendent Weaver (1)	Subcont- ractor Factory (2)	Factory (Yarn Purchased in Quantity) (3)	Factory (Low- est-Grade Yarn Purchased) (4)	Subcont- ractor Factory (5)	Wholesaler- Run Factory (6)
 Monthly salaries of wage weavers Monthly salaries of pirm 	_	19,125	19,125	19,125	16,800	19,125
winding/reeling workers9. Gross profit on sales	—	8,871	8,871	8,872	10,000	8,871
for independent weaver	19,796					
Fixed capital: Machinery (including warper	57,000	1,050,000	1,225,000	1,225,000	1,050,000	1,400,000
and accessory equipment)	12,000	350,000	350,000	350,000	350,000	350,000
Factory buildings and land	45,000	700,000	875,000	875,000	700,000	1,050,000
Initial working capital:	65,743	324,050	1,477,812	1,543,775	1,610,583	2,958,668
Yarn and other raw materials Prepayments to wage labor	61,547	0	1,148,362	1,214,325	1,354,666	2,055,400
and subcontractors Prepayments for selling	2,620	312,450	312,450	314,950	244,667	775,970
expenses and others Modal (fixed + initial	1,576	11,600	14,500	14,500	11,250	127,298
working capital)	122,742	1,374,050	2,702,812	2,768,775	2,660,583	4,358,668
Operating profit to modal ratio (%) Operating profit to initial	26.2	8.6	9.0	-25.6	4.4	20.7
working capital ratio (%)	48.9	36.4	16.5	-45.9	7.2	30.5

TABLE 5-8 (Continued)

Source: Field survey by the author.
Notes: 1. Enterprise forms (2)–(4) are hypothetical cases.
2. All figures are estimated for the minimum time it takes to attain normal production operations.

Figures do not include wages for enterprise owners and their families.
 Operating profit excludes deductions for discounted bills, taxes, donations, etc., which appear in the "selling expenses etc." item.

RURAL WEAVING INDUSTRY

production in weaving industry developed into a factory production system in this region? Table 5-8 has been constructed in order to help answer these questions. Here we have estimated rates of profit for a number of factory situations (some actual, others hypothetical) in order to compare them with the kampong's independent weavers (1). The first (hypothetical) factory case (2) involves a local wholesaler organizing subcontractors into a production line of some twenty hand-looms. The second (hypothetical) case (3) is that of an independent weaver managing a factory of twenty hand-looms. He buys relatively high-quality rejected yarn in quantity in Majalaya, just as the today's local wholesalers do, and produces a relatively goodquality lightweight (low-density) dishcloth that is comparable in price and quality to the products handled by the local wholesalers. Next, we have a (hypothetical) factory (4) operated in similar fashion to independent weaver households, in that the manager buys the poorest-quality, bulk yarn to produce the lowest-quality light dishcloth. For each of these factory cases, we have estimated gross profits on sales, operating profits and the wages required for both pre-weaving and weaving work. Wage, wage scale, raw-materials cost, and selling expense figures were estimated with reference to actual examples existing around the kampong. The figures do not account for wages paid to factory managers or their families.

In the villages around Majalaya, there are still today small factories producing gray shirting (*belacu*) on a *makloon* wage weaving basis for Chinese-run textile mills in town. (There are no textile traders in these villages). Case (5) is an actual example of one of these *belacu* factories, a twenty hand-loom facility employing wage labor in the village of Cijagra, Paseh Sub-district, located about 3 kilometers northeast of Majalaya. This factory is typical of the *makloon*-based weaving firms that existed around the survey kampong during the 1970s and disappeared during the 1980s.

The table shows that the monthly gross profit on sales of small-scale independent weaver households (1) is greater than the wages that can be earned at any of the four factory cases in Table 5–8. However, if the husband works as a weaving wage worker at one of these factories and his wife and children also work as winding and reeling-pirn wage workers, such a family can earn more income as a whole than an independent weaver household's weaving-business income. If this is the case, why are independent weaving businesses still dominant in the survey kampong?

To answer this question, it is first necessary to consider the situation of a factory manager. The gross operating profit of case (2), involving *hirkup* wage weaving contracts with a local wholesaler, comes to an estimated Rp. 3,369 per day and is a little more than what a small-scale textile trader earns, but not as much as medium- and large-scale traders make. On the other hand, the *modal* (fixed capital plus initial operating capital cost) required to set up such an operation as factory (2) is estimated in Table 5–8 at about Rp. 1.37 million. Moreover, this amount is much larger than the average minimum *modal* of only Rp. 570,000 (Table 4–3) required to start a medium-scale trader establishment. Therefore, the operating profit to *modal* ratio of factory (2), 8.6 per cent, is far below the 13.7 per cent to 28.3 per cent rates enjoyed by medium- and large-scale textile traders. There is also the added factor of possible

yarn shortages during factory operations (2), due to dependence on the local wholesaler for large orders.

In the case of factory (3), an operation independent of the local wholesaler, the owner will be able to reap larger profits than factory (2), and the absolute monthly amount is greater than that of a medium-scale textile trader, but still lower than a large-scale trader. However, the fixed capital required for land, buildings, and equipment plus initial operating capital of factory (3), Rp.2.7 million *modal*, is more than that of factory (2), partly because the former has to do its own yarn buying in quantity. Therefore, factory (3)'s operating profit to *modal* capital ratio of 9 per cent falls below that of either a medium- or large-scale trader.

In the case of factory (4) producing the lowest-quality dishcloth with the poorest bulk yarn, the manager suffers a great loss. This factor, added to the diminishing return to scale for a surveyed kampong's small-scale weaver shown previously with Table 5–3, explain why independent weavers produce on a petty scale. The accounting calculation for factory (4) shows that the success of factory (3) depends on how much relatively high-quality yarn the manager of factory (3) can procure¹¹ with an ample amount of operating capital.

What about the operating profit to operating capital ratios for factories (2), (3), and (4)? Here the rates of 36.4 per cent and 16.5 per cent respectively, excluding the case (4), are above what either medium- and or large-scale textile traders enjoy. However, we have seen in Chapters 3 and 4 that such factories did in fact exist, but have all but disappeared from the region. Despite better operating profit ratios than textile traders, the reasons why most of these types of factory went out of business by the end of the 1970s were (1) unstable supplies of yarn, (2) difficulties in obtaining sufficient amounts of operating capital, and (3) difficulties in finding distribution routes maintaining desirable prices.

For factories employing wage labor, the inability to find stable sources of relatively good, inexpensive yarn in quantity and sell their products at a fair price results in the lowering of loom-operation efficiency or even shutdowns in the production line altogether, which in turn lowers the income of piecework weavers. In contrast, petty traders depending on the labor of their families can cope with the situation by reducing the amount of purchased cloth; and local wholesalers who depend on their families and temporary piecework labor are able to cope with the situation by reducing the number of *hirkup* wage-weaver contracts and the amount of cloth they buy from independent weavers.¹² It is no wonder that such factory operations were forced to be shutdown and their managers to switch to the cloth wholesaling business. For the community as a whole, what happened as a result was the that potential factorymanaging entrepreneurs became active in the commercial sector.

Next, let us look at the circumstances under which weavers choose self-employment businesses instead of employment as factory labor.

The first point is autonomy in making decisions about how to distribute one's labor. As mentioned previously, at times when yarn shortages prevent a smooth production cycle, independent weavers can more easily move to secondary occupations.

Secondly, factories, in their attempts to maximize profits, demand relatively highquality dishcloth products from their workers, which means careful and precise weaving. When asked why he did not seek relatively better paying employment (see Table 4–2) as a *hirkup* wage weaver for local wholesalers, one independent weaver replied that wholesalers provide the poorer yarn, then complained about the quality of the pre-finished product, and insisted that independent weaving is a better alternative. Many of the kampong's independent weavers used to work for wages in the kampong and in the power-loom factories of Bandung; and not a few of them have had experience with *hirkup* wage weaving for local wholesalers. In spite of the fact that the pay is better working for others, the choice of lower paying independence can be attributed in part to the Sundanese character, which prefers self-employed work to working for someone else.

Thirdly, in the case of the wet season of 1985–86 and the dry season of 1986, owner operators in the survey kampong earned net incomes of about Rp. 834,000 per ha of *sawah* for the combined harvests (Mizuno 1993a: 145–51). The average gross profit on sales for an independent weaver during the same period of time came to Rp. 208,000, an amount equivalent to cultivating 0.25 ha of *sawah*. Peasants who cultivate 0.25 ha of *sawah* in the kampong are considered "middle" class in terms of arable landownership within survey kampong standards (Mizuno 1993a: 126 and Table 5–1). Putting aside for the moment whether or not these peasants have secondary occupations, the fact that independent weavers are able to earn incomes equivalent to the kampong's "middle"-class landowner operators is an ideal situation from the viewpoint of the kampong's lower classes, from which the weavers hail. This fact goes a long way in explaining why certain villagers choose petty-scale independent weaving as their primary occupations.

The tendency of the kampong's lower and middle classes towards petty commodity production from which to earn their livelihoods is quite clear. This tendency is largely determined by the instability and risk involved in larger factory management. If this is the case, then as soon as conditions are right to ensure profitability, factoryscale production could be reopened and small-scale weavers would be able to interrupt their independent operations to work in the factories. An example of this scenario is the case of factory managed by a wholesaler (6) in Table 5-8, from which a large-scale local wholesaler was able to turn a very good profit. This type of operation is very conducive to economies of scale. It was in 1986 that the kampong's largest-scale wholesaler, Mr. P, decided to open a cloth-weaving factory consisting of forty hand-looms (despite the electrification of the kampong, there was no thought of installing power-looms). The main products were heavy- and medium-weight dishcloth materials, but a production line was also opened to weave curtains for hotels, etc. commissioned from a Chinese merchant in Bandung. The yarn for this curtain material had to have passed inspection. The factory got state bank loans repeatedly. However, the supply of yarn for dishcloth, main products of the factory, was still dependent on discarded yarn, which made the factory still unstable.¹³

In 1989 another survey-kampong large-scale textile trader, Mr. J. (included in traders interviewed in detail), opened a twenty hand-loom factory to do the work of

68

weaving raw dishcloth that had been farmed out to *hirkup* wage weavers up until that time. He continued to use rejected yarn. This move to factory production can be said to be the start of something new in the kampong, in the fact that the capital to build the facility was accumulated from a stable commercial establishment capable of *modal* sufficient to overcome the risk arising from the fixed costs of factory production.

Notes

- 1 For example, during the month following the rupiah devaluation of September 12, 1986, TC40S standard thread increased in cost from Rp. 2,000 to Rp. 2,500, while one dozen lightweight dishcloths sold by local wholesalers to wholesale dealers in Tanah Aban remained at the same Rp. 1,900 price prior to the devaluation and medium-weight dishcloths increased by only Rp. 100 from Rp. 2,700 to Rp. 2,800 per dozen.
- 2 Household income from all household-member occupations was calculated according to the following method. For example, weaving income appearing in Table 4–2 was found by asking about corresponding production output, gross income, and expenses over a given production period (say the forty-five days it takes to weave one warp-beam), then asking how many of these periods transpired over one year's time. This resulting calculation was made for each occupation of each household member in the sample. However, even if it was possible to ascertain the employment pattern of each household, constraints like time limitations might make it impossible to ask about detailed business expenses, wage, and work-hour information for all respondents. (For example, detailed data was obtained from twenty-three out of the twenty-four weaver's household surveyed.) What was done, therefore, was to summarize the data into a standard household average (for example, the average income per weaver's loom), then figure out income of corresponding occupation by adding other data concerning the number of persons occupied, their ages, etc.
- 3 See for example, Hardjono (1990: 23).
- 4 One two-loom household was not able to weave for two months after *Lebaran*, the feast following the Islamic fasting period, because its working capital was consumed by living costs, thus reducing its weaving year to nine months. Insufficiency of working capital prevented two-loom weavers from utilizing the potential of the production. These unstable management conditions keep weavers from enlarging their scale of production.
- 5 Modal is a term that indicates capital funds necessary for starting up operations, whether the investor already owns the means of production or is in the process of buying or leasing them. That is to say, the term may also indicate working capital in the case of businesses already in operation. Here, however, we limit its meaning to the wherewithal for obtaining minimum fixed assets, such as land, factories and machinery, and the minimum initial working capital for starting up operations.
- 6 In absolute terms 1 ha of *sawah* is hardly "large" in scale, but in the socioeconomic context of the village under study, 1 ha indeed represents "large"-scale landownership.
- 7 The net income from an independently farmed 1 ha plot of *sawah* will yield a yearly income of Rp. 834,000, while the average yearly income of the twenty-four weaver households in our study comes to about Rp. 374,000.
- 8 Tenancy tends to be reserved for either veteran peasants or the most physically robust villagers. Weavers are thought to be not physically suited to agriculture, so they involve

themselves only in the tasks of harvesting and transporting crops. Ploughing cost, which is included in Figure 5–1 as the minimum working capital of owner-operators and tenants, has been calculated as half the actual cost for one season of each cultivation form. Since loans from landowners are very limited, tenants must finance their own *modal* funds. However, most tenants have other occupations that provide them with cash income.

- 9 In a village that has no fixed concept of family headship, consciousness about "inheriting the family business" is weak. This characteristic is also expressed in how businesses are inherited. For example, one household surveyed owned ten hand-looms that were distributed piecemeal: two hand-looms to the eldest daughter, two to the eldest son, two to the second son, three to the third son, and one to the fourth son, at the time of their marriages. Who had inherited the father's business was not made clear. One son perceived that he had started a weaving business, while another thought that the business was started by the father.
- 10 This pattern may be described in the following manner. At the time of marriage, the newlyweds move in with the bride's parents. During the following year the couple will move to a separate residence (frequently within the parents' compound) and establish an independent household. At that time or several (sometimes ten or more) years later, the couple may move to the husband's village and set up an independent household. There are several variations to the pattern. For example, there is the case of a patrilocal pattern, in which the couple lives with the husband's family first, then moves to the wife's village, or of the establishment of an independent household at the time of marriage. The time during which the newlyweds live with (either of) their parents may range from two or three months to several years (Boedhisantoso 1977: 569–79). We do observe diverse patterns in both household formation and location residence. For example, the custom of *ngumbara** can occur during that time, in which villagers move away to another place to work, then after a long time move back to the village. The situation can get quite complicated at times (Mizuno 1993b: 82–83).
- 11 Local wholesalers were always worrying about procuring relatively high-quality rejected yarn by purchasing in quantity. The largest wholesaler in the survey village was supplied three bales of yarn by the UPT of Majalaya as part of a program to promote small-scale manufacturing in 1988. However, the supply ceased after only one delivery.
- 12 The existence of independent weavers who claim that they can sell their cloth to anyone they wish makes it hard to imagine any fixed *hirkup* wage weaving or buying relationships between textile traders and weavers, partly resulting from the instability of commerce.
- 13 The growth of this factory was reported in the national magazine *Editor* under the title "Desa Kaum Penenum" [Village of weavers' community] (*Editor*, Feb. 20, 1988: 35–40).