

1. Problems and Approaches

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Problems and Approaches

Overview

The economic growth and development of the agricultural sector in Indonesia since the mid-1960s resulted in an increased demand for nonfood goods and services in rural area, and created possibilities for rural communities to develop their nonfarm sectors and promote rural industrialization. Such rural industrialization has been expected to create employment opportunities for its lower income strata, enable the promotion of balanced regional development, and equalize income distribution. In reality, however, during the period in question the survival of many rural industries in Indonesia became threatened by competition from large urban corporations, which were growing in the midst of the open policy towards foreign investment and promotion of Indonesian-Chinese investment by the Suharto administration. The present volume of research will deal with the topic of one village-level textile industry in the region around the city of Majalaya in West Java. This rural weaving industry of weavers, cloth traders, and related laborers, which developed into a factory production system under the Sukarno administration's protection policy for indigenous Indonesians (*pribumi*) through a system of cooperatives, will be studied in relation to how it has coped with the above-mentioned threat and how it has developed to the present day. A case-study methodology will be adopted in order to discuss the following points.

First, despite the fact that there has been an increase in demand for nonagricultural goods and services on the village level as a result of the development of the agricultural sector, such commodities may not be supplied by the rural nonagricultural sectors, but by sectors dealing with goods imported from the country's urban regions and overseas suppliers. Therefore, in order to clarify the rise of rural industry, or what exactly has been its economic base for the purpose of expanding production,

the present volume will focus on the community-based industrial production area centered around the village surveyed, and investigate in detail production, commerce, and the division of labor within the development of the weaving industry in this area.

Secondly, there is the question of why village industry at the present time is comprised of mainly self-employed family enterprises operating on a very small scale. Through an examination of the possibility that such enterprises could make the transition to factory production, the present volume will attempt to shed light on the character of enterprise management and the barriers that exist to the further development of rural industry. In addition, an attempt will be made to clarify the factors behind decisions by village entrepreneurs to continue production on a small scale, while at the time expanding the scale of their commercial activities.

Thirdly, we will attempt to clarify the relationship between the growth of rural nonfarm sectors, in particular industrial sectors, and the phenomenon of increasing part-time farming. As the result of making clear the relationship of rural industrialization to agricultural mechanization and land productivity, we will try to clarify the actual pattern of rural industrialization in the village surveyed. Then we will turn to the question of whether or not such industrialization has improved the distribution of income among the village's socioeconomic strata. Also in this respect, an investigation will be made of the contribution made by labor movement out of the village to the equalization of income disparities and social stratification in the village.

Next, we intend to examine the significance of the multioccupational character of the village's households in relation to the development of its weaving industry.

Finally, we will take up the question of whether or not the village's nonfarm sectors are merely developing "involutionally," in the sense of being able to absorb the village's labor and increase employment without any real improvements in productivity. That is to say, does the concept of commonly "shared poverty" hold for the village surveyed.

Let us look at these points in a little more detail along with the related research to date.

Point 1: Rural Industrialization and Large Urban-Based Corporations

The development of the rural nonfarm sector began to be promoted by such institutions as the World Bank during the late 1970s as one program for rural development in the developing countries (Anderson 1978: 7–11), and the problems involved have continued to be studied to the present day.

The first reason why the rural nonfarm sector began to come under close scrutiny lay in the increases that occurred in agricultural production and farm income in villages due to the agricultural development that was promoted in the developing countries during the 1970s. This rise in income resulted in increased demand for nonfood goods and services, which display relatively high-income elasticities, and, by the way, might promote economic activity in the rural nonfarm sector (Anderson and Leiserson 1978: 30–32). Concomitant rises in the production and income of the nonfarm sector, therefore, indicated development of both sectors side-by-side

(Shand 1986: 16). Nevertheless, despite such a beneficial impact of agricultural development and increased rural demand on the nonfarm sector, the level of the impact depends on whether goods and services produced by rural industry are capable of satisfying such demand, or if foreign imports and urban-produced commodities meet the new needs of the rural population (Saith 1992: 102–7).

In the case of Indonesia, during the late 1960s and 1970s, when the achievements of the ambitious agricultural development program directed towards wet-rice production began to be evidenced, the advance of big business was matched by an increasing number of declining rural industries. Actually, there were factors working both in favor and against the promotion of rural industrialization.

The reason for the selection of the rural weaving industry as the object of this study lies in the fact that Indonesia's weaving industry is a mixture of enterprises consisting of foreign capital, state corporations, Chinese-owned capital, cooperatives, and *pribumi* entrepreneurs. Such an industrial mix is an excellent indicator of the competition that exists between urban and rural-based business. Moreover, the rural weaving industry is a representative example of the decline experienced by rural industries in the midst of the advance of big business since the end of 1960s, a problem that has become the focus of attention concerning the future of Indonesia's small business community in general.

Pribumis are the owners of most small-scale manufacturing businesses, which, in fact, employ two-thirds of the Indonesian industrial work force. Nevertheless, their inability to accumulate capital has been called into question. The cloth weaving industry in the village surveyed is a typical case of such *pribumi* capital ownership and management.

Point 2: The Scale and Management Style of Rural Industries

In the study of rural industrialization it is very easy to stress the coexistence of enterprises that have grown along with overall economic prosperity and those that have actually declined. Misra (1985: 2–12), who insists that small cities and market towns should be considered as part of the "rural" region, has categorized rural industries into three groups: "household industries," "artisan industries," and "small factories." His "household industries" group consists of "own-use manufacture" and the "putting-out or dispersed factory system" depending on "industrial homework wages paid." The "artisan industries" group consists of "artisans homework" and "industrial homework wages paid" under the "putting-out or dispersed factory system." Small factories are categorized under the "putting-out or dispersed factory system" depending on "quasi-independent small shops" or a specialized "small factory" under the "factory system." According to Misra, in the midst of overall economic growth and development, "household industries" are bound to decline, while "artisan industries" first experience decline, then recover as the result of increased income levels. "Small factories," especially those located in small cities or around large urban areas, have sufficient opportunities to develop from the start, provided the environmental factors which inhibit their growth, such as inadequate infrastructure and social services, are weakened or blunted.

However, it seems quite possible that “own-use manufacture” in Misra’s “household industry” category could very possibly develop into either “quasi-independent small shops” or even “small factories” with the advent of growth in the economy. Also, there is no apparent reason why home wage workers could not be organized into subcontractors/putting-outers, enabling their development into higher technology family businesses. In other words, it is very difficult to predict from Misra’s classification how rural enterprises are going to fare in the midst of general economic growth.

In addition, Misra does not discuss in what way his “small factories” and “artisan industries” came into existence. A similar lack of origins exists in the work of Mukhopadhyay and Lim, which merely states that “enterprises run on a more or less stable basis with an eye on surplus generation and growth, using hired labor, and a certain degree of technical sophistication” (Mukhopadhyay and Lim 1985: 18). A similar lack exists in Choe’s discussion of “profit-seeking enterprises” (Choe 1986). Then there is the problem of what kind of small business these types may be: for example, in the sense of Kiyonari’s classification into (1) local industry, (2) community-based industry, (3) production related to big business, and (4) none of the above (Kiyonari 1972: 116).

One problem that should be considered is how family-based enterprises can be organized into larger production operations like household industries developing into factory production, or part-time farmers involved in home wage work developing into subcontractors/putting-outers. On this point, Schmitz (1982: 429–45), in asking why small enterprises tend towards self-employed family undertakings and seldom transform themselves into small factory production, focuses his argument on the problem of small business and the barriers facing it. He criticizes the research to date for not attempting to support empirically the theories purported. What this means is that research has to be done on the kind of conditions conducive to the growth and development of small business; and for Schmitz the direction to take is “branch-specific studies.”

Whether rural industries will remain dominated by part-time farmers and “own-use” family producers, develop into factory production, or improve their production technology and capital through subcontract relationships depends on a number of diverse conditions. The present volume will examine the motivations and barriers present in the transition from self-employed family production to factory manufacture, in order to clarify the possibilities for rural industrial development and the character of enterprises. We understand modes of production that have not developed into the factory system as “petty commodity production,”¹ sometimes referred to as “petty enterprise” or “petty business” in this volume.

It would be no exaggeration to characterize the overwhelming portion of rural industry in Indonesia as consisting of petty enterprises. The small scale of these enterprise has been studied by Kahn (1980), who discussed why family-run petty blacksmith enterprises in a Minangkabau village, being embedded in world capitalism, were unable to expand their business scale (Kahn 1980: 92–102). The reasons offered were a low level of capital accumulation, low profits, and cheap wages and

product prices. However, it is difficult to say that these conclusions were supported by the data.

Thamrin et al. (1991) studied a shoemaking production area in Cibaduyut, south of Bandung Municipality. The center of development here was its commercial district. There were cases of shoemakers who expanded their businesses and those who worked as subcontractors and home workers; but when business expansion did take place it was as a proprietor of one of the local shops, and did not often take the form of producers expanding into factory production. In a study of capital accumulation of rural elites by Braadbaart (1992), we see these upper village strata making a lot of investments, most of which were commercial in nature. Seldom did they invest in forms of manufacturing, for even export industries remained organized as petty enterprises depending mainly on family labor. Unfortunately, neither of the above studies succeeded in analyzing why this situation exists.² In this book, we will focus on the relationship between petty-scale manufacturing and commercial activities in the village surveyed.

The Division of Labor in the Production Area of Community-Based Industry

This volume will also consider the division of labor in production areas of community-based industry as the socioeconomic foundation of rural industry. The reasons for drawing attention to this facet are as follows.

First, in the study of the nonfarm sector, Anderson (1982: 913–26), for example, agrees that the development of small businesses will be brought about with the growth of the nonfarm sector, but concludes that it is big business that holds the upper hand, resulting in the inevitable disappearance of small industries. However, from the standpoint of a common assumption among researchers of rural industrialization and the nonfarm sector, which includes industry in local towns and their environs, Anderson's theoretical conclusions are not correct, for example in the case of Japan.

The major role in the production areas of community-based industries in Japan, as well as in the bottom end of the subcontracting pyramid that consists of stratified relationships between large corporations, medium- and small-scale enterprises, and self-employed business in Japan, is played by small family-run enterprises.³ Japan's subcontracting structure begins at the top with major parts makers, under which a pyramid is formed consisting of branch factories, direct subsidiaries, affiliated firms (called "satellite factories") at the upper levels, then the influential assembly factories and smaller-scale concerns that subcontract to them, followed by the petty (household) enterprises and home workers, who subcontract to the subcontractors.⁴

We will focus on the study of community-based industry as one pattern of development in the small-scale manufacturing. Kiyonari (1967: 63) has summarized community-based industry as follows.

Community-based industry (or production area enterprises) mainly develops out of traditional industries and is a corporate group that procures its labor resources and raw materials from pre-existing local markets. In many cases, the labor supply for such industries is closely connected to local agriculture and is employed in labor-intensive production pro-

cesses. The enterprises involved are mostly from small to petty in scale. The products manufactured are in many cases locally typical items, and the markets for them are not limited locally, but located throughout the country and the overseas.

Yamazaki (1977: 6–9) adds to this the fact that locationally speaking, production areas of community-based industries tend to be concentrated in a group of local enterprises, consisting of medium-, small-, and petty-scale enterprises of the same trade, and form a social division of labor in both manufacturing and marketing.

The nucleus of this social division of labor has the potential to develop into a local conglomerate, where almost identical small enterprises are tied up in a complex web of competition and cooperation. Mechanisms of affiliation exist in the form of business associations, labor unions and cooperatives, giving the production area a sense of community. Thus, this conglomerate may return to craft production technology under a high-tech flexible network (Piore and Sabel 1984). Such areas have been viewed as one pattern of endogenous development (Tsurumi and Kawata 1989).

In present-day Indonesia, only few small and petty enterprises have developed such affiliations with large corporations, supplying them with parts and unfinished assemblies, or supplying the production facilities themselves and related services. Therefore, the above conceptualization of subcontract manufacturing is not directly applicable for explaining the conditions of rural industry in Indonesia. Secondly, while policy does exist to promote the advance of large- and medium-scale factories from urban to rural areas (and actual attempts have been made), this activity is still limited, compared to the wide diffusion of rural industries in Java.⁵ In contrast, Indonesia's *sentra industri*,⁶ while not on a scale comparable to Japan, does resemble the Japanese social division of labor in community-based industries and can therefore be considered and discussed as one existing pattern.⁷ For this reason, we will investigate the production area, concentrating on the survey village, with respect to local production, distribution and the division of labor, and how they evolved.

Point 3: Rural Industrialization, Rural Stratification and Part-Time Farming

Underlying the study of nonfarm sector development in rural Asia are the following facts: (1) employment opportunities and low income cannot be solved by agricultural development alone (Shand 1986: 1–19), (2) the rate of population increase has outstretched employment opportunities arising from agricultural development, and (3) there are many villagers who have been displaced by technological innovation in the agricultural sector. This is why the nonfarm sector in rural society has been offered as a means to supplying employment opportunities for low-income village residents and improving the village-level distribution of income (Sayogyo and Tambunan 1990: i–ix).

The World Bank, which has been a proponent of the development of the rural nonfarm sector and rural industrialization, has incorporated the nonfarm economy into its agricultural and rural development policies with measures for infrastructure, like roads and communications as the most important components, human resource development-oriented occupational training and public health, capital mobilization and the construction of rural industrial estates (Anderson and Leiserson 1978: 37–

52). However, given the unequal distribution of landownership in the typical Asian village, this type of trickle down approach by the World Bank can bring about only minimal benefits to landless residents (Saith 1992: 102–7).

In the East Asian countries of Japan, Taiwan, and the Republic of Korea, “income disparities were substantially reduced because nonagricultural incomes of the small farms increased more than those of the larger farms” (Ohshima 1985: 34). Choe (1986: 3–15) in his discussion of part-time farming has shown the close connection between rural industrialization patterns and the demand for agricultural labor. That is to say, in monsoon rural Asia, the seasonal nature of agricultural labor demand, shown by an M-cycle curve over time, which gives rise to distinct peak and slack seasons, necessitates (1) the development of a nonfarm sector that is able to employ both the “seasonally underemployed” and the “absolutely underemployed” population not hired during peak seasons and (2) greater diversification in agriculture. Given no structural adjustment of an M-cycle labor demand curve, continued supply of rural-agricultural labor to the urban-industrial sector would cause an absolute shortage of farm labor during the agricultural peak season and a rise of real farm wages, and will eventually lead to high prices for farm products on the one hand, and increases in urban-industrial wage rates, on the other. Agricultural products may then be imported in order to avoid these consequences, causing stagnation in farm income, and the income disparity between farm and urban income may be worsened. In order to solve this agricultural/industrial dilemma, the structural adjustment of the M-cycle through farm mechanization is imperative in the agricultural sector. Land consolidation and rearrangement to support farm mechanization and the supply of cheap farm machineries will be realized, in addition to rural industrialization to increase the nonfarm incomes of farmers. Here rural industrialization leads to more balanced growth between urban and rural and functions to control the over-migration of villagers into the city. “At the stage of industrialization adjusted to the M-cycle, nonfarm activities of farmers are largely off-seasonal in nature” (Choe 1986: p. 10). These activities are sideline business operated by farmers who are subsistence-minded. They are largely agro-related and rural-based and mainly small-scale cottage and artisan industries. This kind of rural industry has been observed by Choe throughout Southeast and South Asia. On the other hand, rural industry capable of adjusting the M-cycle contains profit-minded enterprises that will provide part-time farmers with permanent regular factory and office work. These enterprises are not confined to small-scale industry and may even be located in rural centers. Under this rural industrialization, many small farmers may become part-time farmers. Choe says that this latter type of industry can be seen in Japan, Korea, and Taiwan. However, rural industrialization capable of adjusting the M-cycle will push forward the trend towards part-time farming to the extent that farm income will be sacrificed for nonfarm income due to a situation of near full employment farmers, resulting in a decline in agricultural productivity and constraints to further agricultural development. In contrast, under the rural industrialization adjusted to the M-cycle “it is often found that both land and labor productivity of part-time farms are higher than those of full-time farms” (Choe 1986: p. 13).

On the other hand, Saith (1992: 27–36) has investigated trends in the relative shares of wage employment and self-employment among village strata classified according to the scale of landownership, in conjunction with economic growth trends. As a result he has come up with a rural nonfarm sector development scenario in Southeast and South Asia that goes something like this. In these regions, which are characterized by large landless rural populations, from stage I of economic growth “poor households with little or no land” turn to wage labor. “The artisanal groups are also landless or nearly so, and operate on the basis of self-employment” (Saith: p.33). Therefore, “the wage employment [and the self-employment] components display a clear inverse relationship with respect to landownership” (Saith: p. 33). However, the second stage of economic growth, which is characterized by increased monetization and technological change, finds an increase in wealth for wealthy rural households reaping surpluses and thus offers opportunities for investing in local nonfarm activities. Here, the income from self-employed nonfarm occupations widens income disparities existing among village strata. This income is larger in the uppermost and lowermost strata than in the middle strata, resulting in a U-shaped pattern for the whole village. At stage III, “within self-employment activities, the poorer artisanal groups and households would find their economic validity eroded progressively” (Saith: p. 33). Income from wage labor tends towards equalizing income disparities, while income from self-employment occupations tends to exacerbate them. At stage IV, the self-employed activities of the rich begin to weaken due to competition from the modernized urban sector. Some of them actually shut down operations and move to town. This tendency will also increase opportunities for income disparity equalizing wage labor, thus improving village income distribution in the same spectacular fashion as in Japan, Korea, and Taiwan. Finally, at stage V “all rural households would begin to be more involved in the urban sector.... labor migration would occur from both ends of the scale, the poor to seek low-paid jobs, the rich seeking superior employment.... Migrants from landowning households would retain their rural connection for longer than those from landless one” (Saith: p. 35). The nonfarm sector as the local source of wages and cash remittances from the city occupy a large share of village income, as seen in Korea.

Saith’s argument points out differences in the effect of the rural nonfarm sector on income distribution depending on the extent of wage labor and self-employed occupations. Also, Choe’s argument on rural industrialization shows that management patterns and wage labor will differ according to the level of industrialization and demand for labor; and, of course, the extent of part-time farming will also clearly differ.

Economic activity in Indonesia’s rural nonfarm sector and its influence on village income distribution has been studied by Mintoro (1984: 264–70). He has shown that upper village social strata defined by landownership tend to earn higher incomes in the nonfarm sector, as well. Conversely, virtually landless strata earn the least amount of income in the nonfarm sector.⁸ In addition, Effendi states, “The effects of agricultural diversification on the growth of rural nonfarm activities have been mainly through consumption rather than production linkage” (Effendi 1991: p. iii).

In other words, increases in income cause increases in demand for off-farm goods and services. The richer rural households have benefited more from the expansion of rural nonfarm activities than the poor. Easier access to bank credit and better education and skills of the rich have made it possible for them to gain more profit than the poor, thus causing greater social inequality in the community.⁹ Unfortunately, this research gives us no idea of the extent to which non- and off-farm income worsened income distribution.

The present volume will build on the above research and attempt to clarify whether and to what extent weaving and other nonfarm occupations in the village surveyed have widened or narrowed income disparities among its socioeconomic strata. As part of this examination, we will look at the influence exerted by people who have left the village to work elsewhere on social stratification in relation to Saith's emphasis on the importance of commuting and migrating on narrowing such income disparities. With reference to the experience in Japan and Korea where the advance of rural industrialization caused stagnation in the productivity of agricultural land, the influence of rural industrialization in the survey village on agriculture will be studied, and also the relationship the rural industrialization to part-time farming and agricultural mechanization will be studied.

Point 4: The Meaning of Occupational Multiplicity in Rural Industry

This book will present a detailed account of occupational multiplicity in the village surveyed. Already, Ushiyama (1979) has defined a rural strata consisting of premodern labor engaged in nonagricultural occupations and forestry in Japan, as "partly on the village periphery, partly engaged in agriculture, villagers with occupations not as secure and stable as farm households" (Ushiyama 1975: 22). The ambiguous position of being "partly on the village periphery, partly engaged in agriculture" is observed often among villagers of the Third World. In his study of Jamaica, Comitas observed a group of people in the rural areas who cannot be classified as peasant, farmer or even plantation worker, due to the fact of their occupational multiplicity.¹⁰ He argues that these people should be studied as a group with a unique socioeconomic character (Comitas 1963: 2-4). The importance of occupational multiplicity in Indonesia has been already pointed out by White (1976: 277-84), but a detailed investigation of such a pattern in relation to the development of rural industry has yet to be carried out.

Point 5: Is the Rural Nonfarm Sector Involutional?

According to Geertz (1963a), the ecosystem of rural Java is dominated by *sawah* (wet-rice field) cultivation, whose most critical sociological feature is "its marked tendency (and ability) to respond to a rising population through intensification..." (p. 32). Under Dutch colonial rule, the rural subsistence sector, supported mainly by *sawah* cultivation, was overlaid by an export sector of mainly sugar cultivation. "Wet rice cultivation, superimposed by sugar cultivation, with its extraordinary ability to maintain levels of marginal labor productivity by already managing to work one more man without a serious fall in per capita income, soaked up almost the whole

of the additional population.... It is this ultimately self-defeating process that I have proposed to call 'agricultural involution'" (Geertz 1963a: 80). "Under the pressure of increasing numbers and limited resources Javanese village society did not bifurcate,... Rather it maintained a comparatively high degree of social and economic homogeneity by dividing the economic pie into a steadily increasing number of minute pieces, a process to which I have referred as 'shared poverty.' Rather than haves and have-nots, there were, in the delicately muted vernacular of peasant life, only *tjukupans* and *kekurangans*—'just enoughs' and 'not-quite enoughs'" (Geertz 1963a: 97). According to Geertz, involution, which was crystallized in the colonial era, proceeded relentlessly onward and outward after national independence. A process which begun to be felt in full force mainly in sugar growing regions is now found in economic sectors all over Java and Indonesia (Geertz 1963a: 126).

A lot of criticism concerning Geertz' theory contended that technological innovation in rice growing since the end of the 1960s changed the situation in Indonesia to such an extent that it could no longer be explainable by the concept of involution. Then historians began to raise doubts as to whether the concept was applicable even to the colonial era.¹¹ This criticism was centered around the cultivation of wet rice and sugar cane; but Geertz argued that the concept of involution applied to the Javanese and Indonesian economies as a whole. On this point Collier (1981: 149) has taken Geertz to task for ignoring off-farm labor by farmers in his analytical framework, and has argued that if off-farm income is included in the rice farmer's total income, then the income per capita may increase rather than remain constant or decrease as Geertz speculated. Kanō has argued that the nonfarm sector is a very important topic from which to examine involution (Kanō1979: 9–10), but has not yet embarked on a direct study of this theme.

The problem, however, is whether or not Indonesia's nonfarm sector is merely another economic sector that can absorb labor via labor-intensive technology without raising productivity. And secondly, there is the question of whether or not the principle of "shared poverty" is at work in homogeneous rural communities bereft for all intents and purpose of social distinction. Must we consider the present-day nonfarm sector as an extension of the process of involution?

In investigating and discussing the above points, the present volume will utilize the results of a village survey carried out by the author and other related data and published materials. The survey, which covered an area consisting of one hamlet of Ciluluk village in the Sub-district of Cikancung, Bandung, West Java, was carried out between June 1985 and October 1986, during which time the author resided at the home of the village headman. The survey was made possible by a research permit issued by the Indonesian Institute of Science (LIPI) and a visiting researcher position granted by the Center for Developmental Studies, Bogor Agricultural University (PSP-IPB).¹² The data presented has been supplemented by other published materials and statistical data available on the subject.

Notes

- 1 “Petty enterprises” or “petty commodity production” will be referred to in this book as enterprises performing various types of very small-scale commodity production and not factory production. Factory production and petty commodity production discussed here are not meant to express the development stage achieved by Indonesia as a whole, but rather to examine whether or not the modes of production that exist in the village surveyed can be classified as factory production.
- 2 Both of these studies were done as the result of a project entitled Penelitian Sektor Non-Pertanian Pedesaan Jawa Barat [Study of the nonfarm sector in West Java] carried out between 1987 and 1992 by the Institute of Social Studies (ISS), the Center for Development Studies at Bogor Agricultural University (PSP-IPB), the Centre for Environmental Studies at Bandung Institute of Technology (PPLH-ITB). See White (1986). The purpose of this very productive project was to study (1) what factors contribute to the stimulation of patterns of growth in industry and other farm activities in the developing agrarian region; (2) how can this growth be structured in ways which maximize employment generation and income distribution in a densely populated rural environment; and (3) what are the constraints faced by policy-making, planning, and implementing agencies at various levels in achieving the above objectives.
- 3 See Kaneko (1982) on the community-based weaving industry and Yamazaki (1977) on the community-based doll and glove industries in Japan.
- 4 See Ikeda (1978: 356) for the electronics parts industry and Chuo University (1985: 1–100) for the machinery metals and automotive parts industries.
- 5 Locational plans have been implemented to set up industrial estates and public enterprises. Also, using the Priority Rating List for Domestic and Foreign Capital Investment, government has adopted policies for encouraging the location of manufacturing in non-urban regions. Nevertheless, policy specifically aimed at rural industrialization over a large range of industries and regions was either still under consideration or not yet earmarked for legislation at the time of the author’s survey, resulting in a very scattered implementation.
- 6 Small-scale firms in a cluster of the same kind of industry or production area. Since 1983 the Department of Industry has been carrying out a *sentra industri* (production area) survey as one part of its small business promotion policy. According to this survey, there were as of 1983 a total of 1,010 production areas identified in West Java (Indonesia 1984). By *sentra industri* the survey means any region five kilometers in diameter that contains at least fifteen manufacturing enterprises involved in the same kind of industry. These production areas are almost exclusively located in rural areas and most of the industries are related to consumer-goods (clothing, food, and housing) production.
- 7 Although in the previously mentioned work of Misra (1985), subcontracting is dealt with uniformly, there is a lot of variation in the actual subcontracting relationships adopting a production organization where orders filled by subcontractors must conform to strict specification sheets, in order for the contractor to obtain necessary labor or components in completing the assembly of its products. When subcontractors carrying out capitalist production, there are two cases of contractors: one as industrial capitalist and the other as commercial capitalist. The case of subcontractors not carrying out capitalist production is regarded as putting-out system (Fujita 1954: 122–29). There is also the possibility of non-capitalist subcontractors working for a contractor managing industrial capital. In the study of community-based industries, the markets for the products are usually nationwide or overseas and there are no large enterprises subcontracting for them, but there is the possi-

bility of subcontract production for community-based industry where the subcontracting relationship is established between a large-enterprise contractor and producers in the production area of community-based industry as a whole. Then there is widespread pattern of subcontract/putting-out relationship being established among community-based industries' enterprises within a production area. There are many local industries whose markets are limited in breadth by the nature of their products and services: for example, makers of freshly processed foods (like bean curd) that cannot be preserved for long periods of time, barbers, and real estate brokers. This kind of local industry is quite viable in the midst of economically developing society, and forms an important component of the local community.

- 8 Rietveld (1986) has done a multiple regression analysis on the relation of household income earned in the nonfarm sectors of the fourteen villages surveyed by Mintoro and such data as household farm income, cultivable land population density, landownership Gini coefficients, and distance from the city, and came up with a coefficient of determinant, R^2 , of 0.891. He found that cultivable-land population density and household farm income had the strongest relationship to household nonfarm income.
- 9 A project carried in 1987 by the Population Studies Centre of Gadjah Mada University on off-farm employment in rural Java included plantation (include related wage labor), animal husbandry, hunting and gathering, and fisheries in its definition of off-farm occupations. According to the project's results from intensive surveying done in the Jatinom area of Klaten District, Central Java, the growth of dairy farming and orange growing as facets of agricultural diversification contributed more to the expansion of a off-farm sector made up mostly of commerce and services. The manufacturing sector did not grow much, and increases in villagers' income tended to go the purchase of manufactured goods flowing in from the city (Effendi et al. 1990: 19–44).
- 10 Comitas (1963: 41) defines occupational multiplicity as "a condition wherein the modal adult is systematically engaged in a number of gainful activities which form for him an integrated economic complex."
- 11 For a discussion of involution in terms of the introduction of high-yielding rice varieties since the end of 1960s, see Kanō (1979). A comprehensive historical critique of involution is presented in White (1983).
- 12 The author was despatched to the center by the Institute of Developing Economies in the capacity of an overseas research officer. The present volume is a summary of the research done at that time. The survey results are also the subject matter of Mizuno (1991; 1992; 1993a; 1993b; 1993c; and 1993d). The present volume is in part a summary of Mizuno (1993d). Unless otherwise indicated, the use of the word "present day," "contemporary," etc. refers to September-October 1986.