Working Paper Series No. 54

WOMEN'S ROLE IN RURAL INDUSTRIALIZATION THE CASE OF JAVA

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May 1989

Ms Artien Utrecht was a participant in the MA Programme (Agricultural and Rural Development) at the Institute of Social Studies, 1987/1988.

An earlier version of this paper was submitted in partial fulfilment of the requirements for the Degree of Master of Arts in Development Studies of the Institute of Social Studies.

The Board of Trustees of the Institute of Social Studies awards a maximum of three Prizes each year for the best MA Research Papers. This paper was the recipient of one of the Prizes of the Board of Trustees for the year 1987/1988.

Acknowledgements

I am indebted, in the first place, to my two supervisors for their stimulating guidance throughout the whole course of writing this research paper. Dr. Ashwani Saith, my first supervisor, has been very helpful in deepening my insight in the fundamental economic issues related to rural industrialisation and non-farm employment and in keeping a watchful eye on the analytical consistency of the paper as a whole. I am also grateful for his continuous encouragements to proceed on the way I had chosen. Particularly with respect to the area of women studies, both in general and with regard to Java, I benefitted considerably from the advice from Dr. Ines Smyth, my second supervisor. I thank her for her careful reading of my drafts and her comments showing me contradictions and inadequacies in some of my statements.

My thanks also to Dr. Benjamin White who, in many discussions prior to the writing of the outline for this paper, helped me to gain a better understanding of the nature of agrarian change in Java in general. This has proved to be valuable in the setting up and writing of the paper.

Delft, October 1988

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CONTENTS

I. INTRODUCTION

1. Background and conceptual approach

The choice of the topic of this paper grew out of my concern to obtain a better understanding of the processes that determine the nature of Third World women's employment in rural industry. Why is it that a large part of women's employment is relegated to the more traditional and "informal" branches of industry associated with poor earnings and bad labour conditions? And how are women's roles in rural industry affected by economic changes, particularly those linked to the "development era" of the past few decades? The analysis around broad questions like these is focused on rural Java, an area of which I have some former knowledge and also an area which has recently undergone an acceleration of political and economic changes of a structural nature.

It has been very clear from the beginning that the topic requires an analysis at several levels. Women's involvement in rural industry cannot be fully apprehended without an understanding of the functioning and role of rural industry in the peasant economy whereas the latter, in turn, does not operate in a vacuum but can only be analyzed as an integrated part of the economy at the national and international levels. A further refinement of this broad framework brings us to a more complex network of relations and interactions. Women's involvement in rural industry takes place in the context of a historically and culturally specified social formation containing particular gender and class relations. The domestic units i.e. households of which women are part are determined in their productive capacity by their class position (defined essentially by the access to the means of production) and demographic characteristics (household composition). Class position and demographic characteristics, at the same time, determine the scale of reproduction i.e. the level at which the household reproduces itself and accumulates a surplus. Included is the determination of the extent to which members of a household are integrated in the labour market and in which labour activities they are involved.
For a conceptualization of the way rural households in a peasant economy are integrated into capitalist production I owe much to the analytical framework developed by Deere and de Janvry (1979). This framework accounts for the variation in the material conditions of peasants as well as for the dynamics of their transformation by interrelating three levels of analysis: 1) the organisation of the peasant household, 2) the mechanisms

of surplus extraction, and 3) the class position of different groups of peasants within particular social formations (p.602). It specifies differences within households (i.e. age and the sexual division of labour), differences among households (i.e. class, household composition and family life cycle) and the ways in which these differences determine the forms of integration of the peasantry to the wider economy. It allows for the explanation of the dynamic interaction between class position, household composition and reproduction (p.601-609).

While the above-described framework is helpful in establishing an overall picture of interrelationships across the various levels of analysis, the more specific aspects of the questions asked in this paper need also reference to some other bodies of literature.

One is the literature on rural industry. A large part of the studies with respect to rural industry, carried out in specific localities, are of a more or less "economistic" nature and deal with rural industry as a particular economic sector in its relationship to agriculture and within the perspective of the transformation of agrarian economies to industrialized ones (for example Mellor 1976, Papola 1987). A much smaller number, drawing more on an anthropological tradition, relate rural industry to the micro context of household labour strategies and place it in a perspective of class differentiation (cf. Cook 1984). By and large, the literature about rural industry does give insights in the functioning of this sector in the rural and national economies by way of, among others, intersectoral flows, and in the role of state policies in influencing this functioning. Another point has to be remarked: many of these studies do not deal with rural industry in the narrow sense of manufacture but rather discuss it in the broader context of rural non-farm (RNF hereafter) activities (Islam 1984, Oshima 1984, Ho 1982). As a point of consideration are the close relations between rural industry representing the area of non-agricultural commodity production, with areas immediately supporting this production(construction, services), including that of commodity circulation (trade, transport). For the purpose of this paper, this consideration is indeed taken into account: rural industry, particularly where placed in the perspective of socio-economic change, is always seen in the broader, RNF, context. At the same time, though, we should not fall into the other extreme of conceiving the RNF sector as an undifferentiated entity. In fact, the nature of the RNF sector can only be grasped by

breaking it down into the different parts and analyzing the interactions within it.

The other body of literature to which this paper has to refer is that with regard to women, and especially those segments of that literature which deal with the relationship between women and economic change. The focal connections which are of interest here are those between women's involvement in paid production, women's roles in reproduction, class position and female autonomy. It lies beyond the scope of this paper to review, even in a brief manner, the large amount of studies on women which do have some relevance for the concerned topic (see Beneria & Roldan 1987: 1-16). The relative short time-length during which this paper had to be finished, moreover, has forced me to draw on just a limited amount of analytical sources. The analytical framework developed by Deere, Humphries and Leon de Leal (1982) turned out to be useful for an overall conceptualization of the relationships between women and social-economic change processes. It deals with relations between women's participation in productive activities, reproduction, class position and household characteristics and is, in its assumptions and analytical concepts, closely connected to the above-mentioned, framework of Deere and de Janvry.

A particular area of interest within this framework is that concerning the interaction between women's productive activities and their role in reproduction, and the conceptualisation of this interaction related to changing forms of gender subordination (Beneria 1979, Beneria & Sen 1986). This conceptualisation has a been carried out more thouroughly in the specific context of women's employment in modern factory production associated with the new international division of labour (Elson & Pearson 1981, Fernandez-Kelly 1983), some aspects of which are relevant to our case.

What is at issue here is the question to what extent and how particular forms of women's involvement in industrial production are rooted in the prevailing patterns of gender subordination and how these patterns are modified as a consequence of changes in the forms of women's industrial employment. The ideological level, concerning the perception of gender roles in society is very much culturally specific to the social formation in question, although there are basic universal traits. For most of the time I refer in this respect to specific "Java oriented" studies (Hull 1982, Wieringa 1981, Stoler 1977). The importance of this ideological aspect in the study of women's involvement in rural industry lies not only in the ways perceptions about gender roles determine the extent of and

forms in which women are employed in this sector (see above), but also the compatibility of these perceptions with the actual work women do across classes and how this is related to class differences in terms of social power.

To summarize, the topic of this paper lies in the interface between two areas in the literature: that of women's roles in rural industry and that of the functioning of rural industry within the peasant economy and the economy at large. It is, on the one side, geared towards questions regarding women's contribution to rural industrialisation and the ways structural changes in rural industry and the rural economy affect women's position in terms of autonomy and power. On the other side, it is concerned with the question as to how these contributions and effects are related to the nature of rural industrialisation itself as part of the process of agrarian change reflected in intersectoral relationships and patterns of rural differentiation. The next section explains how this topic is dealt with in the context of rural Java.

2. Objectives

As implied by the approach described in the foregoing section, our discussion of the topic of this paper will move along three interrelated levels of analysis:
a) the nature of rural industry, its function in the rural economy and the economy at large, b) the ways in which rural industry is related to the process of rural differentiation, and c) the ways in which women from different social classes are involved in rural industry.
This framework shapes the following items, in the context of rural Java, to be described or analyzed, which may be referred to as the objectives of this paper.

1. The agrarian structure and the nature of changes taking place in this structure, including questions with regard to a) the conditions of agriculture and industry and the relationships between the two sectors, and b) the ways in which changes within each of the sectors as well as between them relate to changes in the class structure i.e. the process of rural differentiation.
The questions involved are:
- What are the characteristics of the agrarian structure with respect to land distribution, class relations and employment and how have political

and economic policies over time, particularly during the past two decades under the New Order regime that witnessed a significant growth in agricultural (rice) production, affected this structure?
- What are the structure and conditions of rural industry and how has this sector been affected by the regime's industrialisation policies, especially in terms of employment?
- What trends have been observed in the interaction between agricultural growth and rural industry -and RNF activities in general? I.e. what is the nature of RNF activities generated by this growth? What are their rural linkages? What kind of economic flows (capital, labour) were generated by the interaction between the two sectors? How did it affect the economic relationships between urban and rural areas?
- How did RNF activities affect class relations? What are the relations between farm and non-farm incomes at the level of the local economy? Have RNF activities muted or increased rural inequalities?

2. The employment of women in rural industry in relation to women's employment in other economic sectors, the factors with respect to class and gender that shape the patterns of women's involvement in rural industry and the ways in which structural changes in the farm and non-farm sectors have affected this involvement and, accordingly, the position of women across classes.
The questions involved are:
- What are the broad trends in female employment as a consequence of structural changes in agriculture and non-agriculture? What are the conditions of women's work in the RNF sector and how are these conditions changing? Which factors determine the extent and forms of women's involvement in RNF activities? To what extent is female rural-urban migration involved and what are its patterns?
- How did structural changes in rural industry affect women's roles and the sexual division of labour in this sector?
- How did trends with regard to women's RNF employment affect women's position in terms of economic and social power? How does the dominant ideology regarding gender roles play a role in this and how does this work out across different classes? What are the implications of changes in women's work for class differentiation among women?

As an insight of both the roles of women in rural industry and the effects of structural changes in rural industry on the position of women have been

established under point 2 above, these have to be related to the nature of rural industrialisation and agrarian change discussed under point 1. This also involves issues concerning the role of women, through their involvement in rural industry, in facilitating intersectoral relationships (i.e. in terms of flows of capital and labour/wages) and in the process of rural class differentiation.

This paper intends to sketch an overview of the above-mentioned processes and relationships based on available secondary sources. As we will see in the next section, information about rural industry in Java is very sketchy. Therefore this paper will be indicative and suggestive rather than providing a complete picture. And undoubtedly, it will raise more questions than it can answer. The emphasis lies in the conceptualization of the processes and relationships concerned by relating them to theoretical considerations around the subject (see section 1 under "conceptual approach") and comparing them, whenever necessary, with experiences in other countries.

3. Data sources

Despite the growing importance of the RNF sector as a source of employment for the rural households in Java, systematic and detailed information on RNF employment and incomes is still lacking. This is the more so for female employment in the RNF sector,and rural industry, since the scanty available data is rarely disaggregated according to sex. In order to sketch a picture of patterns of RNF employment and women's role in it analysis of macro data have to be combined with results of a number of micro studies (on the village level, the level of groups of villages and that of the enterprise). No analysis of "raw" census data has been conducted for the purpose of this paper. Reference to macro data already processed in secondary sources proved to be sufficient in most instances. Below the types of macro and micro data which have been relied upon are briefly listed.

Macro data:
General data on population and employment can be obtained from the Population Census (1980). The National Labour Force Survey (SAKERNAS) may provide additional data on employment, while the Agricultural Censuses (1973,1983) are a source of time series data on, among others, the distribution of farm sizes. Data on trends in medium- and large-scale manufacturing at the national level is usually obtained from the Industrial

Statistics (Statistik Industri) and some other regular publications of the Central Bureau for Statistics (McCawley 1984).
For data relevant to patterns of RNF employment White (1986) mentions some possible sources, the main one being the SUSENAS (National Socio-Economic Surveys). Despite shortcomings these surveys are useful for data on incomes/ expenditures, income distribution, sources of rural household incomes and trends in these over time (p.32). Particularly on non-farm activities there are the several censuses and surveys by the BPS (Central Bureau for Statistics) of large-, medium- and small-scale and cottage industries. The information on small-scale and cottage industries is, however, not very recent (1979). Problems with these data are that they: do not distinguish between rural and urban (except the 1979 SUSENAS data), do not disaggregate between male and female workers and do not cover non-farm sectors other than manufacturing (p.47). Some, slightly more detailed, information on small-scale and cottage industries can be obtained from an, unfortunately, somewhat outdated source: the 1974/75 Industrial Census. One recent data source for RNF activities is the Economic Census of 1986. However, the parts which have been published up to the moment of this writing (1988) contain only data on very broad categories of industry.

Micro data:
Three types of micro data will be relied upon:
1. Village level studies. These provide more detailed information about the interaction between agricultural and non-farm employment at the level of the household and the community, although many still carry a "bias" towards agricultural activities. Rural Java is one of the regions about which studies at this level have more or less mushroomed. Considering the great variety among villages in Java, however, no generalizations can be made based on the results of studies of any single village. Although, if taken together, they may indicate certain directions of development.
2. Studies of groups of villages. Particularly useful are the surveys and re-surveys carried out by the Agro Economic Survey Foundation in several parts of Java. Another source mentioned by White (1986) are the surveys of the new National Panel Farmer Study (PATANAS) initiated in 1983 by the Centre for Agro-Economic Research of the Department of Agriculture (p.16).
3. Studies that particularly focus on women in RNF activities: on women in small trade, in certain branches of industry (for example handicrafts and the batik industry) and in certain large scale or small-scale enterprises. These provide some data about the characteristics of the female workforce,

production and/or marketing relations, conditions of work etc. Unfortunately, only some of them are relatively elaborated and draw the linkage between the workers and the households where they come from. Besides, cases or studies depicting tendencies in employment in rural industry/ RNF activities but not particularly that of women, and cases about rural women's employment but not particularly in rural industry or RNF activities, will be useful as well to complement the picture.

4. Organisation of the paper

This paper consists of an introductory chapter, a conclusion and four chapters in between. In the introductory and first chapter, of which this section is part, the background, conceptual framework, objectives and data sources are explained. The second chapter is one that basically provides the context for the analysis in the subsequent chapters. It is divided in two sections. The first one describes, briefly, the agrarian structure and the recent political and economic changes that have been taking place in rural Java. The second section deals with developments with respect to industry, particularly the manufacturing sector. It is focused on the effects of the industrialisation strategies pursued in the past two decades on industrial employment, the process of industrial restructuring and the specific governement policies with respect to rural industry. The third and fourth chapters, which are the main chapters, are organized in conformity with the three levels of analysis formulated under "objectives" (section 2 of this introduction). The third chapter attempts to give a rough idea of the nature of rural industrialization by looking at the composition of the growth of RNF activities, the rural consumption and production linkages of these activities and the type of interactions between the rural and urban economies. The second section deals with the relationship between the growth of the RNF sector and the process of rural differentiation. The fourth chapter, which is the core (and largest) chapter, explores the patterns of women's involvement in the RNF sector, particularly in rural industry. These patterns are primarily dealt with in the second section, after discussing general trends in female employment beased on aggregate data in the first section. Factors related to the traditional sexual division of labour and basic household characteristics determining women's work patterns are explored. In the third section particular attention is paid to women's roles in rural industry and the ways in which these roles have changed as a consequence of economic changes with respect to the

industrial sector and to the rural areas in general. The fifth chapter is intended as a final reflection on the main theme of the paper. This is, however, mainly presented in the second section by relating women's roles in rural industry and their changed position with the nature of rural industrialisation. In the section preceding this (section 1), I discuss the effects of women's changed economic position on their autonomy and power as well as the ways in which this has worked out across classes. Given the reflective nature of this chapter, the final conclusion of the paper is a brief one, just consisting of remarks with respect to questions for further research.

II. AGRICULTURE AND INDUSTRY IN JAVA

1. The agrarian structure and recent changes

1.1. Main characteristics of Java's agrarian structure

Java is one of the most densely populated agrarian regions in the world. Its population of about 99.5 million (1985) is crowded on just 7% of Indonesia's land area, making up agrarian densities of 1000 to 1300 people per cultivated square km (Palte & Tempelman 1975:120). One of the main characteristics of the agrarian structure in Java is the tiny scale of its farmholdings. As we can observe in table A1, the majority of the farms (80%) is smaller than 1.0 hectare and over 50% smaller than 0.5 hectare, while only 5% is of a size of 2 hectares or more. If we consider only the irrigated and rainfed rice fields (sawah), the scale of holdings becomes even smaller. Of the sawah-holdings 91.4% is smaller than 1 hectare and 74.5% smaller than 0.5 hectare (White 1984: A VI). Macro statistics on landownership or control are not available in Indonesia, but micro level studies have generally pointed out that large landowners of the size we find in the Philippines or parts of India, are quite uncommon. In most villages the largest landowners own 5 to, maximally, 15 hectares (ibid: 2). Two other characteristics of the agrarian structure in Java as mentioned by White are, first, the predominance of owner-managed farms (around 70% in the 1970s) and, second, the relative high proportion of hired rather than family labour inputs in rice cultivation. Although this does not rule out cases in which leasing and sharecropping are important features in the production relations, on the whole it can be concluded that agricultural wage labour is "the dominant relationship through which one class lays claim to the product of another's labour" (ibid: 4). This finding also refers, among others, to inequalities in land control. Data from the 1973 Agricultural Census and the 1971 Population Census indicate that more than 50% of all farm land is controlled by about 10% of all rural households. Patterns of landlessness are not recorded by macro data, but with the help of extrapolations from population census data, we can see that, for instance in 1983, 41.5% of the rural households controls either no land or less than 0.1 hectare (Husken & White 1987: 25). Micro data, which generally provide more precise indications about landownership, point to degrees of landlessness and near-landlessness in wetland villages of about 60% to 80%. In dry upland areas these percentages may be lower.

High population densities imply high levels of labour intensity in rice cultivation. The averages of labour use of 249 to 356 person days per hectare, depending on the variety planted, in 1969/70 in the northern lowland coastal plain and river basins in Java, are high compared with other Asian countries (Palmer 1977: 17). This goes together with a pattern of high occupational multiplicity in rural households, involving a wide range of agricultural and non-agricultural activities (White 1976). High population densities and processes of impoverishment and social differentiation are no recent problems in Java, but have been part of the rural question since the 19th century.

1.2. Recent political and economic changes

Since the New Order regime came to power in 1966 Indonesia has experienced considerable political and economic changes. The achievement of substantial economic growth following the pursuit of an "open" economic policy went hand in hand with a transformation of the political system within the context of a pre-existing structure of centralized state power. Among the important components of economic growth are the widespread adoption of new rice technology, constituting the socalled "green revolution", and the corresponding increases in rice production. Between 1968 and 1984 rice production more than doubled and yields in Java rose from 1.66 tons of milled rice/ha to 2.78 tons/ha (Mears 1984, World Bank 1987). This growth has been facilitated by the availability of impressive amounts of financial resources due to the inflow of foreign aid and, since 1974, the windfall oil revenues. These resources have made possible: large investments in irrigation and other infrastructural works, the subsidization of prices of chemical inputs (fertilizer and pesticides) as well as credit for the adoption of HYVs and a policy geared at rice price stabilisation (ibid).

Throughout the years the body of literature on social-economic changes following the New Order regime's policies toward the rural sector has steadily grown.[1] Increased land productivity implied an increase in the capacity of farms to produce a surplus. The consequent rise of farmers' incomes, together with the increased government expenditures, have intensified economic activity in the rural areas. Micro-studies have shown that the apparent increased wealth has, however, become more and more concentrated in the hands of a small minority of rural households. For the majority of the rural population the access to land, other resources and agricultural employment has become more limited. As a consequence, income distribution has become more skewed (Collier et al. 1982, cf. Schweizer

1987, White & Wiradi 1987). Given the pre-existing rural inequalities these changes represent an acceleration of tendencies which were already under way (Husken & White 1987).

Despite the fact that the effects of the use of modern rice varieties on employ-ment in rice production have not always been clear cut and vary greatly across regions, it has been generally agreed that during the 1970s there has been some decline of agricultural employment, particularly for women as a consequence of changes in harvesting methods and the virtual disappearance of handpounding for wages due to the rapid diffusion of rice hullers (White 1985). The changes in harvesting methods constitute a decline in harvest-labour use per hectare due to the replacement of the ani-ani (a small hand-held blade) by the less labour-intensive sickle together with a shift from the practice of "open harvests" - where fellow villagers (mainly women) are free to take part in harvesting in exchange for a certain share in the harvest - to a system under which a landowner sells the rice crop shortly before harvest to a middleman who hires a limited number of (mainly male) harvesters often from outside the village (Collier et al.1974). Other changes in labour recruitment practices were observed as well, such as the increase of contract labour replacing the use of casual labour (White & Wiradi 1987:24) and the (re)emergence of kedokan, under which the performance of certain pre-harvest tasks by a worker is required in return for the right to harvest. Though the content of labour arrangements differs from one place to another they all seem to signify an increasing division between those who enjoy job security and those who are excluded from it and cast into a reserve labour pool (Hart 1986).

By some authors the recent social-economic changes in rural Java have been mainly explained in terms of the process of commercialisation following the advent of modern rice technology in a situation of increased population pressure. Similar to the experience in other Asian countries the "green revolution" has proved to be particularly favourable for the already better-off who were provided with lucrative opportunities for profit-making. This went along with an increased penetration of market mechanisms in the rural economy and the erosion of traditional norms of communal cooperation to the detriment of the masses of landless and marginal farm households (cf. Collier et al.1974, Hayami & Kikuchi cited by Hart 1986: 7 & 187). Hart (1986), among some others, has emphasized the need to go beyond mere "economic" explanations of the changes that have occured and to view them in the context of the configuration of power relations in the

rural areas which have, after 1965, shifted in favour of the elites of wealthy farmers and local notables backed by military authorities. The rural poor, at the other end, saw its bargaining position vis-a-vis the rural elites severely weakened. The large interest of the military bureaucratic state in the rural areas, reflected in an increased intervention, has not been limited to economic aims of national self-sufficiency in rice and the provision of cheap food for the cities, but was to a great extent driven by the desire to establish effective political control through an alliance with the dominant social groups in villages. The main concern was to prevent a resurgence of agrarian mobilisation and to contain any threat of the type posed by the militant, Communist Party-linked, peasant organization BTI during the early 1960s. In its efforts to strenghten control over the rural areas, the state has pursued an effective policy of depoliticisation and undertaken a massive restructuring of administrative institutions at village level. Impoverishment of the bottom layers of the rural population[2] has thus gone hand in hand with increased political repression under which the people are deprived of any possibility to organize and resist processes which make them worse off.

2. Industrialisation strategies

2.1. Growth of industrial output and employment

Industrialisation has been the other component of the New Order's economic policy. During the 1950s and 1960s the industrial sector had experienced a period of relative stagnation. In the late 1960s a new environment conducive to industrial development was created through macro economic stabilisation measures, changes in trade regulations and the enactment of a new investment law to attract foreign capital (McCawley 1982: 82). In the years that followed industrial output showed a marked increase allowing an annual growth rate of 15% throughout the 1970s and the share of industry in GDP to rise from 9.6% in 1971 to 12.7% in 1985 (table A2). Important were the investments in manufacture mainly undertaken by Japanese investors and the government investments of oil revenues in a number of large manufacturing projects such as fertilisers, iron and steel and petroleum refineries (McCawley 1984: 158). The annual industrial growth rate even exceeded that in other Asian countries, such as Thailand, Malaysia and the Philippines and matched that of South Korea. Compared to these countries, however, the share of manufacture in GDP is still small and per capita manufacturing value added quite low (table 1).

Despite the fast growth some researchers have been questioning both the nature and the prospects of Indonesia's industrialisation process. The main concerns are whether industrial development contributes to a balanced and sustainable economic growth and whether it is likely to create substantial additional employment and raise the living standards of the population.

1. It has been generally observed that the country's economic growth was in the first place an extractive export-led growth engendered by the exploitation of natural resources such as oil, lumber and minerals (Paauw 1981: 157). This is reflected in the relative large share of mining and quarrying in GDP (table A2) and the fact that incomes from oil exports have constituted more than half of the state revenues: 70% before the collapse of the world market price of oil in the early 1980s. This bias towards resource extraction has very much discouraged non-oil i.e. manufacturing and traditional labour-intensive agricultural exports by, among others, maintaining a high exchange rate (Hill 1984: 9).

The rapid growth of the manufacturing sector, then, was primarily based on import substitution. Initially it was due to a combination of factors which were partly related to the earlier stagnation period. Since there was a backlog of consumer demand industrial investments could easily be geared at the domestic market (McCawley 1982: 83). This market, moreover, tended to grow as a conse-quence of the large government expenditures and the expansion of government services together with a demand growth of a rising urban middle class. In the late 1970s, however, in some industrial branches this domestic demand became satiated; as a matter of fact, these branches (textiles, electronics and car-assembly) began to experience overcapacity (ibid: 85-86). Since the early 1980s industrial growth slowed down: from 15% in the 1970s the annual growth rate dropped to 6.5% in 1980-1985 (Hasibuan 1987: 42).

It was only recently, since oil revenues declined drastically, that the development of labour-intensive manufacturing and agro-processing for export markets has received priority. Such a late entrance into the world market requiring international competitiveness of Indonesian products is, however, not so easy to make. Although cheap labour is in abundance, the factors necessary to exploit this "comparative advantage" - i.e. management efficiency, quality control and knowledge of international markets - have been lacking (Hill 1984: 9, Ramli 1982). And still more difficult to overcome is the burden of industrial regulations which is ultimately rooted

in the exclusive rights to import, produce and distribute essential goods, in the hands of a limited number of monopolies of "bureaucratic capitalists". Some deregulating measures have been taken since 1986, but substantial changes seem not to come overnight (FEER 10-9-1987). This constraint is essentially a political one, with a strong national bourgeoisie entrenched in the import substitution manufacturing sector resisting any change of policy that may damage their interests (Robison 1985:326).

2. The growth of the manufacturing sector have been much more a growth in output than in employment. Macro data reveal that although growth rates of industrial employment are well above the average growth rates of employment in general, the relative position of industrial employment in the overall employment structure is small: 6.9% in 1971, rising to 9.1% in 1980 and 9.3% in 1985 (Hasibuan 1987: 36). In the total share of non-agricultural employment, which rapidly rose from 21.0% in 1971 to 45.3% in 1985, the proportion of industrial employment stagnated at around 21% (ibid).
The meagre contribution of industry to employment growth is related to the fact that industrial development was accompanied with sectoral shifts. It has been characterized by a movement away in factory production from consumer goods, which tend to be more labour-intensive, in favour of the generally more capital-intensive sectors of intermediate and capital goods (Hill 1984:7; McCawley 1984).[3] The shift towards greater capital-intensity in the large and medium manufacturing sectors can also be traced from the rapid growth of real labour productivity and the marked increase in average firm size (McCawley 1984: 161). The latter development reflects not only the expansion of capital-intensive state-dominated sectors such as fertilisers, iron and steel, but also the trend within traditional light industries (food and beverages, tobacco and weaving) of small labour-intensive enterprises being either displaced or incorporated by higher-technology ones (ibid, Jones 1984: 142).
This displacement or incorporation of traditional small enterprises is indicated by macro data on industrial employment, according to which the decline of employment particularly took place in industries at the cottage level (see table 2). Table 2 also shows the important, though decreasing, share of small-scale and cottage industry in total industrial employment. It furthermore reveals that industrial employment as a whole -including small-scale and cottage industries- increased just slightly and even declined in absolute terms in the period 1974-1979. Throughout the entire

Table 1 INDONESIAN INDUSTRIALISATION IN REGIONAL PERSPECTIVE

Country	Manufacturing			Manufactured exports c)	
	Share of GDP 1983 a)	Real annual growth 1971-82 b)	Value added per capita 1982 (curr.prices)	% of total exports 1982	per capita 1982
	(%)	(%)	($)	(%)	($)
South Korea	33	15	481	90	493
Philippines	25	6	192	45	52
Singapore	22	11	1,152	49	4,081
Thailand	21	10	148	26	37
Malaysia	18	9	326	20	163
India	16	5	39	52	7
Indonesia	15	15	75	4	5

Source: Hill 1984, table 3
Derived from Asian Development Bank, "Key Indicators of Developing Member Countries of ADB", April 1984, and ASEAN-Australia Project, Data Bank, Research School of Pacific Studies, ANU, Canberra.

Notes: a) Data at constant (generally early 1970s) prices. Indonesian and Korean data are for 1982, India for 1981.
b) For several countries, data are for 1971-81 or 1972-81
c) SITC 5-8 less SITC 68 for all countries except for the Philippines, which includes SITC 5-9; 1980 data for India; 1981 data for the Philippines, South Korea and Malaysia.

Table 2 NUMBER OF PERSONS ENGAGED IN THE INDUSTRIAL SECTOR INDONESIA 1974/75, 1979, 1986

Category	1974/75	%	1979	%	1986	%
Large & Medium	661,704	13.5	870,019	19.4	1,711,095	32.3
Small-scale	343,019	7.0	827,035	18.4	744,711	14.0
Cottage	3,895,530	79.5	2,794,833	62.2	2,850,795	53.7
Total	4,900,259	100.0	4,491,887	100.0	5,306,601	100.0

Source: Hasibuan 1987, table 17
based on: BPS/CBS Small-scale Industrial Statistics, 1979 (for 1979 figures), BPS/CBS (for 1974/75 figures) and BPS/CBS Economic Census 1986, Hasil Pendaftaran Perusahaan/Usaha, Seri A, p.8.

Note: Criteria for scales of industry:
Cottage : 1 - 4 workers
Small-scale : 5 - 19 workers
Medium-scale : 20 - 99 workers
Large-scale : 100 workers and above

period (1974/75-1986) employment in cottage industry declined to the extent of 2.8% per year (Hasibuan 1987: 45).[4] Rural industrial employment grew between 1971 and 1985 but much less rapidly than urban industrial employment (which started from a very small base) and in the period 1980-1985 at rates well below that of the rural labour force (cf. Hasibuan 1987, tables 1-2 and 13-15).

2.2. The restructuring of industrial production and employment

The changes mentioned in the preceding subsection -i.e. the shift in factory production to intermediate and capital goods and to higher capital intensity as well as the general decline of employment in household industry - are part of a process of industrial restructuring. The complexity of this process, in which changes occur both among and within industries and in which there are great regional differences, render available macro data largely inadequate to provide a definite picture of what is really happening to industrial employment, particularly in the rural areas. At the level of small-scale and cottage industries, furthermore, the data problem is compounded by the difficulty of statistical measurement due to the "informal" features of many of the establishments and the (sometimes) irregular nature of employment in them. In an attempt to give a rough indication of this process, despite the just mentioned problems, I have put together data from an array of studies, most of them at micro level. The drawing of generalisations, therefore, needs much care: some trends may be very specific and apply to just a limited number of cases. Moreover, most of the data concern just a few industries. The evidence found points to the following changes.

1) I have mentioned the trend in the 1970s of small-scale, and particularly cottage, industries in the traditional light manufacturing sector being displaced or incorporated by more advanced and large-scale manufacturing enterprises. The case of the weaving industry is in this respect revealing: it has been estimated that between 1964 and 1974, 90,000 jobs were created in the mechanised sector while 40,000 to 90,000 jobs were lost in the traditional handloom operated sector (McCawley 1982: 112). In the kretek (clove cigarettes) and batik industry this process went together with a rapid concentration of capital and production in a very small number of large-scale firms. In the batik industry within a relative short time span of 10 to 15 years the market has become largely under the control of just three"giants", while small-scale enterprises had to either close down or

become subcontractors. It has been reported that in the area of Yogyakarta only 10% of the batik factories registered in 1970 were still operating in 1984 (Joseph 1987: 26). Traditional and less profitable firms which are, nevertheless, still operating often do so on a reduced schedule - vulnerable as they are to fluctuations in demand - and under very difficult conditions. In an analysis of developments in the cigarette and weaving industries, Manning (1978) points to the emergence of a differentiated structure within each of these industries: the existence of large scale, technologically advanced and capital-intensive firms (which are often foreign owned) on the one end and small scale labour-intensive firms on the other, with in between a relative large number of medium-scale mechanised firms (or very large non-mechanised firms as in the kretek industry). This runs parallel to a structure of highly segmented labour markets, with relatively protected, high-earning, workers in the technologically advanced firms, enjoying relative great employment stability, contrasted to unprotected and often irregularly, low paid, piece rate workers in the low-technology and smaller firms. Workers in the mechanised and non-mechanised medium-sized firms (and huge labour-intensive firms in the kretek industry) are referred to as "semi-protected" in the sense that they enjoy relative high incomes and stable employment but make longer hours than the workers in the advanced firms and do not receive the fringe benefits which are provided for in the labour law. Manning furthermore observes that the capital-intensive firms tend to employ more male workers while female workers are concentrated in the non-mechanised and rural firms (ibid).

2) Since the early 1980s manufacturing production for the export acquired more attention in government policy. Although, on the whole, the effects of this policy have still been limited, they seem to have been tangible in the textile industry which, in the late 1970s reached its lowest point (causing many factories to close down) due to an oversupply of the domestic market. Hardjono mentions that in the 1980s in the Majalaya district in West Java traditional textile firms experienced a revival following an expansion in the export-oriented garment industry and a widening of the domestic market due to the fact that modern textile firms turned to export markets (1988:19). A more direct effect of this export promotion policy has been the establishment of new large labour-intensive firms in the textile and garment sectors. The peri-urban location of most of these firms is due to a set of advantageous factors, among which the availability of cheap land and

cheap female labour from the surrounding rural areas (Wolf 1986, Jusuf 1988). [5]

3) The process of industrial restructuring has been accompanied and supported by changes in market demand as a consequence of changed consumers' attitudes. Mass-produced consumer goods are not only cheaper but are also more preferred due to the belief -strenghtened through excessive advertising and trend-setting by urban and rural elites- that machine-made goods are superior. This phenomenon, which is rooted in the ideology of modernization, is in no way unique and takes place throughout the Third World. This trend implies a reduced demand for traditional "inferior" products, which are mainly produced in small-scale rural industries, such as clay cooking pots, pandan and mendong (grass) mats and handwoven sarong. Alongside this there has appeared an increasing demand for handicraft items for the urban, tourist and export markets (Dunham 1982:144). The government tend to support production of these handicraft items in rural areas as part of its policies to promote (rural) small scale industry (see sub-section 2.3. below). This means that while many rural producers increasingly face marketing problems for their traditional products, some of them flourish because they managed to take advantage of the new and profitable market opportunities by applying improvements in design and technology.

If we look at the changes from the point of view of the traditional, mostly small-scale and cottage, enterprises many of which are confronted with competition from imports and large mechanised firms, several processes may take place.

1. In an attempt to survive firms may lower the costs of production by producing the same kind of products of a lower quality. This may be done by using cheaper raw materials and by simplifying and/or speeding up the production process (cf.Smyth 1986:331 with regard to a case of basket-weaving in West Java). The consequence is a general deterioriation of skills and technology which, on the long run,may increase the vulnerability of the enterprises concerned (ibid).

2. Firms may also shift into other, non-competing, product ranges, usually involving products of inferior quality. Mizuno (1986) describes this process for one village in the area of Majalaya, West Java: once a relative prosperous village with some medium-sized textile factories producing sarong, due to competition by emerging modern textile factories in the nearby area of Bandung it has become an impoverished place where, after

closing down of the factories, a number of home-based producers, each operating just 1 or 2 handlooms, were left producing low quality bandages, towels and dishcloth for non-local large factories (p.IV 1-12). Such a shift involves a significant decrease in value added and earnings.

3. Producers may be forced to enter a subcontracting or putting-out arrangement with a large or medium-sized factory. Such a dependency relationship has often negative consequences for the involved producers in terms of both earnings and employment security. Subcontracting between large and small firms is, however, not new and has been a longstanding phenomenon, particularly in industries that are characterized by great demand fluctuations like in textiles and batik. The point that is being made here is, rather, that this type of production relations seems to be on the increase (cf. Joseph 1987:26 for the batik industry). This situation implies an increasing competition between subcontractors. In the weaving industry rapid technological change may add another factor to the employment insecurity of subcontractors. This is indicated by a case in Majalaya where subcontractors, using "obsolete" looms, cannot keep in pace with demand changes of the large subcontracting firms (Hardjono 1988:56).

2.3. Policies with respect to rural industry

There are no government policies or programs which are specifically directed at rural industry. But we can say something about it by looking at government policies toward small-scale industry. This can be done considering the fact that the majority of the rural manufacturing workforce is engaged in self-employment and wage employment in small-scale enterprises and more particularly in enterprises of less than 5 workers. These enterprises are involved in a limited number of "traditional" product areas : food and beverages and tobacco processing, followed by construction materials incl. bricks, roof tiles etc. and the areas of textiles and leather goods (White 1986: 50). The general problems that are faced by these enterprises have been indicated in the preceding subsections. In policy terms these problems have been reduced and translated into one central constraint: the lack of capital (Hasibuan 1987: 67).

Following the government's stated objective to promote small scale enterprises a range of credit programs has been set up.[6] It is remarkable that none of these programs are specifically intended for the industrial sector although small-scale entrepreneurs in this sector form a part of the borrowers, particularly of the KIK and KMKP schemes. Hasibuan (1987), who examined some large-scale data on the performance of these programs,

concluded, among others, that only a small proportion of the total amount of borrowers were industrial smale-scale entrepreneurs - with regard to KIK for example,between 1974 and 1982 covering just 5,8% of the total amount of approvals. The majority of the approvals went to the trade sector, followed by transportation and agriculture (p.80). A similar conclusion has been arrived at by Colter (1984) based on evidence at a more micro level i.e. a survey of 10 villages in Java. As has been argued by White (1986), the predominance of trade in these schemes has limited their capability to generate meaningful additional employment (p.74). It has also been found that these formal credit schemes have so far benefitted only a small fraction of the rural population e.g. the already wealthier households (Colter 1984: 337) and left the majority of poorer households dependent on either their own meagre resources or informal high-interest loans from local moneylenders. In this context, some more serious and succesful income generating projects by NGOs directed at the poorer sections of the population have remained piecemeal and isolated.

Since recently there is a new policy tool for the advancement of small industry: the bapak angkat (= foster father) policy which, in fact, amounts to the promotion of a kind of subcontracting or vertical integration. Large enterprises, whether public or private, are expected to take up small scale partners as suppliers of parts and subsidiary services. The "fathers", then, assist the small firms with the provision of raw materials, training, technical advice and/or marketing. I have found no data providing an insight in the overall results of this policy up to now. Piecemeal information on individual cases, such as that provided by Hardjono on one bapak angkat project in the weaving industry, however, demonstrated the inherent difficulty of providing assistance to small and technically inefficient enterprises (1988: 39-40 & 57).

At a more general level we can say that, despite the policies to further small-scale industry, the general problem remains: the inconsistency of policies towards the different scale sectors of industry. As long as the greatest share of industrial investments and credits goes to the large and medium-scale capital intensive import substitution sectors, the small-scale and cottage industry will be at the disadvantage. The latter remains confronted with: 1) competition from the large and medium-scale sectors which in many cases produce the same items and 2) high costs of intermediate goods which have to be purchased from these protected capital intensive sectors (White 1986: 68).

FOOTNOTES

1. An overview cannot be given in the context of this paper. Hart (1986) probably provides one of the most concise pictures of these changes

2. Aggregate data on poverty and income distribution is confusing due, among others, to the various poverty line standards used. It seems that, up to now, the most realistic calculation has been made by Sajogyo, since it is more in line with evidence from micro studies than are, for example, the calculations by the World Bank. The period it concerns, however, is not very recent (1970-1976). Using poverty categories based on per capita expenditures in rice equivalents, he concludes that poverty has, in fact, deepened because in this relatively short time period the proportion of the rural population living in destitute conditions has risen from 20.9% to 25% (White 1979: 93-94).

3. Factory production is here defined in terms of firm size, and involve firms in the medium and large scale categories i.e. with more than 19 workers. Consumer goods include: food and beverages, cigarettes, yarn, textiles, footwear etc. (ISIC 31 & 32); intermediate and capital goods, grouped together, include, among others: paint, paper, glass products, chemicals, fertilizers, electronics etc. (ISIC 33 to 39)

4. Figures refer to the country as a whole. Largely 70% of the employment in cottage and small scale industries is, however, located in Java (1979 figure in table 2 compared with White 1986: table 14, p.51).

5. In the location studied by Wolf, not all the firms were export-oriented but they increasingly did so. Mather (1983) conducted a similar study on female workers in a new peri-urban industrial estate in West Java in the late 1970s. The majority of the firms in her study, which produced a varied range of consumer and intermediate goods (food, beverages, chemicals, polyester fibers, plastics etc), were oriented at the domestic market.

6. Those are the following low-interest (12%/year) schemes: KIK (Small Investment Credit), KMKP (Permanent Working Capital Credit), Kredit Candak Kulak for small traders, Investment Credit up to Rp. 75 million, Mini Credit and Midi Credit, the latter two being gradually phased out since 1984 and replaced by the general credit system KUPEDES (Hasibuan 1987: 70).

III. RURAL INDUSTRY AND AGRARIAN CHANGE

1. RNF activities, agricultural growth and the rural economy

1.1. Determinants and composition of the growth of RNF activities

There is general agreement about the increasing importance of non-farm incomes for rural households in Java during the past two decades or so (Soentoro 1984, Jones 1984, Manning 1986). This largely corresponds with the macro data on employment sectors discussed in chapter II and is consistent with the evidence in many other countries. The actual proportion of household incomes deriving from non-farm sources, however, may vary greatly from one area/district to another and from village to village. Various village studies and surveys show proportions of non-farm incomes in average household incomes ranging, roughly, from 30% to more than 75% (White 1986: 34). It has to be added here that the shift in rural employment structure towards a bigger share of non-agriculture reflects not so much a complete shift by individuals of labour in agriculture to labour in other sectors, but rather an increase of the proportion of labour time spent in RNF activities and a corresponding decrease in labour time spent in agriculture (Jones 1984: 130). The latter evokes the question as to why such a shift is made. This will be discussed in the next section, where we will see that the reasons for spending more labour time in RNF activities are very different across households i.e. between wealthy landowning and landless households. For the landless and near-landless households the decreasing access to and earnings from agricultural employment play an important role.

There are several factors which may determine the proportion of incomes, at the level of the village, deriving from non-farm sources. Based on a comparative analysis of 10 villages throughout Java, Soentoro mentions the following factors: the proximity to centres of economic activity, the existence of (cottage) industry within the village itself, the availability of raw materials for industrial processing, the availability of traditional skills among the population and educational levels (1984: 228). Taking data from roughly the same villages, Rietveld (1986) attempted a quantitative analysis assuming a direct relationship between RNF incomes and the conditions of agriculture. Positive correlations were found to exist between the average level of non-farm incomes, on the one hand, and the average level of agricultural incomes, agricultural density, the degree

of equality of land distribution (using the Gini index of landownership) and the proximity of large cities, on the other hand (ibid).

Another question that needs to be asked is that regarding the composition of the growth of RNF activities. Large scale data on growth rates of employment in rural Java show a decline in the growth of employment in manufacturing and trade during the 1970s whereas that of construction and services increased (table A3). In the first half of the 1980s, in the context of a general decline of the economy, growth rates of non-agriculture as a whole slackened somewhat.[1]

Micro studies show that the growth of RNF employment is primarily concentrated on trade and services and other supporting sectors such as transport and construction rather than on manufacturing (White 1986: 34, White & Wiradi 1987).This sounds not very surprising in the light of macro developments already discussed in chapter II, including the fact that some traditional crafts have been declining as a result of competition with urban-produced substitutes.

What does such an evidence imply for the prospects of the rural economy? Manufacturing is generally held as a "lead sector" capable of creating a range of additional employment through multiplier effects. In this light the growth of supporting,i.e. secondary, non-farm activities without a parallel growth of local rural manufacture prompts the question as to what linkages the additional RNF activities have. Do the incomes of these activities derive from the rural economy? And how is the increased rural demand derived from these additional incomes fulfilled? These questions will be addressed in the following two subsections.

1.2. Links with agriculture: consumption and production linkages

The discussion of the linkages of the RNF sector with agriculture can be centred around the following two contrasting hypotheses. The first one suggests that increased agricultural producer incomes are the prime source for RNF development. This development, in turn, raises the incomes of rural households (including the poor ones) through the enhancement of employment opportunities and thereby enlarges the market for producer and wage goods that can typically be produced by small, labour-intensive, enterprises. This Mellorian type of argument, that stresses the importance of consumption linkages, is qualified by Hazell and Roell (1983) who show, based on evidence in Malaysia and Nigeria, that it is the households operating the largest farms which have expenditure patterns most desirable

for the generation of this labour-intensive growth (Harriss 1987: 31). The other hypothesis suggests that although increased agricultural surplus does play a role in enhancing demand growth for non-farm products, the main source of growth lies in the increasing regional integration in terms of commodity flows and the penetration and concentration of the national (i.e. non-local) market together with the independent mobilisation and allocation of public sector resources. Within such a development rural consumption linkages are weak and rural (but not necessarily local) production linkages might play a greater role. It, furthermore, allows for substantial imbalances in financial flows, implying the flow of agricultural surpluses to the urban commercial and industrial economy. This hypothesis is based on findings by Harriss in an analysis of the RNF sector in the green revolution district North Arcot in Tamil Nadu, India (1987).

As has been noted in chapter II section 1, one of the effects of changes in rice production since the 1970s in Java is that, across the board, farmers' incomes have indeed risen due to higher yields and multiple cropping but that, at the same time, income distribution in rural areas has become more skewed. The total income in rice agriculture has increased substantially but the share in it of the farmer's income per unit of land has grown faster than that of the hired labour's income (cf. White & Wiradi 1987: 9). The income gap between the minority of rich farmers and the majority of landless peasants and small farmers is, however, greater than suggested by the distribution of the total agricultural income per hectare since land control has become more skewed too, with a declining proportion of households having access to farm land.

The relationship between increased agricultural surplus and intensified RNF activities is indicated by a number of village studies. One observation is that concerning the increased investments by rich farmers in rice hullers, trade and transportation activities and small-scale industry. The division between agricultural and industrial capital is, however, not fixed - i.e. capital tends to move in both directions - since the surplus from RNF activities are, in turn, invested in the acquisition of *sawah* and rice production (cf. Soentoro 1984, White & Wiradi 1987). The question is if investments by rich farmers in RNF activities have created additional employment. To the extent that they are directed at labour-intensive industries (brick- and tilemaking, *batik* etc) this might be the case. On the other hand, many other kinds of investments such as in rice hullers and

large and medium-scale trade have destroyed much local (mainly female) employment. Systematic research on investment patterns of the rural rich seems not be available. Despite the recognition of the methodological problems inherent in such studies (a.o.the likeliness of underestimation of property and profits by repondents), this fact probably justifies the conclusion that there has somehow been a "bias" in much of the more recent agrarian research towards the rural poor.

In the secondary round, enhancement of RNF activities by increased agricultural producer incomes takes place through increased expenditures by rural households on commodities produced in the area. This requires an intensive study of expenditure patterns of rural households, both poor and rich (related to landownership and other economic assets), in which the types and origins of the purchased goods are investigated as well. The household expenditure studies undertaken in rural Java do give some indication but seem to be still rather general. A study by Chaerul Saleh (1984) in 10 villages in Java[2] shows expected results. It indicates that landless and small farmer households are more inclined to spend their incomes on foods, and especially rice, while the richer (incl. large farm) households spend greater proportions of their incomes on non-rice foods - indicating diet diversification - and non-foods. These non-foods, moreover, tend to contain more luxury items (television-sets, radios, motorcycles) the higher the income of the household concerned. The non-local origins of these latter items is quite clear, but it has not been analyzed to what extent the other non-foods and non-rice foods are locally and labour-intensively produced.

The mentioned evidence suggests the existence of some links between RNF activities and agriculture but not the precise nature and extent of it. It also suggests leakages of agricultural producer incomes to non-local and urban areas. The relative decline of small-scale labour-intensive rural industry together with the increased unequal rural income distribution raise some doubts about the likeliness of progressive RNF development based on agricultural growth through consumption linkages and labour-intensive development as has been perceived by Mellor (cf. White 1986: 1-10). Moreover, for a dynamic growth the existence of rural production linkages are crucial as well as, for instance, is shown in the succesful cases of East Asia including the socialist case of China (Saith 1986).

The extent of forward and backward production linkages of industrial firms with agriculture can only be analyzed by classifying firms in a certain

region or district according to these linkages. Such a study requires an examination of the origins of supplies and the destination of products of firms in the concerned region. In the Javanese context rural backward linkages might be generally weak; unlike in the East Asian cases intermediate and capital goods needed for the agricultural sector (fertiliser, pumpsets, irrigation pipes, tractors, spares etc) are for a large part either capital-intensively produced in urban areas or imported. Even simple tools as hoes seem to be increasingly imported leading to severe competition for small rural blacksmiths.[3]
The extent of forward production linkages (in the case of sugar and tobacco processing, sawmilling, leather industries, furniture workshops etc) might vary a lot from place to place. But even when it is found that firms do have agricultural/rural linkages, these linkages do not necessarily have to be local. Infrastructural improvements may make it more profitable to trade agricultural products at long distances. This factor is of relevance in Java where the road network is relatively developed and where improvements in the past two decades have amounted to a kind of "transport revolution" (Hugo 1985). In many cases we will find that forward linkages are weak or non-existent. Rural industries often use raw materials which have been transported from other/distant places, for example imported yarn and synthetic dyes for weaving firms and rattan from Sulawesi for furniture workshops. On the other side, we have to trace the extent of local agro-processing. There are no studies providing some idea of this. It seems that where -as more rudimentary agro-processing takes place locally, most of the advanced agro-processing is done in urban areas (de Groot & Keddie 1987: 11).

Harris (1987), in her study of the Indian case mentioned earlier, has also looked to linkages in relation with age, location and labour-intensivity of firms. She found that the majority of rural-located industries are old traditional ones with some rural production linkages while new firms tend to be urban-located with very few rural consumption and production linkages (p. 33). In the case of Java we may look at the study by Jones (1984) who, among others, analyzed trends in the spatial distribution of industrial employment on the island using macro data.[4] One of his findings is that 75% of the employment in the large and medium scale manufacturing sectors (i.e. the sectors which have grown much more rapidly as compared to the small-scale sector, as we have seen in chapter II) is located in large cities or in districts surrounding large cities. Moreover, there seems to

be a trend towards heavier concentration around Jakarta (p.143). Districts more remote and isolated from large cities tend to have a preponderance of cottage and small-scale industries in their manufacturing employment (p.146). Interesting is the somewhat different distribution pattern of manufacturing employment in Central Java and Yogyakarta: here large and medium scale manufacturing employment is more evenly spread among smaller cities - a fact that seems to reflect the very high population densities in most of these areas, both rural and urban, and the greater dispersion of (smaller) cities here (p.143). This evokes an association with evidence, at a somewhat different level, discussed by Ho in a comparison of industrial development in Taiwan and South Korea, showing a more concentrated industrialisation in the latter case following a more concentrated pattern of urbanisation and infrastructural development (1982).

In spite of the regional differences, a general picture seems to emerge from the mentioned evidence of the case of Java of new industries being more inclined to locate in urban or near-urban areas. This is in line with the policy emphasis on -usually highly urban concentrated- import subsitution industries. Export-oriented industries, which have generally less rigid locational constraints and may more easily locate in rural areas, are still unimportant in the Indonesian context although they may become more important in the near future. We have to keep in mind, however, that the above-sketched picture refers to location rather than to linkages. Moreover, as has been noted in chapter II, the contribution of large- and medium-scale industries to industrial employment is marginal whereas (mostly rural) small-scale and cottage industries still provide more than half of the total manufacturing employment despite the displacement of many by more technological advanced enterprises. It does, nevertheless, indicate the general trend in the spatial orientation of the industrialisation process.

1.3. Increased intersectoral integration

A further inquiry into the nature of the growth of RNF activities requires insight in the relations between the rural and urban economies. Before doing so, I will, firstly, return to my earlier remark about the concentration of the growth of RNF activities on sectors other than manufacturing. The trade sector represents one third of all RNF primary employment - almost one half for females and one sixth for males (White 1986: 57) - and is characterized by an increasing polarisation between local petty traders (mostly women) and large traders operating on a much

wider, non-local, scope (ibid). The services sector includes a heterogenous collection of "informal sector" activities; its rapid growth, however, is mainly due to the growing group of well-educated, professional, managerial and administrative workers who in 1980 accounted for nearly 40% of the workforce in services in rural areas (Jones 1984: 135). This growth undoubtedly reflects the large government investments in administrative services, education and health facilities. Finally, employment in construction grew rapidly in the late 1970s and early 1980s, both in rural and urban areas, as a consequence of large government investments in building and infrastructural works during the oil boom (Hart 1986: 75).
The trend toward new industrial location in urban/near-urban areas, the relative decline of cottage industries and the important role of government expenditure in the rapid growth of RNF activities other than manufacture establish the impression that RNF development is primarily stimulated by external, i.e. non-rural and non-local factors. This impression is strenghtened if we look at the trends in labour circulation prompted by shifts in agricultural and non-agricultural employment: since the 1970s there has been a spectacular increase of rural-urban migration the nature of which is primarily temporary i.e. circular and partly based on commuting (Hugo 1985). This implies that in many cases RNF incomes are in fact derived from urban sources. Manning confirms this in a study and re-study of 6 villages in West Java in 1976 and 1983, where he found that despite substantial increases in rice production and incomes, relatively few jobs were created in rural areas and a large proportion of rural households had individuals involved in self-employed activities in transport and petty trade in major cities (1986). Generally, the majority of migrants originate from the small farmers and landless households and enter the lowest rungs of the urban "informal sector". Despite exploitative work conditions urban incomes are higher than rural ones and allow the migrant to transfer part of it for use in his/her village. Patterns of circular migration serve important functions in the rural and urban economy: it "produces cheap goods, services and labour for the benefit of the capitalistic urban formal sector, and in turn captures part of the incomes generated in this capital-intensive sector for recirculation in the informal sector and eventually into the rural economy" (White 1986: 60, with reference to Titus 1985). The role and magnitude of remittances by circular migrants should not be underrated. Jellinek (1978) remarks, based on some very rough estimates, that in villages with, let's say,"..... fifty or more circular migrants,

the amount of money being brought back to the village must have been much more substantial than any other source of village income" (p.8). She has also observed the significance of these remittances for the rural economy: the higher purchasing power of migrant households has boosted local markets and jobs have been created for village craftsmen for the building of new houses (ibid). Hetler (1986), in a village study in Central Java, found with respect to expenditure patterns of migrant households two "archetypes": landless and near-landless households who spend remittances primarily to providing basic needs and rich and large landowning households who use remittances to build new houses, invest in tertiairy education and generally increase their living standards (p.225).[5]

We may refer to the increased interaction between the rural and urban economies in ways described above as a process of "intersectoral integration". Harriss (1987: 32) conceptualizes this[6] in terms of flows (already partly discussed in this section). These are: commodity flows (of supplies and products), flows of labour (migration and wages) and flows of finance (private investments, flows of wages and interest,and state revenue and expenditure). One of the evidences shown in her regional study in Tamil Nadu is that of the imbalances in rural-urban development facilitated by flows of rural surpluses (derived from both agricultural and non-agricultural sources) to the urban economy in the form of investments and savings. This has taken place, among others, through investments of rural commercial surpluses in urban property (houses and shops) and several forms of moneylending (p.36). The same kind of development is taking place in Java, although evidence need still to be substantiated by systematic research. Cases of wealthy rural households purchasing houses in the city for their children are quite common, for example. Other forms of imbalanced financial flows are those where urban profits are invested in rural areas (in farmland, industry or moneylending) with the intention to exploit certain advantages of these areas (cheap labour). The phenomenon of absentee landownership in Java is one that has been generally increasing and the same holds true for, usually extremely exploitative, moneylending activities in rural areas evidenced by the emergence of several kinds of "koperasi rentenir" with urban-based (sometimes influential) persons behind their establishment (Colter 1984: 330, Kompas 3-6-1987). The evidence of industries locating in rural areas to exploit cheap rural labour seems to be still less prominent in Java if compared to other South-East Asian countries. A number of cases of industrial estates in peri-urban areas

recruiting cheap (female) labour from rural areas indicate, however, that this phenomenon is on the increase (Mather 1983, Wolf 1984 & 1986). Rural location is here clearly a strategy to keep labour costs low and profits high and not a response to local expenditure patterns.

The evidence presented in this subsection reinforces the finding that rural linkages of RNF activities are generally weak and that the recent growth of the RNF sector is, to a significant extent, based on relations with the urban economy. With respect to economic flows involved in this process of increasing intersectoral integration it has been found that flows go in both directions. With the available data it is difficult to say how "imbalanced" these flows are, i.e. to what extent we can speak of an extraction of the rural sector by the urban sector in these terms.

2. RNF activities and rural differentiation

The relationship between the RNF sector and patterns of rural differentiation finds its materialisation in the specific ways RNF activities and incomes are distributed among rural households at the various social strata. It refers to the types of RNF activity rural households from various strata are engaged in (subsector, product, market) and the conditions of their engagement (production and marketing relations, productivity and remuneration). For the purpose of this section, and even more so for the sake of brevity, we will limit the discussion to the issues of productivity and remuneration.

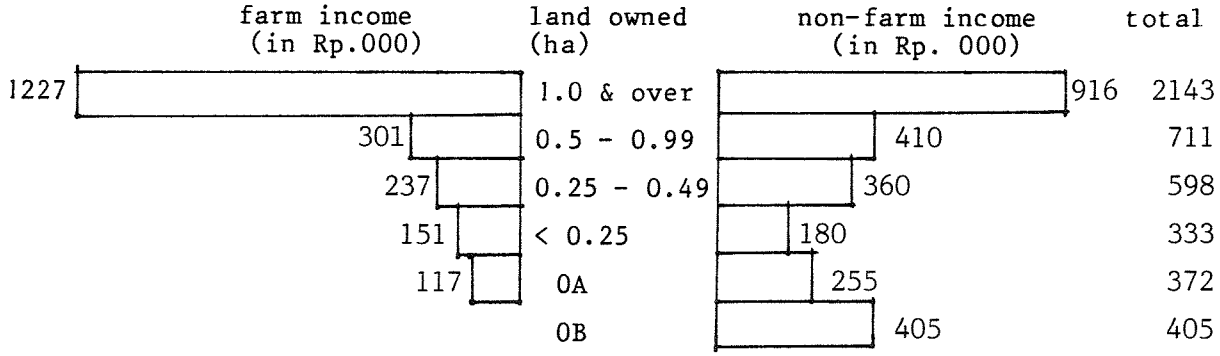
The two contrasting propositions around which the discussion at this level can be centred are the following. The first one states that RNF activities tend to correct imbalances because landless and small farm households devote much more time to RNF activities than large farm households. Since RNF activities are, according to this proposition, more remunerative than agricultural activities, incomes of the landless and small farm households increase more than those of large farm households. The other proposition states that under conditions of agrarian inequalities the larger farm households are engaged in RNF activities that are much more productive and remunerative than the landless and small farm households and are, therefore, likely to capture a much greater share of the RNF incomes. Landless and small farm households, although indeed spending more time to RNF activities, are usually confined to activities that are less productive and less remunerative. The overall result of this is that RNF activities

tend to widen the gap between the richer and poorer segments of the population.
Whereas the first proposition is based on the East Asian experience, where agricultural income distribution has been relatively equal, the second one is based on the experience of countries in South and South-East Asia (Oshima 1984 and Islam 1984, respectively).

In the case of Java some debate around this question has been going on, sometimes referred to as the "supply push" and "demand-pull" debate. Taking Islam's characterisation of the duality in the growth of the RNF sector based on evidence from cases in Thailand, Bangladesh and Pakistan (1984: 319), Heinen and Weijland divide RNF activities into: 1) relative stable activities which yield "above-average returns" requiring some education, skill and access to capital and technology, often related to increasing agricultural producer incomes; and 2) residual activities which yield "below-average returns" comprising of typically low-productive work in cottage manufacturing, petty trade and "informal" services, usually associated with a push-out of workers from agricultural employment (1986, Heinen 1987). This distinction is more or less parallel to the one made by White between RNF activities related to "accumulation" strategies of wealthier households and those related to survival strategies of poorer households who resort to these activities in an effort to achieve subsistence income (1986: 36).
The contrast between the two patterns of involvement in RNF activities rests , in the first place, upon the differential access to non-farm assets which is positively correlated with the access to agricultural surplus i.e. land. The availability of capital on the part of large farm households implies the possibility to engage in activities with higher labour productivity (large-scale trade, the operation of vehicles etc) or the employment of wage labour (in small industry). It also implies greater opportunities for human resources investment such as in education, which eventually increase access to high salaried jobs, for example in government services. The lack of capital in small farm and landless households, on the other hand, implies less or no opportunities for investments in either material assets or human resources and a resort to low productivity activities which require long hours of work for low returns. Within this "dualistic" framework the distribution of RNF incomes among households is inevitably unequal. And even if the degree of inequality is lower compared

to the distribution of agricultural income, the ability of RNF activities to contribute to reducing overall income inequality is questionable. As has been put by Islam, for this to happen in a dynamic context - in order to reduce inequalities over time - non-farm incomes must grow at a faster rate compared to farm incomes (1984: 321).

The positions taken in the debate about the concerned question with regard to Java are contradictory and based on just a limited number of micro studies. We may take one example which shows results of a study in 9 villages by Survey Agro Ekonomi(SAE).[7] The distribution of farm and non-farm incomes in these villages are presented in the following chart.



OA: households not owning agricultural land but with some income from agricultural activities

OB: households without any income from agriculture

Source: Abunawan Mintoro 1984, reproduced in White & Wiradi 1987: table 11

The figure shows that for the landowning households RNF incomes are positively related to landownership/farm sizes and agricultural incomes. This is conformity with the line of argument presented earlier and is the opposite of the "East Asian" pattern where the relationship between non-farm and farm incomes is generally negative. It can be concluded, therefore, that RNF activities in Java tend to reproduce or strenghten rather than reduce, the income inequalities in the agricultural sector (White 1986: 37). The correlation is, however, somewhat different for the group of non-landowning households (OA). Moreover, both the OA and OB households receive higher total incomes compared to the very small farm households. White attributes this "deviation" to the existence of small numbers of households without land or agricultural incomes but relatively high non-farm incomes, consisting for a large part of inmigrants (school teachers and police authorities, for example) and young married children of wealthy households who have not yet inherited land (ibid). To Rietveld

(1986), however, who referred to the same data[8], this deviation - or the U shape of the pattern of non-farm incomes, as he calls it - is reason to conclude that "non-agricultural activities have a mitigating effect on income differentials resulting from differences in land endowment" (p.114). Furthermore, based on data of the same SAE study presented by Soentoro (1984) and a study of 2 villages in East Java by Nibbering and Schrevel (1982) which show that for RNF activities, compared to agricultural activities, time shares were smaller than income shares in all household categories, Rietveld suggests that non-agricultural activities are on average more remunerative than agricultural activities (ibid).

How can we draw conclusions from this limited and somewhat contradictory data? It is true that not all RNF activities in which members of poor rural households are engaged, yield low earnings. Wage levels in the construction industry (for bricklayers, carpenters as well as their assistants), for example, are recorded to be substantially higher than agricultural wages and seem to have grown faster than the latter in recent years (Mazumdar & Husein Sawit 1985, in White 1986:43). It is also true that beneath the general pattern of distribution of farm and non-farm incomes based on aggregate data from the 9 villages referred to above (i.e. if we view the patterns in each of the villages) lies a great diversity. In some of the villages the positive correlation between farm and non-farm incomes is weakened by, among others, the relative abundance of non-farm employment opportunities due to factors like the proximity of cities (and the possibility of commuting) and specific conditions with respect to local manufacture and levels of education (Abunawan Mintoro 1984: 274-276). In most cases, though, the positive relationship between farm and non-farm incomes for the landowning households holds true (ibid: 283-288).
Rietveld's conclusion about the (higher) productivity of RNF activities compared to agricultural activities based on a comparison between time shares and income shares in activities in both sectors (see above) seems quite convincing. But may be some care is needed in drawing such a conclusion, because in weighing time shares against income shares for RNF activities the amount of capital resources invested (in cases of self-employment) need to be taken into account as well.
Data from more research would certainly enable us to get a more definite picture on the relationship between farm and non-farm incomes. However, for the time being, available evidence seems to confirm the finding that the majority of RNF jobs in which members of landless and small farm households

are engaged do indeed yield returns lower than in agriculture. White confirms this by pointing to data from villages other than the ones mentioned earlier, i.e. data from 6 villages in West and East Java showing labour incomes from farm and non-farm sources of households who normally engage in agricultural wage labour (1986: 39). A study by Hardjono in a village in West Java recorded levels of earnings for females in a number of farm and non-farm incomes. It indicates that while most RNF jobs (except skilled jobs in nearby textile factories) yield Rp.100 per hour and below, most farm jobs (except weeding) yield Rp.120 per hour and above (1985:146).[9] Wages in the rurally-located modern manufacturing sector are often very low as well, far below agricultural wages, especially for young female workers (Mather 1983, Wolf 1986).
Something needs also to be said about the instability of many "residual type" RNF jobs. The low incomes of very small landowning households(owning less than 0.25 ha) evokes the question as to why these households do not give up their tiny plot of land altogether and devote all their time to RNF activities. Abunawan Mintoro suggests that this is the case due to the lack of better RNF employment opportunities (1984: 268). This might indicate that agricultural land, however tiny, is regarded as a source of security against the instability and insecurity of much of the RNF jobs accessible to these poorer households (i.e. due to fierce competition, invasion of markets by "big" capital etc).[10]

To summarize this chapter, with some reference to chapter 2, the following can be said about the nature of the industrialisation process in Java. The past two decades have witnessed significant economic and political changes geared towards capitalist modernisation of agriculture and accelerated industrialisation under increasing political control by the military regime of the rural and urban population. The policy towards manufacturing has benefitted the growth of a, largely urban based, import substitution oriented and capital-intensive sector to the detriment of much of the small -scale and household industry in rural areas. There has been a growth of RNF employment, but this has been more concentrated in sectors other than manufacture, particularly in construction and services. Evidence indicate that this growth is based on changing social relations, i.e. the concentration of an agricultural surplus in the hands of a minority of landowning households who invest in RNF activites, rather than on an overall trend of rising incomes and expenditures. Crucial for this growth, moreover, is the

increasing intersectoral and urban-rural integration in terms of flows of commodities, labour and finance, together with increasing government expenditure for the expansion of rural infrastructure and services. The picture that emerges is one depicting a growth of RNF activities that is stimulated primarily by factors external to the rural economy rather than by the development of rural consumption and production linkages. Furthermore, there seems to be sufficient evidence, despite restricted data sources, indicating that RNF activities tend to widen the gap between the richer and the poorer segments of the population. This is related to the fact that large landowning households engage in activities that are much more remunerative and productive than poor households. This tendency is, therefore, closely associated with the process of rural class differentiation based on differential access to productive assets in agriculture, a process that has been accelerated by the modernisation policies of the past 20 years.

FOOTNOTES

1. This can be observed in table A2, keeping in mind that this refers to the whole country and is not distinguished between rural and urban.

2. The same villages that have been studied by Soentoro (1984) and White & Wiradi (1987)

3. This has been regularly reported in the main newspapers in the mid-1980s.

4. Data from the 1971 & 1981 population censuses and the 1976 intercensal surveys (Supas). The weaknesses of studies analyzing trends over time in employment using large scale data are also discussed by Jones. Problems are, among others: the change in rural-urban definitions and the fact that macro data do not take account of occupational multiplicity in rural households(p. 130).

5. This is in line with the distinction made by White between the "survival" strategies of poor households and "accumulation" strategies of rich households with respect to involvement in RNF activities (see section 2 of this chapter).

6. Harriss uses the term "regional integration", which is well-suited to the regional scope of her analysis.

7. This study forms part of a research program in 12 villages, of which 10 in Java, on different aspects of agrarian change. In the previous section (1) we have already referred to some other authors who worked with data in the same program, namely Soentoro (1984), Chaerul Saleh (1984) and White & Wiradi (1987).

8. Not of 9 but 12 villages including two outside Java. The aggregate pattern is nevertheless similar.

9. 1981-1982 figures (ibid)

10. On the other hand, these small sub-subsistence farms can be retained because of the very fact that household members are involved in RNF activities (White 1986: 65).

IV. WOMEN'S EMPLOYMENT IN THE RURAL NON FARM SECTOR AND PARTICULARLY IN RURAL INDUSTRY

This chapter will be opened with an overview of the broad trends in female employment in the main economic sectors following the structural changes in agriculture and non-agriculture discussed in the previous chapters. Subsequently, women's activities in these main sectors, particularly in non-agriculture, will be specified further as well as the conditions of their employment. We will look at the question why women are engaged in particular RNF jobs and how this is related to their activities in agriculture, their domestic tasks and the activities undertaken by other, i.e. male, members of their households. This involves a discussion of the sexual division of labour within rural households and of the factors that determine women's mobility, including patterns of female rural-urban migration. The last section of this paper deals specifically with rural industry: the emphasis lies on the impact of structural economic changes, especially those in the industrial sector, on the roles of women in rural industry.

1. Trends in female employment

The degree of women's economic activity is usually indicated in terms of their labour force participation. Apart from the complexities around the definition of "economic" and "non-economic" related to the function of domestic work, data on female labour force participation is often questionable due to problems of measurement. Many traditional female household-based activities, especially in rural areas, cannot easily be differentiated into reproduction and production -or "non-market" and "market"- activities, which leads to arbitrary formal definitions of these two types of activity/work. The problem is compounded by the perception of interviewers in the field who are led by the prevailing ideologies about women's work. The generally low labour force participation rates of women as compared to those of men - in rural Java at around 20-50% as against percentages around 50-70% (see table A4) - might be partly attributed to these problems. [1] Other reasons for the underrecording of female labour force participation rates are the seasonal, part-time and "informal" nature of much of women's work (Khoo 1984:286).

If we want to trace trends in female employment at the aggregate level over time, the interpretation and measurement problems mentioned above are less

relevant. Here, other problems of data comparability will appear, as is indicated by Oey (1985), who analyzed such trends by using data from the 1971 and 1980 Population Censuses.[2] Despite those problems, in broad lines it can be assumed that the figures do reflect real trends (ibid). Below some of the data will be discussed. The average annual growth of the male and female workforce in all sectors in the whole country during the period concerned do not show large differences: 2.93% for females and 2.95% for males. A closer look at the figures in each sector in Java, however, indicate some shifts, both intersectoral and between the sexes (see table 3).

The extent to which agriculture has been able to absorb the growing workforce is limited. This limitation is, however, larger for females than for males. This is indicated by the considerable difference between the two sexes in the average annual growth rates of the workforce (1% and 0.56% resp.) as well as in the growth rate index (0.49 and 0.35 resp). This trend corresponds with the evidence from several micro studies already mentioned in section 1 of this chapter, which show that female agricultural employment declined more than male agricultural employment due to changes in rice production. At this conjunction it is worth to compare the population census data with data from the labour force surveys (SAKERNAS)[3] in the way done by Hart (1986:75) (see table 4). Since the labour force surveys are held more frequently they allow us to identify trends over shorter periods of time. It appears, then, that while during the period 1971-1977 female agricultural employment dropped sharply and in absolute terms, in the late 1970s (1977-1981) it grew at an average annual growth rate of 5.5% - parallel to an annual growth rate for male agricultural employment of just 0.18%. Hart (speculatively) attributes this growth to an increased access to agricultural jobs due to a sharpened seasonality in rice production in this period.[4] This increase went along with a relative decline of employment of women in non-agriculture, at least in the agricultural peak periods (ibid:76).

Returning to Oey's analysis, we proceed now to the industrial sector (consisting of manufacturing, mining & quarrying and construction). As expected, overall growth rates are much higher here than in agriculture. In urban areas the female industrial workforce, particularly in the age groups 15-19 and 25-29 (not shown in the table), grew more rapidly than the male industrial workforce, most probably due to, among others, the increased

availability of female jobs in manufacturing in the major cities Jakarta and Surabaya. The reverse is true for the rural areas. The female workforce in the rural industrial sector grew at a much lower rate than the male workforce, which is also reflected in the rising sex ratio. This data do not particularly support findings from micro studies which indicate a decline in employment in cottage industry for women. But they support the evidence of a shift from female to male employment in rural industry following technological innovation and changes in market demand (see section 3 of this chapter).

The services sector (consisting of trade, transportation and communication, finance, services and others) is the only sector where the growth rate index of the female workforce exceeds that of the male workforce. This is particularly the case in the trade sector (not shown in the table). The domination of women in the trade sector is, however, not a recent phenomenon in rural Java. This is particularly true in Central and East Java, where the ratio of males to females in trade is 59 to 100 (in 1980). The trade women are involved in is exclusively limited to small-scale trade, which is relatively easy accessible and needs little capital outlay. The growth in the 1970s of the female workforce in this sector might reflect a "push" of women from other sectors (particularly agriculture) into trade.

To summarize, census data indicate that female employment in agriculture has relatively declined, most probably as a consequence of the changes in agricultural production already indicated in chapter II. In the rural industrial sector the female workforce grew but much less rapidly than male employment. This suggests that men have benefitted more than women from developments in rural industry. In the services sector, which include the traditional domain of women, i.e. petty trade, the female workforce grew at a slightly higher rate than the male workforce.

Table 3 THE WORKFORCE BY MAIN SECTOR, SEX AND RESIDENCE, JAVA 1971-1980

Sector and residence	1971 F (000)	1971 M (000)	sex ratio	1980 F (000)	1980 M (000)	sex ratio	average ann.growth F (%)	average ann.growth M (%)	growth rate index F	growth rate index M
Agriculture										
urban	185	56	330	471	149	316	10.27	10.75	1.66	1.54
rural	10,139	4,726	215	11,109	4,974	223	1.00	0.56	0.49	0.35
Industry										
urban	569	171	333	1,182	418	283	8.03	9.82	1.30	1.41
rural	1,192	923	129	2,164	1,258	172	6.55	3.40	3.20	2.10
Services										
urban	2,026	975	208	3,222	1,700	189	5.10	6.11	0.83	0.88
rural	2,898	1,897	153	3,868	2,511	154	3.17	3.08	1.55	1.90

Source: Oey May Ling 1985, tables 5, 6 & 7 (or 1986, tables 2.2, 2.3 & 2.4) based on BPS/CBS data: 1971 Population Census, Series C, and 1980 Population Census, Series S2

Notes:
- The exact comparability of the data is limited by differences in coverage
- The industrial consists of manufacturing, mining & quarrying, electricity, gas, water and construction
- The services sector consists of trade, transportation and communication, finance, services and others
- sex ratio = number of males per 100 females
- growth rate index = the ratio of growth rates of the workforce in the concerned sector and the total workforce

Table 4 ANNUAL RATES OF EMPLOYMENT GROWTH IN AGRICULTURE AND NON-AGRICULTURE IN JAVA

	Labour Force Surveys 1971 - 1977	Labour Force Surveys 1977 - 1981	Census 1971 - 1980
Agriculture			
Female	- 2.44	5.50	0.66
Male	1.73	0.18	1.11
Both	0.26	2.02	0.97
Non-Agriculture			
Female	7.51	4.90	6.46
Male	7.39	4.15	6.08
Both	7.43	4.43	6.22
Average	3.40	3.03	3.25

Source: Hart 1986, p.75, based on calculations made by Strout 1983

2. Patterns of women's work in the RNF sector

2.1. The conditions of women's employment in the RNF sector

Despite the fact that agriculture has been less and less capable of absorbing the labour force growth, particularly of women, on the whole this sector still represents the main source of income for slightly more than half of the rural female work force (compare table 3). As table 5 shows, a large part (39%) is, however, involved in this sector as unpaid family workers; the remaining part is either self-employed, with or without help (34%) or engaged in wage labour (26%). Also in the non-farm sector, we find a higher proportion of unpaid family workers among women as compared to that among men, although the actual percentages are generally smaller than in agriculture (table 5). On the other hand, in the non-farm sectors, unlike in agriculture, the proportion of self-employed women does not differ very much from that of self-employed men. The proportion of self-employment (with or without help) among women is particularly high (almost 90%) in **small-scale trading**, one of the sectors of rural employment in which women considerably outnumber men, except in West Java (White 1986: 56). In this sector women act as market traders or circuit traders (vendors), mostly in retail trade though some of them are involved in wholesaling on a small scale. The majority sells daily necessities such as vegetables and fruits, cooked and/or dried foods, while smaller numbers sell clothing and factory products in the lower-price range (toothpaste, powder, combs and hairclips, matches etc.). Their profits are very small and many of the market traders even do not have a stand (kios) and display their goods along the streets (Chandler 1985: 55). Much of the petty trade activities include some small-scale production, for example in cases where the women traders selling cooked or dried foods process the items themselves. These two sectors, therefore, cannot always be so easily separated (cf. Harriss 1982, cited in Smyth 1986:38).

In the process of economic change rural small scale trade is affected in several ways, often to the detriment of the women traders. While improvement of the road network and the "transport revolution" have, on the one hand, given an impulse to small scale trade and facilitated easy commuting, the greater accessibility of villages has, on the other hand, enhanced the influx of urban-based traders which tend to reduce opportunities for rural traders in certain traditional chains of trading (Hardjono 1985). This greater accessibility has also enabled wealthier rural people to build up well-stocked general stores and to travel directly

to urban centres to buy stocks, a process which may have contributed to a decline in trading in traditional rural market places (White 1986: 56). These developments have been accompanied by an increasing polarization between men (who dominate large-scale trade) and women in trading. In a study of market places in the area of Yogyakarta, Chandler (1985) observed that on normal market days women occupied 95% of the 329 selling spots while on the"big"day, when twice as many spots are occupied, their proportion declined to 75% (p.52).
While opportunities for petty traders tend to decline, at the same time, the numbers of women who try their luck on the market place seem to be increasing (Peluso 1981). One of the reasons, as suggested by Peluso, is the introduction at the market place of simple modern instruments as the scale, which has removed much of the"exclusionary"character of small scale trade and made it more accessible to women in general (p.19). Undeniably, the overall decline of employment opportunities in agriculture has contributed to the rising numbers of women seeking an alternative source of income in trading (cf.Hardjono 1985). This situation has led to an increasing competition at the market place and, accordingly, to an overall decrease of the obtainable profit margins.

The next sector in which many rural women find employment is the **services** sector. 40% of rural Java's work force in this sector is employed in salaried white collar type jobs, the majority of which as government employees, such as teachers, agricultural extension workers, health service workers etc., involving women from mainly middle class circles. The remaining part is engaged in various, generally low remunerative, "informal sector"activities (White 1986: 55). At the latter level we find women working as domestic servants, midwives, washerwomen or masseuses. Some types of work which do not easily fit into one or the other category, such as collecting firewood,collecting banana leaves for food wrapping, collecting gravel, sand and stones for the construction industry, are sometimes also included in the services sector (ibid: 55-56).

In rural **manufacture**, a major part of the male and female work force is employed in enterprises at the small-scale and household levels. The concentration of females at these levels, and particularly at the household level, is more pronounced than for males. The table on employment status (table 5) does give some indication of this: 55% of the females in manufacturing is self-employed, with or without help, or works as unpaid

Table 5 EMPLOYMENT STATUS OF MEN AND WOMEN IN VARIOUS SECTORS, JAVA 1980 (RURAL AND URBAN, EXCL. DKI JAKARTA)

Employment status	Agriculture		Manufacturing		Construction		Trade		Transport		Services		Total urban & rural		Total rural	
	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)
Self-employed without paid or unpaid help	23	12	14	17	16	13	55	49	39	18	21	19	25	22	26	21
Self-employed with help of family members or temporary paid workers	36	22	19	19	12	13	27	40	7	6	6	6	26	21	27	22
Unpaid family worker	19	39	6	19	2	9	6	15	2	4	3	14	12	27	14	31
Employer with permanent workers	1	1	5	2	5	2	2	1	4	5	3	3	2	1	2	1
Employee	22	26	56	42	65	61	10	4	48	66	66	57	33	27	26	23
Not stated	*	1	1	1	1	1	1	1	1	2	1	1	1	1	1	2
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: : White 1986, tables 10 and 11
Based on : 1980 Population Census, Series S

Notes: - Tables disaggregating sectors for rural and urban areas separately are nnot available for Java
- Total in last two collumns include minor sectors not included in the first six collumns
* less than o.5%

family workers, whereas just 42% of them is employed as wage workers; for men the proportions are reversed i.e. 39% and 56% respectively. Official census data record that more men than women work, i.e. having their main employment, at the cottage level. White has pointed out that according to the 1974/75 Industrial Census data, however, the number of females employed in cottage industry is almost three times as much as the number of males (roughly 1.8 million as against 0,6 million) when both "full-time" and "part-time" participants are included (p. 50). This seems to indicate that for many women employment in rural manufacture is of a part-time nature. Women contribute an average of 82 "full-time equivalent"days a year as compared to 210 by men (ibid: 50-51).[5] The area of food-processing (palm sugar, several chips, soybean products, salt etc) is the main production area in which women are involved. Some other industries in which many women are involved are: handloom-weaving, hand-painted batik, basket weaving and ceramics/clay products, while leathercraft, tile-making, stone-carving etc. industries employ women as well. The conditions of women's employment in rural manufacture will be elaborated on separately in the next section of this chapter (IV.3).

2.2. Determinants of the patterns of women's engagement in RNF activities

The factors that shape the patterns of women's engagement in the RNF sector are many and intricately interrelated. In the analytical framework for the study of women and economic change developed by Deere et al. (1982), the following main factors which determine patterns of women's work in general are identified (p. 101-102):

- the conditions of both labour and product markets,
- the characteristics of the household in terms of class (i.e.the access to the means of production),
- the sexual division of labour within the household,
- the characteristics of the household in terms of size and composition/ domestic cycle determining the familial labour power in relation to its consumption needs.

Our discussion below will take the main factors identified by Deere et al. as a point of departure. Since the factors are interrelated, some overlapping can be expected.

a. The conditions of labour and product markets:

These conditions essentially determine the non-farm employment opportunities available for the rural population concerned, both male and

female. They are part of the general structural characteristics of the local rural economy which have already been mentioned in chapter III.1.1 and will, therefore, not be dwelt upon in this section.

b. Class:

Class, as defined by the access to productive assets, is one of the most crucial factors in determining women's work.[6] In a direct sense it determines the availability of capital for investment in some economic enterprise, either industry or trading. More indirectly, it determines the availability of capital for human investment, such as education, to secure access to higher-earning salaried jobs. Women from landowning households, indeed, often do invest in shops and small-scale or medium-sized industry (cf. Joseph 1987, Price 1983) or are engaged in salaried jobs as teachers and office employees. In many cases some capital is regularly invested in social obligations, i.e. in feasts and ceremonies, to support their husband's social status. Within a particular sector or branch, the class differences between women entrepreneurs is manifested in the different range of products and/or quality of products they produce or trade. Whereas women entrepreneurs from richer households are often involved in the production of textiles, including fine cloth, women from poorer households are more likely to produce and trade foods or jamu (Javanese herbal medicines) or, if they are engaged in the same branch as the richer women, produce coarser cloth (often on a piece rate basis) or only trade in it (cf. Price 1983:105). At the market place, women selling cloth and garments are often the more affluent, i.e. being the wife of a government employee or teacher, particularly those who can permit themselves to work on a more part-time basis (Chandler 1985:55). Women from poorer households who also trade in batik, sarong or garments often have these items alongside their more "traditional" goods in order to spread risks (cf. Chandler 1985, Hetler 1986).

Ideology, too, plays a role in determining women's work across classes. There is a tendency of women from richer households to withdraw from activities in production as a sign of their superior status (see point c below).

Self-employment in home-industry and market trading, which needs just little capital outlay and yields therefore just small profits, is often seen as a "last resort" for women from poorer strata. The fact that such occupations require at least some capital, however, implies that for women from landless households even those jobs are often not accessible (Jansen

1987:28). These women, then, are mainly confined to wage labour either in agriculture (rice production or plantations, if existing) or non-agriculture. One village study in Central Java shows that female involvement in wage labour, particularly in the slack periods of rice cultivation, forms a major difference between households from different classes (Hart 1986:145). While women from small-farming households tend to withdraw from wage labour in periods when wage rates are low, landless women keep working in these periods, making long hours for very low returns (ibid). And whenever wage labour opportunities are non-existent, these women are found to be involved in the collection of edible roots and plants, snails and frogs in and around the village - an activity which, without exception, yield returns even lower than wage labour (ibid:122).

c. The sexual division of labour within the household:

The main characteristic of the traditional sexual division of labour, which seems to be almost universal, is the association of women with reproduction and men with "productive" work. The implications of this for women's work are twofold: there are practical consequences related to the confinement of women to the household and there is the ideological dimension determining which work is socially perceived as being proper for women and for men.

Women's work in small-scale production often takes forms that allow the combination of work and reproduction tasks, especially child care, and are extensions of their domestic responsibilities (cf. Heyzer 1986: 43). The association of women with reproduction generally implies that women's physical mobility is more restricted than men. This has consequences for the type of accessible jobs in terms of remuneration. While men are more likely to travel longer distances to look for suitable and higher-paid jobs, women's options for remunerative jobs are more limited. As a case in Central Java indicates, among traders, men tend to travel longer distances, to major cities, to purchase their goods from wholesalers or directly from the factory and, therewith, allow themselves the possibility of gaining higher profits than women (cf. Chandler 1985:58). In the basket-weaving village studied by Smyth, limited mobility forces women to rely on local intermediaries for the marketing of their products while men undertake long trips to sell directly to consumers to major cities where prices are higher (1986:350). Although the described pattern is true in general, as we will indicate in point d below and in the next subsection on female migration, it depends very much upon the economic conditions and composition of the household as well as on the characteristics of the local economy.

Age is also an important factor in determining women's physical mobility. This phenomenon, which is basically related to male control over women's sexuality, is quite universal too and already mentioned by Beneria, who pointed out that while women of older age and, in some cases, young girls tend to have a relative high mobility, the work of married women and particularly those in their child-rearing phase, is more likely to be centred in and around the household (1979: 212-213). The relative higher mobility of young girls in Java is, among others, exemplified by the significant proportion of the young age group among female migrants to cities- the majority of which obtains work as domestic servants (see subsection 2.3 on female migration) - and the sending of predominantly young girls for modern factory work.[7]

One important point about the perception of gender roles in Java is that although it is generally believed that a husband and wife should work together as a team for the maintenance of the family (Koentjaraningrat 1964, cited in Hull 1982:106), women are perceived to have the sole responsibility for the material and psychological wellbeing of all household members (cf. Wieringa 1981: 193, Smyth 1986: 194). While this amounts, in the first place, to the universal trait of the traditional sexual division of labour already mentioned above, it also establishes the -equally quite usual- expenditure pattern in poor households by which women's incomes primarily go to the fulfillment of the household's daily maintenance whereas men's earnings go to larger but more casual expenditures like taxes, school fees or the purchase of consumer goods (cf. Smyth 1986: 163). As a consequence, women are generally more concerned with a daily regular stream of income, albeit small, and are less likely than men to take risks. In the absence of opportunities for stable salaried work, the typical "informal sector" jobs in which women are usually involved, generally conform to such a criterium. The extent to which such a pattern of labour allocation exists in a household (i.e. women taking low-paid but less risky jobs than men) is, however, also related to class. If not employed in stable salaried jobs themselves, women from wealthier or large landowning households either withdraw from economic activities other than household tasks or, indeed, do undertake "risky" but lucrative jobs requiring relative large capital investment.

Considering the absence of wealth that can serve as security, poorer and landless households are, self-evidently, more concerned with income stability. But Hart found that within this stratum internal household

arrangements with respect to labour allocation do vary according to household composition: households with a large number of working-age members are in a better position to engage in activities that offer relatively high but variable returns than households with a less favourable size or composition (1986:164). In these cases, it is men who usually engage in comparatively risky activities and this engagement, then, is "contingent on women and children undertaking the same type of work as those in households with a weaker internal structure" (ibid).

As is the case elsewhere, the traditional sexual division of labour implies, in households of both the lower and upper classes but particularly in the former, that women have a "double" day. White's much quoted time-allocation study in landless and small farming households in one village in Central Java (1976), registered an average of daily working hours of 11.1 for women and 8.7 for men. The time spent on "directly productive" work was, however, lower for women (5.9) than for men (7.9) (p.274-275). Patterns of time-allocation differ according to class. In general, there is an inverse correlation between the wealth of rural households and female participation in productive activities (Mangkuprawira 1985:93-94).[8] The tendency among women from richer and middle class households not to work, or to work less, outside their household duties (despite their higher educational levels) is, according to Hull, related to social status: not working is "an indication that one's husband has a good enough position to support the family....and that one is free to choose to stay at home" (1982: 108). Other reasons, mentioned by Hull, for an upper or middle class woman not to engage in production, are: 1) the scarcity in the village of jobs which would confer the necessary high or medium level status consistent with her social position, and 2) the prevailing idea, reinforced by the official women's organisations, that work is not compatible with her most important duty as a mother (ibid:108-109).

d. Composition of the household and the domestic cycle:

The composition of the household is important in three ways.

Firstly, it determines the consumer-worker ratio. Stages in the family life cycle in which consumption needs are relatively high compared to the familial labour power may spur the workers in the household, both male and female but particularly the females who are held responsible for the fulfillment of the daily needs of the household, to make longer hours in a particular job or to engage in more additional jobs.

Secondly, it determines women's physical mobility. This relationship has, to a certain extent, been discussed under point c. We have seen that women's mobility tend to vary according to age and family life cycle. In her study of the work of Javanese women traders, Peluso describes how a woman adapts her work to the changing domestic responsibilities related to the different stages in the family life cycle, by altering her methods of marketing (1981:2-30). Composition of the household also determines the possibility of labour substitution. Work that requires a woman's absence from home for longer periods might be undertaken if other kin can take over her domestic responsibilities. Husbands may even take over the care of children - thus breaking the "natural" order of things - in cases where the wife has a well-remunerated job. These cases are, however, very rare (see Smyth 1986: 132,221). Another example concerns the relationship between household composition and female factory employment. In her study on female factory workers in a location in Central Java, Wolf (1986) found that female factory workers tend to come from poor households at a later stage of the family life cycle, i.e. where sufficient productive members are available to both secure household subsistence and perform domestic tasks. This is related to the fact that factory wages, although helpful to overcome difficulties during periods of economic distress, do not contribute significantly to the household's daily subsistence (p.369-370).
The third way in which household composition influences women's work is by determining women's access to family labour. In many occupations women need the help of others to perform certain tasks.[9] In the basket-weaving village studied by Smyth (1986) women need male labour, usually of their husbands, to fetch the bamboo (p.346). In one clay-products village in Central Java men assist women of their own households by, among others, digging, carrying, mixing and mounding the clay (Dunham 1982:15-16). Equally so do some women petty traders need male labour, for example a fruit trader who is dependent upon her kinsmen to pluck fruit in the treetops (Peluso 1981:52). In the absence of unpaid family labour, such tasks need additional capital to hire labour from outside the household.

There is one other factor, not included in the framework of Deere et al., which determines women's work. This factor may not be of the same order as those already discussed, but can be considered as important and should,therefore, not be overlooked. This is the availability, to women, of clientele relations.

e. The availability of clientele relations:

The relations meant here are those which provide access to all or some of the following items: jobs, raw materials, marketing channels and credit. Peluso describes the importance for small scale producers and traders to establish and maintain good relations with their customers, particular credit providers and wholesalers. In many cases (of producers and traders of palm sugar, melinjo chips and of fruitsellers, for example) good relations with tree or plant owners - often on basis of sharecropping - have to be maintained, an effort which tend to become more and more problematic whenever competition becomes fiercer (1981). For women who are involved in home industry, the availability of raw materials and marketing channels is crucial, and it is - as has been suggested above - particularly in conditions under which these items become scarcer that the issue of having the "right" relations appear to be increasingly important. In many cases these relations are based on kinship. A village study in West Java shows how under the condition of a growing scarcity of employment opportunities, the access to jobs becomes a privilege based on social, partly kin-based, relations (Hardjono 1985:46). The example mentioned is of nine women - all cousins of each other - who were lucky to have gained a relative stable stream of embroidery work on a putting-out basis through an uncle who maintained a constant relationship with a supplier from outside the village; these women were not inclined to share this privilege with other village women or neighbours, even at instances that the amount of work became such that they had to drudge from dawn to night (ibid).

The tendency of access to job opportunities to become more exclusionary and contingent upon particular social relations under depressing employment situations is not very unique. Hart describes how in the village she studied, the access to relative higher-wage jobs - in this case as fishpond workers - became increasingly the privilege of small landowning households to the exclusion of the landless (p. 176-177).[10] According to Hart this is, however, less specifically related to the slackening and tightening of labour markets than to changes in the broad political-economic context in which the rural poor is left in a relative weak bargaining position and has no opportunity to organize politically (cf. 1986b).

The remaining question is how women's engagement in RNF activities is related to their activities in agriculture. This amounts to the issue of the seasonality of women's employment in the RNF sector. The few studies

which mention this issue all give different answers. Whether women's non-farm work follows the seasonal patterns of agriculture i.e. is combined with employment in agriculture (in the case of rural Java mainly in rice production) depends on a set of interrelating factors. These are, among others: 1) the nature of the RNF activity performed, 2) the location of the activity (whether it includes temporary migration, particularly to urban areas), 3) the labour allocation arrangements within the household, 4) characteristics of the local rice cultivation (irrigated or rainfed, planting schedule), and 5) the type of available agricultural work i.e. whether it concerns transplanting or harvesting and whether it concerns work on one's own land, wage labour on other people's land or reciprocal labour for a relative. Central in the choice of occupation at agricultural peak seasons lies the issue of lucrativity - both in the economic and social sense - and whether one's non-farm job can be disrupted temporarily. Peluso's study of women petty traders contains a detailed description of the way in which one trader made her decision about how to divide her time between marketing activities and work in nearby rice fields (1981: 47-50). For this full-time market trader, trading was essentially more lucrative than agricultural labour - particularly during agricultural peak seasons when there were generally more buyers on the market place; her choice to engage in harvesting, though, was prompted by social obligations i.e. helping kin or neighbours (ibid). This is not the case for many women from landless households, who are more confined to wage labour and who, at the most, occassionally engage in small-scale production or trading. These women are often seen travelling accross districts in search for harvesting opportunities in other villages. In the West Javanese village studied by Hardjono (1985), agricultural labour yields significantly higher earnings than the non-farm jobs available to most of the women (see chapter III,section 2, of this paper). At peak seasons the majority of the women temporarily leave their work in the local weaving factories or small trade to engage in agricultural wage labour (p.43-44). Varying patterns can also be observed in cases where women derive their income from non-farm jobs in urban areas. This will be discussed below in the next subsection.

2.3. Patterns of female rural-urban migration

The main reason for including patterns of female rural-urban migration in our discussion is to explore the role of rural women in one of the forms of the process of increasing intersectoral integration (see ch. III, section 1), which can be considered as a feature of the industrialisation process.

We have seen how rural-urban migration facilitates economic flows between the rural and urban sectors in both directions. The extent to which rural women take part in this process has increased. This is only partly reflected in macro data (1976) which indicate, for example, that in the 15-19 age group there are even more women than men among rural-urban migrants (ibid: 278-280). Census data do not reflect the real scale of rural-urban migration since a substantial proportion of the movements between rural and urban areas is of a short term and circular nature involving no permanent change of residence and therefore not detected in the censuses (ibid: 280, with reference to Hugo 1975). Micro-studies at both the urban and rural ends indicate that women are also involved in circular migration, and increasingly do so, not only as "passive" migrants (accompanying their husband and family) but also as "active" migrants (cf. Jellinek 1978, Hetler 1986).[11]

Which factors determine female migration? Just as is the case with women's employment in the non-farm sector in general, female migration for economic reasons is determined by the availability of local employment opportunities, class, household composition and, to a certain extent, the existence of social contacts. To this we should add the availability of employment opportunities in the city. Studies suggest that circular migration of whole household units is rare and that it is more common for some household members (either the wife, husband or other members) to remain in the village. The decision as to whom in a household is sent for migration depends on whose labour can be spared from the home and the fields (including considerations about labour substitution) and how the female's probability of obtaining employment in the city compares with the male's (Khoo 1984: 282). Interregional and even intervillage differences are great, both in the occurence of migration as such and in the gender-specifity of it. While some villages seem just minimally affected by migration, other villages use to send large numbers of their inhabitants to urban areas. And while in some villages females are just as likely to migrate as males, in others male outmigration is more pronounced leaving women largely responsible for household subsistence at home (cf.Joseph

1987:25). One example of a typical "circular migration village" can be found in the region of Wonogiri, Central Java. In this village, in the early 1980s half of the economically active persons were circular migrants and 59% of the males and 43% of the females relied on circular migration as their primary means of generating income (Hetler 1986:228). Female migrants from this village, a considerable proportion of them being female household heads, use to move very long distances, preferably to Jakarta, for periods of 1 to 3 months in search for an income by performing a very specialized job: the production and sale of herbal tonics (ibid).
The urban occupations of rural migrants are quite gender specific. The majority of female migrants are confined to jobs in the urban"informal" sector: street vending, domestic service and prostitution. Unlike the case in some neighbouring and East Asian countries, in Indonesia urban factory employment still does not play a significant role in attracting rural migrants. The relative few employment opportunities in the manufacturing sector are occupied by urban resident women (Khoo 1984:286). Khoo furthermore remarks that, while rural-urban migrant women usually have some years of formal schooling, their level of education is not enough for entry into white collar occupations in urban areas (1984:287). Of the occupations open to female migrants from small landowning and landless households, self-employment in the urban"informal sector" yields relative higher earnings. Entrance to such jobs, however, need some capital, experience, daring and social contacts (cf. Jellinek 1978: 1). The majority of the poor and younger women are channeled into domestic service jobs and prostitution. Hetler found that, whereas migrant women from "her", lowland wet rice, village are relatively better-off as self-employed petty producers and street traders, migrant women from the more impoverished highland villages in the same region tend to enter less desirable jobs as domestic servants and prostitutes in the cities (1986: 257-259).

To what extent is the work of female migrants determined by agricultural seasonality? Although some sources indicate the compatibility of circular migration with agricultural seasons (Jellinek 1978), other sources emphasize the minimality of relationships between the two. In the earlier mentioned study by Hetler only one third of the circular migrants combines circulation with agricultural work, the latter being primarily on own farms (242-243). Similarly, a survey of 8 villages in East and West Java (not specifically dealing with women) indicates that migration in these villages, both circulation for longer periods and commuting, is of a

largely non-seasonal nature (White 1986: 58). This evidence is explained by " the lack of adequate agricultural income opportunities at any time of the year for large numbers of the labour force, making participation in the urban economy - even at the lower rungs of the urban income ladder - a better option for many household members" (ibid: 59, compare Hetler 1986: 244). Manning (1986) found, based on a survey of 3 lowland and 3 upland villages in West Java, a varying pattern among (male and female) migrants: while many female petty traders from the upland villages, landless non-operators and large sawah owners did not engage in agricultural work, others - and especially those from the lowland villages - used to return to their villages during harvest time (p.28-29).

Summarizing section 2:
Women in the RNF sector are concentrated in petty trading, several "informal sector" services activities and cottage industry. Petty trading, in particular, seems to be traditionally a women's domain, except in some regions. More recently, accelerated social-economic changes in the rural areas have affected rural small-scale trade,often to the detriment of the petty traders. Competition among women has sharpened due to the influx of women on the market and the polarization between men (who dominate large-scale trade) and women has increased. General rural employment conditions seems to have been worsened, particularly for women from landless households who are increasingly confined to a combination of agricultural wage labour and a range of "services" activities, which yield very low returns to labour.
The patterns of women's work are determined by a complex range of factors related to local economic conditions and characteristics of their households. In general, women's access to work opportunities offering decent earnings is more limited than for men as a consequence of their domestic responsibilities and the dominant perceptions about gender roles, although the extent of this limitation varies according to household composition and locality. Women's "double burden" implies that in total they make longer working days than men. Class position is an important factor, exemplified by the great differences in work patterns between women from rich and poorer households in terms of time spent on productive activities and lucrativity of these activities. Female migration to urban areas is increasing but the patterns differ so much from one place to another that no single conclusion can be drawn from it. For the same reason

is it impossible to conclude upon the extent to which women's work patterns in RNF activities is influenced by agricultural seasonality. The impression is that in many cases this influence is not very significant and that it is nearly absent whenever incomes from non-farm activities in urban areas are available.

3. The changing roles of women in rural industry

In the preceding sections and chapters, particularly in section of this chapter and chapter II subsection 2.2., some indications have been given with respect to general changes in the (rural) manufacturing sector and to women's employment in this sector. It has been observed that:

- In factory production, as indicated by cases in the cigarette and weaving industries, a more pronounced differentiated structure emerged according to the level of technology - a structure that has been accompanied by a segmentation of the labour market. In this process women tend to be concentrated in the rural and more labour-intensive segments of industry.
- In some peri-urban locations, new employment opportunities have been created for (especially young unmarried) rural women in modern labour-intensive industries.
- Many traditional rural small-scale and household industries have been (and are still) confronted with competition from imported and urban-produced substitutes, forcing part of them to close down or enter into subcontracting arrangements with large factories. At the same time, some small-scale industries, especially in the handicraft sector, flourish due to their capacity to adapt to new market demand either or not supported by credit from government or non-governemnt development agencies.
- According to aggregate data, during the 1970s the female industrial work-force did grow but at a much lower rate than the male rural industrial workforce.

In the following, these trends and their impact on the position of women in rural industry will be further explored.

3.1. Women and the traditional sexual division of labour in cottage industries

As has been said in subsection 2.2. of this chapter,cottage industry is a field of employment in which traditionally many women are engaged. Some cottage industries, such as weaving and batik, were traditionally

exclusively female. Rural women were involved in these activities during agricultural slack periods for household consumption. Later, in the 19th century when pressure on land grew as a consequence of population increases and the Cultivation System imposed by the Dutch colonial government, the social division of labour proceeded rapidly. The division of labour between spinners, weavers and batikmakers became more articulated. For a number of women cottage industry became a more full-time and market-oriented activity (Joseph 1987:7). In a number of industries, such as basket-weaving and ceramics, both men and women were involved. Other industries, like blacksmithing, have always been almost totally a male bussiness. In a study of women's work in rural industry, mainly in Central Java, Dunham (1982) gives an idea of the traditional sexual division of labour in handloom weaving, batik, clay products, blacksmithing and basket-weaving industries. She indicates that in the traditional household industries there is a quite well-defined sexual division of labour along several conceptual dimensions, assigning to women tasks that are considered lighter, softer (material), finer, more profane and requiring more patience (p. 138).[12] This is also associated with the utilization of gender-specific tools. While the use of these tools is characterized by a certain rigidity, the sexual division of labour in terms of activity is rather flexible in the sense that it may break down under certain conditions, particularly in cases of shortages of male labour. Examples are of females carrying out tasks which are normally considered men's work (the digging of clay and sand in a clay products industry, the making and attaching of bamboo rims in a basket-weaving industry) in order to cope with a drain of male labour into more profitable industries or in cases of individual women living in households short of male labour. The reverse, i.e. men performing women's tasks due to a shortage of female labour, has not been encountered. There are, however, cases of men taking over a traditionally female industry (evidenced in one of the handloom weaving industries studied) if a change in market demand opens up new possibilities for profits (see also next subsection).

It has to be remarked here that the traditional sexual division of labour does imply certain inequalities in remuneration for women and men. In some instances this is related to the rigidity in the usage of gender-specific tools. An example is the differential earnings between male and female carriers (for instance in the clay products industry) due to the fact that males can carry much more in their pikul (baskets attached to a shoulder pole) than women in their gendongan (cloth sling). More generally, the

distinction between "heavy" male work and "light" female work forms one of the sources of income differentials between genders. Another dimension, rooted in traditional beliefs, is the prohibition of women working with metal, which, among others, obstructs women's access to the -relatively profitable - blacksmithing industry (Dunham 1982:14,138-142).

3.2. The impact of changing technology and market conditions

The changing position of women in manufacture results from the ways in which technological change and changing market conditions affects female and male employment in it. The general literature about women and industrialisation has concluded that higher levels of mechanisation and technological expertise seem to be consistently related with male employment even in those sectors of economic activity originally considered as women's domain (cf. Fernandez-Kelly 1983:10). It is true, as we have noticed in the previous subsection with respect to Java, that in traditional rural industry there is a division of labour between genders which already imply certain inequalities in the returns to labour. Technological development, however, has added a new layer to this traditional sexual division of labour by providing men with tasks that utilize new technical devices and expertise, while women are left in the more traditional, low-technology, jobs. Technological development, in this way, is clearly gender-specific. Differential remuneration is usually based on definitions of skilled and unskilled labour. It are male jobs that are defined as "skilled" and therefore receive higher wages, while female jobs, although involving certain skills, are considered as "unskilled" and receive lower wages. A number of feminist authors have pointed out that the differential valuation of female and male labour stems from a disregard of female skills in their own right (cf. Berg 1985:152). Characteristics usually attributed to women, such as manual dexterity, are derived from socially invisible training within the domestic sphere and rather referred to as a female's"nature" than as a skill. The definitions of skilled and unskilled labour, therefore, seems to have been strongly based on attributes associated with gender distinctions (ibid, citing Phillips and Taylor).

With respect to certain rural industries in Java, particularly batik, the mentioned proces of change is quite well-documented (among others, Wieringa 1985, Joseph 1987). As far as I know, Dunham, in her earlier mentioned study (1982), is the only one who has, thusfar, analyzed this proces in

some other industries (basket-weaving, clay products, blacksmithing) as well. These studies show how in these industries, with the advancing comercialisation and technological change, the most profitable jobs came to be assigned to men while women (and children) were left in the least profitable ones. This type of occupational segregation can be found within a particular firm, within an industry or branch as well as among industries. Considering the fact that Java has been experiencing structural changes as a result of its integration into the international economy for almost two centuries, changes in certain branches of rural manufacture are not of a recent date but started already some time ago. In weaving and batik, for instance, the most dramatic changes were introduced either early this century (weaving, with the introduction of the shuttle loom and, later, the power loom) or even in the nineteenth century (batik). Below I will briefly illustrate the changes affecting women's position in rural industry with some evidence from the batik and clay products industries.

The batik industry:

Revolutionary change in this, traditionally exclusively female, industry started with the introduction of the copper stamp (cap) under the influence of competition from cheap textile imports from Europe. With the production of batik cap - mainly factory-based - and also a wider use of synthetic dyes, labour productivity increased significantly. The cap was, right from the start, conceived of as a male instrument. The involvement of women in cap production became limited to a number of less well-paid jobs, in which the canting [13] was still used. Stamping and dying became male jobs which were paid four to six times the jobs done by women (Wieringa 1985: 184). Different from these male jobs, which were thought of as "heavy" and defined as skilled and semi-skilled respectively, canting work was assigned just the lower status of "trained" (Joseph 1987: 11).

Under the threat of this new production system, the batik tulis (hand-painted batik) industry was forced to reduce its production costs as well. Cheaper coarse batik tulis came increasingly to be produced in workshops and factories while fine batik tulis survived by catering to a limited elite market. The unstable nature of the industry was reflected in its labour relations: in an attempt to minimize risks, factories to a large extent paid wages on a piece rate basis and converted more and more to putting-out for canting work (Joseph 1987:8-10). The particular system of putting-out, using partial payment of finished goods by entrepreneurs to workers (and middlepersons), was instrumental in advantaging the former at

the expense of the latter and keeping the worker in a longlasting dependency position (ibid: 13). Both piece rate remuneration and putting-out frequently led to indebtedness of workers to employers, because if they make mistakes their work is either refused or paid for at a reduced rate (ibid: 18).

From these developments it is apparent that women's position deterioriated in two ways. In the first place, employment opportunities for them shrinked as a consequence of the entrance of males into the industry. Secondly, fiercer competition in the industry made employment less stable for both men and women, a condition which hit women more considering their much lower earnings. These lower earnings of women were justified by the argument that their husbands, as cap workers, earn now a family wage (Wieringa 1987: 184). Apart from the false assumption in this argument that all women have such husbands at their disposal (ibid), it clearly reflects the western perception of men as providers i.e. breadwinners.

More recent developments, particularly those since the late 1960s, have in fact consolidated and, in some ways, intensified the earlier trends with respect to women's relative position in the industry. As we have noticed in chapter II.2.2, the New Order's "open" economic policy has led to a significant concentration of capital and production in the batik industry with negative consequences for many traditional cottage and small scale producers. At the same time, the opening up of new urban, tourist and export markets stimulated product diversification and the emergence of new employment opportunities. Rural women workers remain to be much preferred by medium and large-scale factories due to their lower labour costs. Large urban factories employ many rural women, either on site or through a putting-out arrangement. Young unmarried (and therefore extra cheap) workers stay in the production site during the week. They return to their villages as they get married and often become batik home-based workers, sometimes for the same enterprise (Joseph 1987: 20). In this respect, the organisation of production has not changed very much to date. In fact, the impression is that the occurence of putting-out has increased. The position of the putters-out is particularly bad; in 1985 in Yogyakarta they made approximately Rp.125 (US$0.11) per day for coarse quality batik and Rp.500 (US$0.44) per day for fine quality batik while factory workers earned as much as double those amounts (ibid:9). The general conditions on the labour market have to be considered as well. Joseph observed an influx of women

into the industry, probably due to declining employment opportunities in agriculture, which has put an additional pressure on wages (ibid).
Alongside this the 1970s saw the emergence of lucrative production of some new-style products, such as batik artistic paintings which usually takes place in small scale workshops and is almost entirely dominated by men. For this, men even started to use the canting, an instrument that has previously been thought of as exclusively female. The few women who are involved in batik painting usually only draw the patterns designed by men and receive wages much lower than their male counterparts (Wieringa 1985:186).

The clay products industry:
Developments in the clay products industry show similar features, though changes started at a much later date. In the four traditional branches of this industry: bricks, roof tiles, grabah (ceramic houseware) and clay toys, the sexual division of labour is quite flexible. There is also some relationship with the agricultural cycle: at times of the year when a lot of male labour is needed for ploughing and land preparation, more work in the industry is done by women, while at times when more female labour is needed for planting and harvesting, more work in the industry is done by men (Dunham 1982:10). Grabah is, though, more specifically a female industry in the sense that the main activity, namely shaping, is only done by women on a slow wheel. Production is organized mainly in cottage enterprises. The changes studied by Dunham are focused on the grabah and toy-making branches in the village of Kasongan (Central Java). The grabah industry, in particular, was severely hit by the invasion of urban factory-produced plastic and ceramic wares (see also Peluso 1981:81-95, on the case of a grabah trader). In the late 1970s female grabah producers in the village worked at just 30% of their capacity, whereas alternative employment opportunities for these women from landless households were quite limited. At the same time, however, the demand for animal banks and toys increased. This was due to the introduction by one village craftsman of a new production technique, the ukir tempel or appliqued ornament technique, which resulted in a new style decorative product for the urban market. This ukir tempel industry has been, from the start, an exclusively male bussiness out of which producers gained a high status. A rough calculation learns us that these producers reached a level of earnings of 9 times the earnings of grabah makers (ibid:5-22). A later study in the same village by Sulaiman (1987), reports that during the 1980s a further rapid

expansion of the male-dominated decorative ceramics industry (now focusing especially on the production of vases and plant pots) has taken place. The large amount of training programs which accompanied this development, by both the Department of Industry and NGOs, were also exclusively directed towards men (p.7-8).

The examples described above show how in rural industry, with the integration of the local economy into the wider economy, women's position has changed both in absolute terms (together with men, as a consequence of increased competition in industries and on the labour market) and vis-a-vis men. Men have entered into previously exclusively female industries, or consolidated their position in others, taking the most profitable jobs. The differential valuation of women's and men's labour has intensified, not as a result of "different pay for equal work", but due to a more complex system of production and remuneration by which tasks performed by men were rewarded more highly than tasks performed by women (cf. Dunham 1982:142). Before drawing more general conclusions on this trend, we will look more specifically at women's changed position in factory production.

3.3. Women and the sexual division of labour in factory production[14]

Technological development, as has been remarked in the previous subsection, tend to provide men with higher technology jobs leaving to women the more traditional, low-technology, jobs. The cases of factory production studied by Manning mentioned in chapter II.2.2, roughly confirm this trend among firms within certain industries (weaving and cigarettes). In these cases, male workers predominate in the technologically advanced enterprises where employment is more stable and wages are higher, while female workers predominate in the more traditional and labour-intensive enterprises where employment is less stable and wages generally lower. Between the labour-intensive enterprises themselves, however, wage levels and work conditions vary according to the profitability of the enterprise. In the larger firms female workers receive relative high incomes, enjoy relative stable employment (yet often on a piece rate basis) and are even entitled to some fringe benefits. Working days are, nevertheless, quite long: 10 to 11 hours per day in normal periods and 11 to 12 hours per day in peak periods. In smaller firms, which generally suffer more from demand and price fluctuations, employment is often irregular, working days shorter but wages also much lower, i.e. equal or lower to wages in agriculture. Incomes earned by women in these smaller firms are usually below subsistence.

Characteristic for these labour-intensive enterprises, both the larger and smaller ones, are the high levels of labour absenteeism (10%/day) and turn over (up to 20% per month) owing to pregnancies, temporary retirement for household reasons and agricultural employment. Between industries differences do also exist: the kretek (clove cigarettes) industry stands out among the large industries in Java due to the higher proportion of female and child labour, the extreme labour-intensity of operations, an almost total reliance on piece-work systems of remuneration and, accordingly, lower earnings if compared to other industries (1987: 20-27). A division of labour between sexes is also found within labour-intensive firms where female workers predominate. Here, males are assigned jobs which are perceived "technical" and"heavy" (for example related to the maintenance of building and machines) and paid on a higher level and more permanent basis than female jobs. To the extent that women are promoted to supervisory positions these are usually at a lower or, at at the most, middle level in the factory hierarchy (cf.Wolf 1986).

As has been mentioned in chapter II.2.2, at some locations around major cities new modern factories have been established, taking advantage of cheap land, (sometimes) easier procedures for location and cheap rural female labour. Government's recent export promotion policy has further supported this trend. Reasons for the labour-intensity of these factories usually do not lie in the lack of capital to mechanise, but rather in the type of operations that cannot easily be mechanised further and/or the very availability of cheap female labour which makes the option of exploiting this advantage and not mechanising further a more profitable one. Mather (1983) and Wolf (1986) have argued that the sub-subsistence wage levels in these factories are facilitated by three factors: the peri-urban location (rural-urban wage differentials are significant), and the sex and youth of the workers. In the case studied by Wolf, factories also benefit from the fact that most workers live with their families at home, which means that they are exempted from boarding expenses. The management of the factories concerned justify the low wages by arguing that households in a rural setting are supposed to cover their basic subsistence from agricultural activities and that the income needed by the young workers are not more than a little extra since they are economically still supported by their families. The preference for females is explained by the idea that they are not only cheaper but also easier to control, quicker and more accurate - traits that resemble the general "nimble fingered" stereotyping of the

(Asian) female worker.[15] Single females are, furthermore, chosen to avoid the obligation to pay maternity benefits (1986:196). The sub-subsistence wages render the workers incapable to directly contribute to the household income. Contribution to the family economy is, rather, indirect in terms of lessening financial demands upon the family (because the workers can fulfill part of their own consumption) and through little savings that could help the family to overcome financially difficult periods (p.371).
Recent research conducted by Jusuf (1988) on young unmarried female workers in garment and textile factories in the vicinity of Bandung (West Java) indicates, in broad lines, similar features. The textile factories, by the way, vary a lot as to the proportion of female workers employed. In the garment factories wages are below subsistence for labourers who work according to the normal schedule of 7-8 hours per day; they are supported by their families through regular sendings of rice and vegetables. Subsistence wages (for the workers themselves) are only for those who are capable and willing to continuously make 12 to 14 hours per day. The extreme extent of exploitation particularly shows up during annual peak periods, when the factories approach the "deadline"for reaching their export quotum; in these periods the women are found to continuously stay in the factory during 24 to 48 hours.[16] Factory work in these cases is, furthermore, characterized by very high rates of labour turnover, absenteeism and inter-factory mobility of labour. This is, to a certain extent, related to marriages, pregnancies and other household obligations as well as to agricultural seasonality, but should also be seen, according to the author, as a strategy of workers to occassionally release themselves from the control and work-rhythm of the factories (p.46).

In general, for both males and females, wages in Indonesia are reported to be among the lowest in the world (Wolf 1986:102, see table A 5 for a comparison of the wages of female workers).[17] This fact is undeniably linked to the New Order regime's fierce repression of industrial workers. In the wave of depoliticisation after 1965, autonomous trade unions have been effectively banned and replaced by one state-controlled labour organisation (INDOC 1981). Labour activity is severely curtailed and strikes forbidden under the pretext that they do not comply with the Pancasila labour relations.[18] There is ample evidence of strikes being violently crushed by police and military power. Equally so, dismissal of strikers and activists is normal practice (ibid). The difficulty of initiating actions can be understood if we realize the lack of support from

socalled workers representatives for such actions, these "representatives" are usually either part of the factory management or are workers carefully chosen by the management for their loyalty to the management. Under these conditions, supported by more gender-specific conditions originating from the patriarchal control in the rural households of the women concerned, the workers' militancy can easily be suppressed. The fact that, despite these conditions, collective actions by female workers -mostly spontaneous and independent from the trade union- do occassionally take place is proof of quite an amount of solidarity and courage (see cases mentioned by Wolf 1986 and Jusuf 1988).

Summarizing remarks

Drawing a conclusion from the incomplete but complex picture that arises from the evidence presented in this section is rather difficult. Has, on the whole, the position of women in rural industry deteriorated? The incompleteness of the picture is due to the fact that it relies on just a small number of cases as well as the fact that our knowledge of the past (which should serve as a reference point) is limited. The picture is complex because it has many dimensions: On the one hand, many female jobs and crafts got lost in the course of capitalist competition and men "took over" traditionally female industries in the sense that they got hold of the more profitable jobs but, on the other hand, there have also been new employment opportunities created for women in factory production - albeit badly paid - to the extent that we can even speak of a "feminisation" of certain industries.

Yet, keeping in mind the scantiness of evidence, I would conclude that, overall, the position of women in rural industry has indeed deteriorated. A quantitative measurement for this in terms of living standards is difficult to give, but the "qualitative" aspects of the process of decline seem to be sufficiently convincing. Crucial is that with the penetration of capitalist economic relations women's employment in rural industry has become <u>less secure</u> as a consequence of competition and market fluctuations, which have affected both the stability of employment itself and the production relations to which women are subjected. The latter also imply relations that increase the dependency of female workers on their employers.

Women's position has also deteriorated in terms of their possibilities to organise for improving their work conditions, i.e. in terms of political power. In this respect the point of reference does not lie very far back in

time: before 1965, despite many limitations, women as well as men enjoyed at least some political space to organise autonomously from the state, both on the workplace and outside it.

With respect to women's position vis-a-vis men in rural industry, the process of deterioriation is evident in the widening gap in earnings and work status between genders. As has been suggested, this erosion of traditional female roles in rural industry following technological innovation, seems to be a quite universal phenomenon described in much of the general literature on women and industrialization. A phenomenon, moreover, which is not limited to the industrial sector but applies to other economic sectors as well, and to the "development" process as a whole (see Boserup 1970). One important aspect which is also suggested in our evidence, especially in the batik case, is that this change process is accompanied with changes in notions with respect to gender roles. It is with the introduction of factory production that the western "males as breadwinners" ideology has been imposed on the traditional Javanese gender ideology, which attaches rather different notions on the sexual division of labour.[19] Some speak in this respect of "housewifization" (see further elaboration on ideological aspects in the next chapter, section 1). And it is exactly this western gender ideology, based on the narrow relegation of women to the area of reproduction, which acts as one of the justifications for the poor remuneration of women in factories. The creation of new employment opportunities in the modern manufacturing sector for women should be viewed in this way, i.e. in that their creation is associated with the very consideration that women can be paid lower wages than men due to assumptions based on the above mentioned ideology.

In face of the general scarcity of employment opportunities this factory work is no doubt a "blessing" for the women concerned; in one way or another it contributes to the incomes of their households. In terms of the overall employment effect, however, its significance is still very small (compare figures mentioned in chapter II.2). The fate of this factory employment, moreover, is also to a greater or lesser extent subjected to market fluctuations.

In judging the trend of the position of women in rural industry I would like to make a distinction between structural and conjunctural changes. More employment opportunities, even with improved earnings, may emerge in periods of rising economic conjuncture. But if we consider the trend on the long term and in view of structural change, we cannot escape the conclusion

that there has been indeed a deterioriation in the position of women. The parameters used in this respect are employment stability, production relations and the differences in income and work status between genders.

FOOTNOTES

1. One striking example of different data recording on female labour force participation is the difference between the 1976 SAKERNAS (labour force surveys) and the 1976 SUPAS (intercensal surveys) data: whereas in the SAKERNAS data the average rate is around 40%, SUPAS data recorded an average of 50% for rural areas in Indonesia (Corner 1987: 133). Although the cause of this difference has not been satisfactorily defined, the difference in interpretation of women's "economic"activity may have played an important role (ibid: 132).

2. Beside the problem of changes in the definition of "rural" and "urban", the 1980 census compared to the 1971 one seems to have a better coverage of the male workforce due to a longer measurement period (Oey 1985:19).

3. The question whether it is the population censuses or the SAKERNAS which provide more reliable data on employment has been a matter of debate (Oey 1985:18).

4. It was a time in which the green revolution became more rigidly implemented according to synchronized planting schedules resulting in sharp peaks of labour demand. At the same time men, in this"economic boom" period, were attracted to relatively remunerative jobs in construction (Hart 1986:76).

5. Some micro studies (for example Smyth 1986) show that this is not true: women do not particularly make less hours than men in rural industry.

6. In the discussion below the term class is, however, loosely used, often reffering to income levels or other stratification categories. This is inevitable due to the different definitions of the term in the secondary sources I am referring to.

7. The latter is, however, in the first place a reflection of the specific demand by these industries for young female, and therefore, cheap, labour.

8. Based on evidence from research by Hull(1976) and Hart(1978).

9. This point is, among others, emphasized by Jansen 1987.

10. Hart's study is not concerned with women's work in particular but rather with interhousehold labour allocation.

11. We are not referring here to commuting, a movement in which many female petty traders are engaged (Peluso 1981, Alexander 1987) but rather to movements involving longer periods of absence from the village, from several weeks to 6 months.

12. Since this does not concern a historical analysis,"traditional" here refers to an organisation of production in enterprises that, at the time of the study (1978/79), still used simple tools and produce entirely for the local market.

13. A tool used to put wax on cloth in hand-painted batik.

14. Factory production is here, somewhat loosely, defined as production which involves exclusively wage labour and a highly differentiated division of labour. It usually refers to medium and large-scale enterprises. It is distinguished from cottage industry which primarily utilizes family labour, with or without the help of a small number of hired workers and where the division of labour is still rather simple.

15. The "nimble fingers" discussion refers to the large amount of publications on the work conditions of women in large relocated industries in Export Processing Zones in some LDCs, many of them in South-East and East Asia. See,among others: Heyzer 1986, Elson & Pearson 1981.

16. The author mentions that the reasons forwarded by the factories not to organise work in more shifts have to do with efforts to suppress costs and risks. The recruitment of more workers implies higher costs and is risky considering the inherent instability of the garment export market (p.42).

17. One may wonder why, despite of this "comparative advantage", Indonesia has not (yet) been able to attract "world market factories" on a large scale. This issue has been slightly touched upon in ch.II.2.2. (p.13). The main obstacle for investments by relocated industries, thusfar, has been the complicated regula-tions and corruption in the Indonesian bureaucracy, besides the inadequate infrastructural facilities. These industries, therefore, still prefer other countries like Malaysia and Sri Lanka, even though the labour costs are there marginally higher (Mather 1983:4).

18. Pancasila is the official state ideology. Pancasila labour relations form part of the corporatist structure of labour management, in which management, labour and the state are conceived of as having the same interests and are expected to closely cooperate.

19. In a study on female tea-pickers in West Java, Grijns (1987) analyzes, among others, how notions with respect to gender roles have been shifting and how the western perception on the part of the plantation management has influenced the sexual division of labour among workers to the detriment of the female workers (p.113-116).

V. WOMEN'S ROLES IN RURAL INDUSTRIALISATION

In the previous chapter I have indicated the patterns of women's work in the RNF sector and the impact of structural political and economic changes on women's roles in this sector and particularly in rural industry. It has been concluded at the end of that chapter that, across the board, we may speak of a certain deterioriation both in absolute terms (particularly for women from poorer households) and in relative terms, i.e. compared to the position of men. Considering this development, the following questions arise: 1) what are the effects of the changed position of women in rural industry on their power and autonomy?, and 2) how do these effects vary across classes and what do these differences imply for the relationship among women?

These two questions will be addressed in the first section of this chapter. The latter question relates to the more general process of rural class differentiation and brings us back to one of the main objectives of this paper, i.e. the objective to relate evidence of women's changed position in rural industry to the nature of rural industrialisation itself as part of the process of agrarian change (see chapter 1, p.3,4). This relationship will be discussed in the second section of this chapter. By placing the discussion in a broader, more comparative, framework - with an eye on some main policy issues - this last section is intended as a final reflection on the main theme of the paper.

1. Structural changes, female autonomy and polarisation among women

1.1 "Economic" participation and female autonomy

Before looking at the effects of the changed position of women in rural industry on their power and autonomy, a brief elaboration is needed on the notions of "power" and "autonomy", the relationship between these notions and women's participation in production and the ways these issues have been discussed in the literature on Java.

The active "economic" participation of and the significant contribution to the household income by women in rural Java have been one of the main reasons for several authors to attribute to Javanese women a relative high status (Geertz 1961, Tanner 1974 cited in Hetler 1986:151). Feminist writers have indicated, however, that such a direct and simple correlation between participation in productive activities and "status" cannot be made (Safilios-Rotschild 1982). It goes beyond the scope of this paper to go

into the elusive debate on women's status, autonomy and power; yet some conclusions relevant to our purpose can be mentioned. The main one is that participation in production is an element in establishing women's autonomy and power, but not a sufficient one.[1]

In the Javanese "matrifocal system" women's high status is based upon their roles as mothers, which is not just a biological role but a central one in the cultural and affective sense (Hetler 1986, citing Tanner 1974). As has been remarked earlier (ch.IV.2.2), a woman is perceived to have the prime responsibility for the material and psychological wellbeing of all those who are entrusted to her,i.e. her household. Women's participation in social affairs within their kingroup or neighbourhood is also quite intensive (Wieringa 1981:193). The usual conclusion is that women enjoy at least a certain amount of power (relative to men) within the household and its direct environment. In practice, this power, i.e. as reflected in decision-making with respect to marriage and family formation, economic activities, expenditures and participation in social activities, vary considerably between localities, between classes and between households (White & Hastuti 1980,cf.Hull 1982). Another level at which women may exert power is that of society. The impression is that, whenever one can speak of women's "social power", it is usually not autonomous i.e. independent from men or other factors such as class position (see below).

The absence of a monocausal relationship between power and autonomy on the one hand, and participation in production on the other, implies that there is no reason to celebrate the relative economic self-reliance of lower class women as being an indication of greater autonomy. Their participation in productive activities is primarily a means of survival and a reflection of their household's economic vulnerability. And in a class society, where middle class attitudes tend to be held as normative,their activities are looked upon as inferior and degrading. Neither can the position of upper/middle class women, who enjoy higher levels of education and can opt for higher status jobs and more leisure, be seen as a sign of"progress", however (Hull 1982:110). It is true, that in cases where women from richer households are engaged in productive activities involving the recruitment of and supervision over wage workers (such as in workshops) they exert some social power in the sense of "exercising control over the lives of others outside the domestic sphere, e.g. in appropriating the product of another person's labour" (Stoler 1977:75).[2] This social power, and the social status of upper/middle class women in general, is, however, based on their

class position and, as such, derived from the power of others i.e. of their husbands or fathers (cf. Safilios-Rotschild 1982). The lives of women from these classes generally conform more closely with the dominant norms on gender roles, which perceive women primarily as mothers (at both the levels of the household and the nation), as housewives and as supporters of their husbands (see Wieringa 1985: 27).

1.2. The effects of changes in rural industry on women's autonomy

The erosion of women's roles in rural industry lessens women's autonomy in several ways. Lower earnings compel women to work longer hours in order to meet household subsistence needs. The loss of autonomy involved here has to do with the decreasing ability of a woman to decide over the allocation of her labour time. Under the conditions that women are held responsible for the daily maintenance of their household, increased poverty means that women are, to a greater extent than men, increasingly tied down to subsistence work through underpaid labour both outside and inside the household. Dependent production and marketing relations (such as in putting out) lessens women's control over the production process and surplus produced. According to the agents involved, this implies a loss of autonomy vis-a-vis women from other classes -amounting to a polarisation among women across classes (see below)- or vis-a-vis men. Polarisation between genders due to this process can happen across classes or within the same class or even within the same household, as is described by Smyth (1986). This situation rests upon unequal gender relations inherent to the traditional sexual division of labour but, at the same time, reinforces it. In cases involving a shift of the sexual division of labour in industrial production, such a polarisation is also at issue. At a general level, the widening gap in the material valuation between women's work and men's work in production contributes to a widening gap in its social valuation as well and ultimately emphasizes women's primary role as housewives.

Low earnings and bad labour conditions for women apply to several types of RNF activities, and to household industry as well as to factory production. However, in the extent of economic exploitation and women's autonomy, differences do exist between the two. The nearly 20% of the female manufacturing workforce that is employed as unpaid family workers (see table 5) obviously work in household enterprises. And wages for home-based workers are generally below wages for factory workers, as the batik case has indicated. Production relations for women in the household industry, furthermore, are often such that they are not more than"disguised wage

workers". Studies on female home-based workers in India have stressed the disadvantages of those workers due to their atomization, unprotectedness by labour legislation and extreme domestication (Mies 1982, Bhatt 1987). This is true for the case of Java, though in the Javanese cultural context the extent of female subordination at the concrete level may be not as dramatic as is described in the Indian cases.

Involvement in factory production, on the contrary, is often believed to have a liberating influence since it releases women from the narrow confines of their homes and direct control of the male members of their household. Elson and Pearson (1981) have questioned this and posed that in the change to factory production gender subordination is not reduced but recomposed: from subordination to their fathers and/or husbands women are placed under the subordination of male factory managers and supervisors (p.31-32). In her study of female factory workers in West Java, Mather (1983) has pointed to a particular way in which patriarchal power is preserved. Here employers entered into an alliance with local Islamic leaders who act as labour recruiters; these leaders established direct patronage over the young rural workers and, at the same time, provide the factories with a docile and cheap labour force (p.14-15). Such a pattern has not been found in the case studied by Wolf in Central Java, where Islamic patriarchy is less strong than in West Java (1986). Wolf concludes that on the one hand, factory workers clearly felt a sense of greater freedom due to certain aspects of their employment (despite the fact that they cannot dispose over their entire income) but that, on the other hand, their adherence to traditional Javanese patriarchal norms has not undergone any change (p.377-378). We have to consider, however, that these two studies primarily concern just one age category of women, i.e. young unmarried women; the impact of factory work on their autonomy, therefore, cannot easily be generalized to Javanese women in general. More research is needed before we can draw conclusions on this impact.

1.3. Increased polarisation among women

In the two first chapters of this paper it has been indicated how agrarian changes in the past few decades, influenced by government economic policies and political reforms, have tended to increase the process of rural class differentiation. This process has also reinforced the class differences among women as members of rural households.[3] I have also indicated (ch.IV.2.2) how this process has determined the type and profitability of (non-farm) activities in which women from rich and poor households are

involved as a consequence of their differential access to productive assets and human resource facilities such as education. The resulting disparities are not only reflected in differences in income and social status but may also extend to direct exertion of power by some women over other women. This happens, for example, in the case of local female moneylenders on whom petty producers and traders are depending. Or in the cases of female owners of small to large-scale enterprises and women managing enterprises owned by their husbands, who hire other women's labour. These phenomena are, of course, not new. But what needs to be said is that more recent political and economic changes have, on the one hand, increased the numbers of easy exploitable women from poor rural households who have no other alternatives than to offer their labour power at any price both within rural industry and outside it and, on the other hand, increased the access to productive assets for some women.

An important point which I want to make in this connection is that the government, through its specific policies with respect to rural industry and women, has actively reinforced this differentiation among rural women. It has done so, in the first place, through special programs to promote women's employment in small-scale industries. These programs, that are usually operated by the Directorate General of Small-Scale industries (Department of Industry) ain conjunction with the Ministry for the Development of the Role of Women, provide credit, technical training and extension services. Apart from the poor performance of these programs in technical terms, i.e. their failure to offer attractive marketing channels and their bad training services, they tend to benefit only a small number of elite and middle-class women. This is not surprising in view of the basic approach of the programs and the channels used for their implementation. They are intended primarily for entrepreneurs and are not accompanied by any policy to improve the welfare of the workers in the concerned industries. The selection of participants in such programs is, furthermore, often done by or through village officials i.e. the village headman and/or his wife. A case of an assistance project for batik entrepreneurs studied by Joseph (1987: 35-43), is a good example of the functioning and outcome of programs like these. Women selected for this project were those who were judged by the village headman and his wife as potential independent producers. This limited selection to those whose households had sufficient resources to invest in subsidized but still costly raw materials and who had time to attend training sessions and group

meetings (p.41). Another, unofficial, criterium for selection was participation in, elitist, village-level organisations such as the PKK (Program for Family Welfare). The eventual outcome was the emergence of five succesful entrepreneurs (out of the 26 initially selected) from already wealthy households (landowning and/or civil servants), who employed mainly poor relatives and dependents plus a number of fellow villagers from landless households. Wages were low -and even lower than those paid by middlepersons on whom the workers were previously depending- and the indebtedness of workers to the employers was quite high. The project was, no doubt, instrumental in reinforcing the pre-existing socio-economic stratification in the village (p.43).

The above trend is politically and ideologically supported by the official women's organisations, particularly by the civil servants' wives' organisation Dharma Wanita, which operate at village level through the PKK (see above). It has to remarked that no other women's organisation is permitted to operate at this level. Though the operational scope of the PKK is larger on paper (where it claims to cover all Indonesian villages) than in reality, the ideological impact of this program should not be underestimated. The messages disseminated by this program and the wives' organisations are quite clear: a woman, in the first place, need to be a good wife and supporter of her husband and is obliged to educate her children into proper members of community (compare the official "five duties", Hull 1982:122). Wives' organisations should be viewed in their historical context; as Wieringa has put it, they are "...connected with the housewifisation process in which women have to be re-subordinated after the rather militant period of women's organisations of before 1965" (1985:30). In fact, they are an instrument of women's subordination and of political control for the military bureacratic government at the same time. Membership of the strict hierarchically organized wives' organisations is obligatory for the concerned women (wives of civil servants, army personnel). For the leaders of these organisations, i.e. the elite women, participation is functional to enhance their status both socially and economically -the latter by supporting trade networks among these women and by providing them with opportunities to accumulate capital. For women from poor and landless households, on the contrary, these organisations as well as the PKK are no more than another means of oppression: they are primarily a tool to keep them politically in check and, at the same time, not able to really improve their lives (ibid:33). It is in this sense that

the official women's organisations, together with other government's programs, tend to reinforce the differentiation among women.

The evidence presented in this section is meant to complete the picture of the impact of structural changes on women's position, with special reference to women's roles in rural industry. The general worsening of their employment conditions and the widening gap between men and women in labour incomes are likely to have a negative impact on women's autonomy. Special government's policies to enhance women's employment in rural industry seem to have failed in providing a solution; they have, rather, increased rural inequalities and the polarization among women. This trend is politically and ideologically reinforced by formal women's organisations which, basically, serve as a tool to intensify women's subordination to both men and the state.

2. Women as bearers or beneficiaries of industrialisation?

2.1. How women are part of the industrialisation process

As the case of Java has shown, rural women play a significant role in industrialisation. They do so by contributing, with their cheap labour, to the process of capital formation in both the traditional and modern manufacturing sectors (and in the RNF sector in general) and, particularly in the former, as intermediaries in the transfer of manufacturing skills from generation to generation. The profitability and competitiveness of many rural, peri-urban and urban industries are contingent upon the labour of women from poor households, who work either as factory workers or putters-out. To the extent that the rural small-scale industrial sector survived in face of the competition from increasingly monopolistic large firms and of the high costs of intermediate goods produced by these firms, this has been made possible by the un- and underpaid labour of women. In view of these conditions, rural women appear as bearers, rather than as beneficiaries, of industrialisation.

The predication of the industrialisation process upon the exploitation of sub-ordinate female labour is not a feature characteristic only for Java, or for Third World countries; it has repeatedly been shown in history. The cases of early industrialisation in Britain and Japan are good examples.In Japan the competitiveness, in the pre-war period, of the silk and cotton textile industries on the world market could not have been achieved and maintained without the steady stream of female labour (Saith 1986:24-49).

The"extreme plasticity of wages" in rural areas allowed these areas to function as suitable"cushions" or absorbers of shocks caused by frequently changing market conditions (ibid:47-49). With regard to the role of cottage industry in the industrialisation process there are also similarities between the studied case and the"historical" cases. In 18th century Britain female cheap labour in combination with hand or intermediate techniques has long continued to be chosen as an alternative to mechanisation, representing a strategy of"capital widening". Or as has been put by Hobsbawm: "The obvious way of industrial expansion in the 18th century was not to construct factories but to extend the so-called domestic system" (Berg 1985:146). There were even cases where industries deliberately developed new labour-intensive techniques along with an advanced division of labour in order to tap a female labour force (ibid).
Equally so, are there similarities in the basic ideological mechanisms used to legitimize the subordinated labour of women. Berg describes how gender-specific skill definitions related to the association of women with the domestic sphere have been used to justify differential returns to labour between men and women in 18th century British industry (1985:151-153). As we have seen in the case of Java, Dutch colonialism has been meritorious by imposing these notions, for the first time, as a new layer to the traditional sexual division of labour in industry. Accompanying the introduction of technological innovations in some industries, these notions have been used to justify widening disparities in the valuation of men's and women's work.

Whereas the subordinated role of women in the industrialisation process in industrialized countries has been replicated in the Third World, the success of the industrialisation process itself has not. The global conditions in which Third World countries have to carry on the process of industrialization is different from those faced by the industrialized countries at their time. After,in some of the LDCs, the potentials of industrializing have been destroyed during the period of European colonisation, they now face competition with an already established and strong western industrial power that control the world market (Saith 1986:6).
The historical path followed by Java is, essentially, not different from that followed by most other South and South-East Asian (and Third World) regions. It carries the same, principal, contradictions of underdevelopment by which, on the one hand, dynamic development of capitalism in agriculture

tend to continually separate large sections of the peasantry from access to the means of subsistence production while, on the other hand, the pattern of industrialisation fails to provide sufficient alternative employment opportunities (cf. Deere et al 1982:91). Along these lines, the growth of the manufacturing sector has been primarily based on import substitution in capital-intensive, urban based, industries. In the 1970s up to the early 1980s oil windfall revenues have greatly fuelled this growth as well as the growth of a rural economy characterized by agricultural production increases and a growth of RNF activities, particularly in the construction and services sectors. The resulting type of rural development shows the emergence of a class of capitalist farmers and rural entrepreneurs, together with growing rural-urban disparities and rural income inequalities. This process has been accompanied by an increase of political control by the New Order regime over the rural areas.

Rural women involved in the RNF sector are part of this process in several ways. They mediate certain processes while they are, at the same time, affected by it:

1) As carriers of undervaluated labour they mediate intersectoral net flows of resources,i.e. from agriculture to industry and from rural to urban areas. They do so as low wage earners in rural and peri-urban factories[4], as putters-out for urban-based enterprises predominant in textile and batik industries, and as rural women working in the urban "informal sector".[5]

2) Where labour relations are confined to the rural areas, i.e. between rural female workers and rural entrepreneurs, these workers mediate and are affected by growing power imbalances in the context of sharpening rural class differentiation. In the rural context where personalized patronage relations tend to play a more significant role, the link between economic exploitation and social-political subordination is more tangible. Wealthy landowning entrepreneurs reinforce their social power through the dependency relations with the bulk of piece rate workers (many of whom are members of their own families), enabling them to justify ever more reductions of labour costs.

3) As members of rural households women are affected by the process of growing inter-household disparities which reflects itself in a greater differentiation among themselves.

4) Both the increasingly dependent relationships through which women's labour is exploited and the growing differentiation among women facilitate a more effective political control by the military bureaucratic state. This

is because political control can be easily channeled through wealthy rural entrepreneurs (who are part of the rural elite) and through women from the rural elite who are organized in government village level organisations.

If we look at how rural women have been affected by change processes in the RNF sector and rural industry, the impression of "women as bearers" is difficult to evade. Micro studies, and in some cases also aggregate figures, suggest: a) a certain push of women from agriculture into the rural and urban "informal sectors", b) the loss of female jobs in traditional cottage industry, c) increasing instability of rural female employment, and 3) growing polarization and labour income inequalities between men and women in all economic sectors.
All these trends point to a process that has been referred to by some authors as the process of female marginalisation.[6] Yet, in concluding upon changes affecting women's roles in rural industry I have preferred to use the descriptive term deterioriation, pointing to the tendency of increasing employment instability and growing economic inequalities between genders (ch.IV,p.60). One of the reasons is that the female marginalisation thesis seems not to allow for variations in the ways women are either excluded from or incorporated in the labour market. As McEwen-Scott has concluded, the female marginalisation thesis is too general to take account for such variations; neither does it refer to gender as an element of subordinate (and not just cheap) labour in structuring labour markets due to its narrow reliance upon notions of surplus labour and wage competition (1986:673).
The evidence on Java, indeed, indicates that women's exclusion from and/or incorporation into the labour market is uneven.[7] We have seen that the loss of employment in certain industries at the cottage and small-scale levels has occured alongside the incorporation of women in these industries at medium and large-scale levels, and, into other industries. Equally so do the rates of exploitation of female labour vary between and within industries. There is an indication of increasing gender segregation of industrial employment, but the patterns of it are uneven, such as, for example, indicated by the case of the textile industry. And lastly, although there has been a certain push into the "informal sector" (petty trade, informal type of services), earnings in this sector vary considerably and are not automatically below earnings in agriculture or the manufacturing sector. Local economic and social factors play a role in determining the variations mentioned above, as well as the profitability of

the particular enterprise, branch or industry depending on, among others, economic conjuncture. One of the observations have been that wage levels and work conditions seem not to be determined by market orientation (export or domestic). The low levels of female wages in export-oriented labour-intensive industries have to do with the need to maintain competitiveness on the world market. Female wage levels in labour-intensive industries oriented at the domestic market, however, vary a lot and seem, on the whole, not to be particularly higher or lower than in the export-oriented ones. Profitability is a crucial factor, determined by, among many other things, the market segment for which the firm is producing.

Given the scantiness of data available,my reflections above are just indicative. Much more research, both at the micro and more macro levels, is needed before we can sketch definite patterns of women's exclusion from and incorporation in various forms of employment, especially if we want to find out the regularities in these patterns.

Yet, despite all variations, some general trends in female (industrial) employment, i.e. the increasing employment insecurity (in terms of both employment stability and types of production relations) and the growing economic inequalities between genders, seem to be persistent. I have perceived these features as being structural (p.61), which could be associated with a systemic - and thus irreversible- tendency within dependent capitalism. Although this could invite a complicated discussion on the nature of dependent capitalist development and its long-run tendencies, I will leave it aside as something beyond the scope of this paper. More relevant is it to discuss the implications of the observed trends in the context of policy questions, i.e. for strategies geared at the development of rural industry and the turning of women into beneficiaries of this development.

2.2. Can women benefit?

This subsection aims at just giving an idea of some general policy implications of earlier discussed tendencies; it is not aimed at giving a complete set of policy recommendations.

The policies we are talking about should contain two interrelated components: one concerning the promotion of rural industrial employment in general and one concerning the specific gender aspects i.e. the issue of women's subordinated labour. The problem of markets, which stands at the core of efforts to generate industrial employment, is the problem I would

like to discuss first. There are ample programs for the promotion of rural industry which collapsed due to their sole concentration on the "supply" side and ignorance of the demand question. The problem is, however, essentially a structural one: dependent capitalism is characterized, among others, by a limited domestic demand for mass-produced consumer goods due to particular patterns of income distribution, while access to export markets, as has been remarked at the beginning of this section, is limited by the already established domination of industrialized countries on the world market. In the Indonesian case there has been some scope for widening domestic demand during the 1970s. But the capacity of the state to generate investments and growth (including the purchasing power of a rising urban and rural middle class) was heavily predicated upon oil revenues. Dwindling oil incomes after 1982 have slowed down economic growth and in some industrial branches domestic demand stagnated. This development necessitated a shift to non-oil and labour-intensive export-oriented industrialisation. Given the entrenched interests of the national bourgeoisie in the highly state-protected import-substitution manufacture and the deepening of international recession (including the increasingly protectionist attitudes of industrialized countries), the probability of success of such a policy can be questioned.

In a discussion of different future scenarios of Indonesia's industrialisation, Robison (1985) mentioned stagnation and decline, with disintegration of the state as a consequence,as one of the possibilities. Another one is the expansion of a model of "accumulation from below" -as contrasted to the model of large-scale capital-intensive development from above- centered around the role of small- and medium-scale bussiness groups, the national petty bourgeoisie and small- and medium-scale capitalist farmers (p.327). This scenario has not been worked out and the question remains as to how to generate and sustain adequate demand levels. Whereas export markets are an unstable option, particularly for a "late comer" at the world market as Indonesia, expansion of domestic demand -on the long run- can only be considered in relation to changes in the patterns of rural income distribution. The importance of a more or less egalitarian distribution pattern of agricultural incomes for a dynamic growth of internal demand for labour-intensive rural industrial goods has often been emphasized, with reference to the relatively succesful market-oriented cases of Japan, South-Korea and Taiwan, as well as the socialist case of China (Islam 1984, White 1986).

The fact that demand, on the long run, poses a structural dilemma which basically cannot be solved without fundamental political and economic changes, however, does not imply the absence within the existing political and economic context, of possibilities for new markets (export, tourist, urban) and even, to a certain extent, of raising internal (rural) effective demand. If external demand is relied upon, employment generation in rural industry becomes an effort with relative short-term perspectives. Marketing policy becomes an important concern, involving a certain amount of risks and requiring high levels of flexibility. If the raising of rural effective demand is considered, some policy changes are needed in order to enable effective poverty alleviation. A reallocation of rural development funds is desirable in a direction that will directly benefit the rural poor. For example, a higher proportion of public work funds (Inpres Desa which at present involves impressive amounts of money and goes primarily to infrastructural projects) should be redirected to the creation of productive assets "by and for" the poor (White 1986:71). Within the existing political and bureaucratic structures, however, such a resource reallocation alone will not guarantee that the poor can be really reached. In the previous section we have seen how programs directed at the improvement of rural productive capacity and intended (at least on paper) for the poor, such as credit and training programs for promoting rural industry, tend to misbehave. They either fail due to technical imperfections or reinforce rural income and power imbalances due to the fallacy of their basic entrepreneurial approach and the utilization of indirect and formal channels of operation,i.e. the village government apparatus. These problems can be overcome but need a more lenient and flexible attitude from the side of the government towards collective management forms and initiatives for autonomous development.[8] The latter points to the need of more space for grass roots activity and non-governmental organisations which, despite their weaknesses (Utrecht 1986), may provide a wider scope for success of programs geared at strengthening the productive base of the poor than do present "top-down" government programs.

Another change which is required for a more succesful promotion of labour-intensive rural industry concerns macro-economic policy. Present policy inconsistencies towards various levels of industry, i.e. the preferential policies towards the large-scale capital-intensive sector, should be

eliminated in order to create a favourable environment for the development of labour-intensive rural industry.

As we have seen, the problem of rural industrial employment is not just a problem of employment opportunities but, even more so, a problem of labour incomes, particularly for women. Apart from the specific gender aspects involved here, the problem is rooted in a basic contradiction of capitalist production. In the framework of an "open economy" there is a trade-off between employment creation and efforts to increase income levels or, in other words, between the improvement of the quantity and quality of jobs (Bar-El 1984). In most cases the creation of employment opportunities for women is based on the very possibility to exploit their labour at high rates. The prospects of a decline in profitability due to pressures for higher wages may spur a firm to introduce labour-saving techniques or even to relocate (particularly in the case of footlose industries), with the loss of many jobs as a consequence. The margin for shifting the proportion of wages and profits within value added depends on a set of factors, of which the market position of the firm or industry is one of the most important. And as we have already observed, the market conditions, both export and domestic, for industries in peripheral capitalist regions like Indonesia are, across the board, not very favourable.

Yet, the plight of women in industries, either as small-scale producers, home-based or factory workers, badly needs attempts at improving their labour incomes. The most important avenue for such attempts is that of labour organisation, i.e. of establishing a stronger bargaining position of workers. Support to pressures for strict adherence to the labour legislation and for an extension of the coverage of labour laws to home-based workers and small-scale producers is necessary, however ambitious this may sound within the present situation of strong state repression and deplorable conditions of the labour movement. Besides, programs aimed at the promotion of rural industry should be accompanied with particular efforts for raising income levels. In income generation projects this requires special attention for establishing reliable marketing channels and for management forms which ensure that the greatest possible share of profits accrue to the direct producers. The latter applies also to models of vertical integration which are presently promoted by the government (see ch.II.2.3).

One other issue need to be mentioned in discussing the improvement of women's position as workers. This concerns the provision of educational and

training facilities intended to reduce the differential remuneration between genders. Self-evidently, the provision of these facilities has to be matched by an increasing capacity of the rural areas to absorb the resulting higher-valued labour of women. We have seen how without the increase of this capacity, women's higher-valued labour either remains idle or is attracted to urban areas (Hull 1982). The prime question is, however, how to make these facilities accessible to women from poor households. Income generating projects are likely to reach these women if the social and economic obstacles to participation faced by them are not tackled as well. This argues for more integrated programs involving a wide range of activities to elevate their economic conditions as well as services that are intended to alleviate their specific gender tasks (schemes for child and health care, maternity insurance etc). Up to now, the operation of integrated programs -to the extent that they exist- seems to be a government's privilege. Apart from the earlier mentioned fallacies of the government's approach to rural development programs, such programs generally suffer from coordination problems inherent to the "tradition" of sectoral policy-making.

Finally, we should concern ourselves with the improvement of women's position as gender. We have concluded in the first section of this chapter, with direct reference to the case of Java, that no simple and direct correlation exists between women's participation in the market and their autonomy or "status". Given the ideological source of women's subordinated labour, i.e. the relegation of women to the sphere of reproduction, the promotion of employment and incomes alone will not be sufficient to improve women's status both in the labour market and in society in general. As Beneria and Sen have emphasized, the only fundamental solution lies in the elimination of discrimination in the reproductive sphere, which implies that domestic work has to be shared by men and women and that patriarchal relations have to be broken (1986:153). Such a radical change which is likely to meet strong socio-cultural resistance is, self-evidently, a matter of long-term strategy. The key to such change lies ultimately in organisation, through which women may develop their own social identity, independent from men. Policy-makers within the state and NGOs can only be helpful by creating an environment conducive to women's organising and to the positive changes that eventually result from it. However, attempts at autono-mous organisation by rural women in this perspective will not be an easy task, particularly given the nature of present formal structures

established for the "advancement" of women which, as we have remarked in the previous section, basically represent an instrument for the re-subordination of women as gender and for more effective political control by the state.[9]

In concluding upon what have been discussed in this section, I would say the following. As has been true in other cases, rural women in Java have contributed to industrialisation primarily as providers of cheap labour. In the context of peripheral capitalist industrialization rural women mediate, through their subordinate labour, processes of increasing urban-rural disparities and growing rural differentiation. Their position has generally deterioriated in the sense that female employment has become increasingly unstable and economic inequalities between genders has grown. Yet is it difficult to speak of an overall marginalisation of rural women because the ways in which they are excluded from and incorporated in the labour market are uneven.

For a sustainable development of rural industry and an improvement of women's position in it on the long run, a range of fundamental political and economic changes are needed. Central is the redistribution of power and economic assets in the rural areas in order to establish a home market for labour-intensive industrial goods. Within the existing political and economic structures, employment generation in rural industry is possible but becomes an effort with relatively short-term perspectives, especially if only external demand is relied upon. The raising of effective rural demand can be considered too, but this requires a reallocation of rural development funds in a direction that enables more effective programs for poverty alleviation. The latter, in turn, would gain by a certain relaxation of government (political) attitude in favour of initiatives for autonomous development. The enhancement of labour-intensive rural industry, moreover, needs a favourable macro economic environment, which implies that present preferential policies towards the large-scale capital-intensive sector have to be ended. While women would certainly benefit from programs mentioned above, particularly if these programs involve an increase of labour incomes for the direct producers, a fundamental improvement of their position also necessitates space for the autonomous organisation of women aimed at structural changes in gender relations.

FOOTNOTES

1. I will take the very general definitions of autonomy and power as a guideline. Autonomy:"the extent to which women exercise control over their own lives" (cf Stoler 1977); power: "the ability to control or change the behaviour of others" (Safilios-Rotschild 1982:117).

2. The cases described by Stoler are related to involvement of women in rice production. Social power is possessed by women from landowning households who supervise the harvest labour of others and engage in harvesting work themselves but for much higher returns than poor women due to their social proximity to the landowners and their own social standing (p.81)

3. This inference is based on the premise of the household as a central unit of analysis. I am aware of the fact that this has, however, become a matter of debate (see, for example, Wong 1984). It would be interesting to amalyze the relevance of the household as a unit of analysis in the specific case of Java.

4. Mather (1983) and Wolf (1986) speak in this respect of a "subsidization of manufacturing factories by rural households".

5. This mechanism should be viewed in the context of the role of the urban "informal sector", not only in the rural economy, but also in the urban economy: as a producer of cheap goods and services that can keep urban wages in the "formal sector" low.

6. See, for example, McEwen-Scott 1986:650-652, for a review of interpretations of this thesis.

7. The unevenness may be even greater if we include women's employment in urban areas.

8. One of the problems are the political constraints to the development of autonomous cooperatives beyond the local-informal level. For an elaboration on this see, among others, White 1986:80-82.

9. The role of religious organisations has not been mentioned. But there are indications that in several parts of Java, in the context of a revival of Islam, Islamic organisations (including those for women) are getting increasingly active in enhancing the faith and practice of Islam among the population. The normative impact of this on deepening women's subordination cannot be ignored (see Woodcroft-Lee 1983).

VI. CONCLUSIONS

Rather than being an exercise by which certain hypotheses are tested for, this paper is primarily an explorative one in which a problem is analyzed by addressing a number of research questions. The main intention has been to conceptualize certain socio-economic processes and relations by using a set of relevant theoretical considerations. As has been formulated in the introduction, the main question is that of women' roles in rural industry in Java and how this is related to the specific nature of rural industrialisation as part of the process of agrarian change. Due to the multi-dimensional nature of the question, the analysis has been a multi-leveled one, comprising of two levels concerning the nature of rural industrialisation in terms of the relations of rural industrial growth with the wider economy and the process of rural differentiation respectively, and a third level with respect to the ways in which women are involved in it.

There is no need to repeat in this conclusion the main findings of the analysis in this paper and my reflections on them; these findings and reflections are dealt with in the second section of the last chapter (V.2). Rather would I briefly discuss what these findings imply for further research. As I have already emphasized in the introduction and repeated a number of times in the several chapters, due to the sketchy nature of available empirical data, the paper can only provide some indications of ongoing processes and does not pretend to produce a complete and definite picture of these processes. But these broad indications revealed a multitude of areas at which further research efforts could be directed.

Evidence on the conditions of rural industry and its role in the wider economy has indicated a process more or less typical of peripheral capitalist rural industrialisation characterized by 1) the subordination of labour-intensive rural industry to a capital-intensive, mostly urban-based, manufacturing sector, 2) relatively weak local production and consumption linkages of rural industry, and 3) the contingency of the growth of rural industry, and the RNF sector in general, upon factors external to the rural economy. Moreover, the growth of rural industry and the RNF sector tends to sharpen rural inequalities.

This evidence, however, needs to be substantiated by much more empirical data. More insight is needed of the exact forms by which these tendencies are proceeding. This requires a large amount of local and regional studies on production and consumption linkages of rural industry, the rural-urban

economic flows involved in the process of rural industrialisation and patterns of rural capital formation. These studies together, moreover, would provide insight in the uneven patterns of the development of rural industry in relation to agrarian change. Because, as has been observed, regional differences are great and within the broad tendencies described above, change patterns are not necessarily even and identical.

The latter also applies to the roles of women in the change process and in rural industry in particular. Women's incorporation as carriers of subordinate labour is more or less universal but the forms in which it takes place vary. More micro studies are needed in particular industries, particular occupations and particular localities in order to reveal these variations. Apart from economic specifities of particular localities, local history and regional differences in culture - for example between West and Central Java - may play a role in determining these variations.

Of interest are also the roles of women, through their involvement in rural industry, in political-economic processes which are part of rural industrialisation, i.e. in widening rural-urban disparities and increasing rural inequalities. Women mediate these processes and are, at the same time, affected by them in several ways. More insight is needed in the ways rural women - as factory workers, as workers in the urban "informal sector" and as putters-out in urban-based enterprises - take part in intersectoral relations (agriculture-industry, rural-urban). This requires a combination of micro-level research on the conditions of women as workers and as members of their households on the one side, and analysis of particular economic or industrial branches on the other side, which highlight "both ends". More insight is also desirable in the ways rural women, involved in rural industry, take part in the process of rural differentiation. This requires more micro-level studies on various localities and industries, of the type conducted by Price (1983) and Joseph (1987) for the batik industry, analyzing the position of women at "both ends" too, i.e. as workers and as owners of capital. One particular area of interest concerns the question as to how the increasing polarisation among women resulting from the mentioned processes articulate with the dominant notions about gender relations and the tightened political control by the state on poor women and on the rural population in general. In the same vein, i.e. directed at addressing the same kind of questions, we should evaluate the large amount of income generating projects conducted by government and NGOs for women in rural industry.

Much remains still to be analyzed in order to obtain a more complete picture of the ways in which women are incorporated in the process of rural industrialisation and, more importantly, of the possibilities to turn women from bearers into beneficiaries of industrial development.

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APPENDICES

Table A1 DISTRIBUTION OF OPERATED FARM SIZES, JAVA 1963 - 1983

	1963:			1973:			1983:		
Operated farm size (ha)	% of farms	% of area	average farmsize	% of area	% of area	average farmsize	% of area	% of area	average farmsize
0.1 - 0.49	52	25	0.3	55	22	0.3	54	21	0.3
0.5 - 0.99	27	27	0.7	26	27	0.7	27	27	0.7
1.0 - 1.99	15	23	1.1	14	17	1.3	14	27	1.3
2.0 & above	5	25	3.3	5	24	3.2	5	25	3.1
Total farms 0.1 ha (mill)	7.95			8.66			9.21		
Total area (mill. ha)	5.65			5.51			6.17		
Average farm size (ha)	0.071			0.064			0.067		

Source: Hüsken & White 1987, p.24
based on CBS data, Agricultural Censuses 1963, 1973, 1983

Note: To allow comparison the authors have standardized definitions between the 3 censuses, and farms less than o.1 ha are excluded.

Table A2 EMPLOYMENT AND GROSS DOMESTIC PRODUCT BY SECTOR
INDONESIA 1971, 1980, 1985
(%)

Sector	1971		1980		1985	
	Employment	GDP	Employment	GDP	Employment	GDP
Agriculture	67.0	33.8	56.3	24.6	54.7	24.2
Non-agriculture	33.0	66.2	43.7	75.4	45.3	75.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Industry	21.0	9.4	20.9	14.5	20.5	16.7
Non-industry	79.0	90.6	79.1	85.5	79.5	83.3
(Trade)	(33.2)	(22.5)	(29.8)	(20.1)	(33.1)	(20.3)
(Public Administration & Other Services)	(31.6)	(17.4)	(31.9)	(13.5)	(29.4)	(16.2)
(Transport and Communication)	(7.4)	(5.0)	(6.6)	(5.8)	(6.9)	(7.6)
(Construction)	(5.2)	(4.4)	(7.4)	(7.7)	(7.4)	(7.5)
(Banking etc.)	(0.7)	(2.1)	(1.3)	(2.5)	(0.9)	(4.0)
(Mining & Quarrying)	(0.6)	(36.5)	(1.7)	(32.0)	(1.5)	(23.1)
(Electr,Gas & Water)	(0.3)	(0.5)	(0.3)	(0.6)	(0.3)	(1.0)
(Ownership of dwellings)	(-)	(2.1)	(-)	(3.3)	(-)	(3.6)
T o t a l	100.0	100.0	100.0	100.0	100.0	100.0

Source: Hasibuan 1987, table 16
Based on BPS/CBS

Table A3 AVERAGE ANNUAL RATE OF GROWTH OF EMPLOYMENT BY MAIN SECTOR AND SEX IN RURAL JAVA, 1961-1971, 1971-1980

	Males		Females	
Main sector	1961-1971	1971-1980	1961-1971	1971-1980
Agriculture	- 0.4	0.7	2.9	- 0.1
Manufacturing	4.9	3.7	9.5	2.5
Transport & Public Utilities	4.0	6.4	*	*
Construction	1.9	10.7	*	*
Trade	6.2	3.0	9.9	4.4
Services[a]	3.0	5.4	- 1.6	7.4
All sectors[b]	0.7	2.0	4.0	1.6

Source: Jones 1984, table 2
based on Population Census data 1961, 1971, 1980

Notes : * numbers too small to be meaningful
[a] In 1971 and 1980 finance is included with services as there was no separate finance category in 1961
[b] In all years the group"activities not adequately defined"was prorated across industry groups

Table A4 LABOUR FORCE PARTICIPATION BY SEX, PROVINCE AND RESIDENCE, JAVA, 1971 AND 1980

Province and residence	1971		1981	
	Males	Females	Males	Females
DKI Jakarta				
urban	66.34	20.66	62.35	23.07
rural	-	-	-	-
West Java				
urban	59.21	19.62	57.59	19.25
rural	69.38	28.45	68.68	25.83
Central Java				
urban	58.96	34.05	60.20	35.25
rural	74.11	37.87	73.34	40.99
DI Yogyakarta				
urban	49.34	35.39	50.51	34.39
rural	70.43	50.84	50.51	55.42
East Java				
urban	63.45	30.07	61.10	30.27
rural	76.03	38.62	73.95	36.69

Source: Indikator Sosial Ekonomi Wanita 1987, tables 13A, 13B, 14B, 14B, 15A, 15B

Based on: BPS/CBS Population Census 1971 Series D
Population Census 1980 Series S2

Table A5 WAGES PER HOUR FOR FEMALE WORKERS IN INDONESIA COMPARED TO THAT IN SOME OTHER ASIAN COUNTRIES (in US $)

	Wage	Wage and fringe benefits
Hong Kong	1.15	1.20
Singapore	.79	1.25
South Korea	.63	2.00
Taiwan	.53	.80
Malaysia	.48	.60
Philippines	.48	.50
Indonesia	.19	.35

Source : Wolf 1986, p.103
Based on : Balai, Asian Journal, 1981, p.11