Factory Management, Skill Formation and Attitudes of Women Workers in Thailand : A Comparison between an American Owned Electrical Factory and a Japanese Owned Electrical Factory

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ABSTRACT

The objective of the research is to make a comparative study of the effects on women workers. Two factories were selected for the study. The first is an American electronics, the second is a Japanese-Thai joint venture.

The study indicates that the production of consumer durables by Japanese multinational firms has created jobs mainly at the semi-qualified levels which are biased towards men. However, the entry of multinational firms, particularly electronic firms, has had far-reaching consequences for women in the labour force.

The findings of the study regarding the labour entry process revealed that the majority of the respondents had never been employed in any factories prior to the ones they were interviewed at. Those who had done so had worked for private employers. As for job seeking methods, most workers found their present jobs through information provided by relatives and friends who were usually already working with the company. When job satisfaction and expectations were examined, the workers were found to be fairly satisfied with their jobs.

The workers were quite clear that the companies wanted as much profits as possible by increasing the efficiency of work. Even with the increasing use of technology women workers were still limited to certain levels of the occupational hierarchy and for them there is little hope of learning useful skills.

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Introduction

In 1973, the world economy has been going into prolonged economic recession. While countries of the 'Core' are experiencing general decline in productivity, high unemployment, rising wage-levels and runaway inflation; the 'peripheral' Third world countries are facing serious deficit in the balance of payment, unmanageable foreign debts and deindustrialization. The world situation worsened with the outbreak of petrol crisis in the following years.

Analysis in terms of relationship of domination between the 'Core' and 'Periphery' is often evoked as an explanation to the process of deindustrialization in the Third-World. So much so that 'development' has often been confused with 'independence' of the country. And when we examine the performance of the economy: whereas the annual growth-rate by volume of OECD industrial production fell from 6.4 per cent before 1967 to 4.6 per cent and then to 1.6 per cent between 1973 and 1978, the rate in the 'developing' countries rose, without a break in 1973, from 5 per cent to an average of 7.1 per cent since 1967. The crisis seems to touch the centre much more sharply than the periphery as a whole. Such a long recession has made it unforseenable which characterized the industrial countries of the post-war years.

The recent years, much has been talked in the West about the "third technological revolution" about its force which might overturn the world and propell the industrialised nations out of its long durable economic recession. The economy of the West has been caught in the general decline of productivity for some time, mainly as a result of workers' resistance to the implementation of Scientific Work Organization. While the regime of intensive accumulation, baptized "Fordism" with its "monopolistic" forms of wage-regulation, thereby, ensuring that

final demand would keep pace with supply so as to ward off a crisis of overproduction as experienced in the 1930s, has, on the contrary, led to a general rise in wages and the price level. The lack of productivity vis-a-vis rising wage rate has resulted in a profit-squeeze. Technological revolution, thus, becomes a necessity of today.

Countries of the "Third-world" are also undergoing economic crisis. Although the manifestation of the crisis appears to be similar with the crumbling down of the financial system, the worsening deficit in the balance of payments, the accumulation of debts to international finance capital and the general decline in the rate of growth, but the cause of crisis is very different. It is a crisis of accumulation inherent in the economies of the South, the result of specific forms of articulation with the world economy. Three principal strategies of insertion into the world economy are practiced in the 'developing' countries: the import-substitution, the promotion of exportation and the substitution of exportation. Thus, the capitalist issue to the crisis in the Third-world does not necessarily imply social and technological mutations of a grand enverge as that of the North.

While it is true that a long time back in history, relationship between the core and periphery was founded on unequal exchange. And economic surplus was being siphoned off to the 'core' through the manipulation of price mechanism. At this time, the under-development could be characterized by the mono-exportation, by the absence of industrialization in the Third-world. But the post-colonial period, the evolution of the nations in the South presents a great diversity. Many have experienced a big push of industrialization in the early sixties. Some became the newly industrializing countries like South Korea and Taiwan, developing a more self-centred, diversified and locally-owned economy.

Modes of Industrialization in Thailand

Due to the weakness of local investors in Thailand, the State played a leading role in the early phase of industrialization. With the fall of the Phibul's

nationalist government, the new regime under Marshall Sarit oriented the State enterprises towards the construction of infrastructure such as roads, waterworks and electricity. Through the adoption of import-substitution policy (IS) in 1960, the State became closely associated with foreign capital in order to provide the condition for capitalist development in the country. The IS strategy of industrialization is a question of financing producer's goods imported from the West or and East with an agricultural surplus or mineral rent. Correlatedly, favourable measures were offerred to foreign firms with regarding to tax exemption on capital goods imported, repatriation of the profit, etc. At the same time, high import tariffs and quotas were set up against imports of luxury goods, thus compelling foreign investor to open up fabrication in the country. Goods that were previously imported for the consumption of the middle class were then produced on place. Car-assembly is a typical example of the IS industry. It was hope that such factories, which is highly protected, would provides employment through the forward and backward linkage. Through its tax policy, the State could push the factories to use more and more local contents. This would improve the balance of payment of the country, accelerate the transfer of technology and eventually permit the country to be doted with productive section of producer goods. And moreover, Thailand with a population in that decade totalling about 35 million and the birth rate of over 3% per annum, the choice of such economic policy seems justifiable in the eyes of the ruling class.

The change in the form of the State also made it possible to put in place institutional condition for a new intervention of the State in the labour market, characterized by an absolute control of the mobility of labour. Extension of the working hours, 10-12 hours, was sorted for. At the same time, the wage policy of the military government, based on the fixation of low price-rice, permitted a compression of the workers' salary. Trade-unions were banned, as a result, strikes and collective negotiation between workers and owners of the factory could no longer serve as a mechanism to secure the purchasing power. The compression of wage through politico-repressive measures, implying a reduction of the cost of production, becomes an important economic mechanism for capital accumulation.

Politic and economics, in this sense, becomes indissociable where the repression of the working class was done mainly through the compression of wages. Thus, during 1960-71, while the average rate of profit 25 leading industries was as high as 100% of the investment expended, the wage rate of unskilled workers was stabilised at 8-10 bahts a day for over a decade (1957-1973).

The compression of the workers'wage became a permanent instrument of the economic policy of the military regime. Consequently, the purchasing power of the workers not to speak of the peasants was at its lowest depth, the inflation was kept in check and the rate of profit was high. This policy touched the workers and their families especially those in the lowest income bracket. A "strategy of survival" adopted commonly by workers of the family into the labour-market. Increasingly, women were drawn into the industrial circle and many of them are absorbed into the textile industries which boomed up since 1970.

Two decades have passed, the IS strategy of capital accumulation has exhaused itself out. Infact, this model encounters numerous obstacles :-

a) the IS policy which was thought to lead to the reduction of foreign imports has, on the contrary, led to more importations. Although less quantity of luxury goods is imported than previously but the country becomes more and more dependent on the importation of intermediate and capital goods especially machinery and equipments. The result is degradation of the terms of trade between the raw products exported and the equipment goods imported. This contributes to the deficit in the balance of trade which becomes serious during the Third Five Years Plan (1971-76).

b) the limitation of local markets, due to increasingly unequal distribution of income, acts as a barrier to expanded industrial growth.

c) direct foreign investment poured into the country during the early phase of the IS policy but has slackened in later years, while loan capital has gained much in importance as a source of industrial financing.

But this policy left 2 durable traces :-

(1) a development of local capital through close association with the multinational corporations (MNC).

(2) a worker's movement which is more experience in industrialization. While the penetration of foreign capital into the Thai social formation has set in motion the rural-urban migration, it tends to make the labour market very segmented. Temporary and permanent workers exist along side, at the same time increasing number of women are drawn into the industrial circle especially the light industries and construction.

Many *"developing"* countries found IS an unsatisfactory method of industrialization due to the difficult in obtaining adequate economies of scale, and thus the intensification of work. Moreover, in face of the deterioration in the balance of payments these countries, with the recommendation of the World Bank, have turned to a more export-oriented strategy of development.

Promotion of export (PE) began in Thailand in the early seventies. Through its rice premium policy, the Government could encourage farmers to grow cash crops for exportation. And foreign exchange earned would be used to finance the imports of capital good. During this second phase, 1970-80, an orientation was given to the creation of industries for exportation, such as textile. And in the Fourth Five-Year-Plan (1977-1981), the government began to give importance to labour-intensive industries and particularly the agro-industry which could create more value-added to the products of agricultural sector. But on the whole, it was the agricultural sector which bore the burden of industrialization. Given that agricultural surplus was drained out while there was no equivalent in-flow of resources into this sector, agricultural productivity stagnates. This brings about the failure of agriculture to modernize itself which, in turn, in the long run, obstructs the process of industrialization in the country. For now, the only way to finance industrialization was through foreign borrowings.

Table A : Growth rate of the Thai economy

Rate of growth (%)	Economic Plans			
	I	II	III	IV
	8.1	7.8	7.1	7.1
1. Agriculture	6.3	4.5	5.6	3.5
1. Industry	11.2	11.4	11.1	8.7

Restructuring the Thai economy

One cannot deny that with the deepening of the IS strategy of development, a certain amount of industrial network was created, which could later serve as the base for exportation. The impact of industrialization during the two decades has transformed the structure of the Thai economy. The share of agricultural sector in the GNP declined from 40.0% in 1960 to 24.3% in 1981. While, the secondary sector which represented 13.1% in 1960 rose to 20.0% in 1981. The importance of industrial sector is also reflected in the domain of international trade. In 1960, the 6 major agricultural products exported consisted of rice, rubber, tin, cassava, teak and maize, representing about 80.1% of total value of exportation. But 25 years later, these 6 commodities have declined in importance, occupying about 42.7% of total value of commodities exported (1982). While commodities gaining importance in the exports are tin, sugar-cane, garments, textiles, integrated circuits, precious stones, canned food and pineapple.

Facing with the dilemma of obtaining sustained growth through foreign financing, the Thai government chose to intensify the export oriented process, but by encouraging the substitution of agricultural products by manufactured goods for export. This is known as the substitution of export (SE). However, this strategy

Table B : Part of Industrial Sector in the economy of Thailand in 1960, 1972 and 1979

		1972	1979
Population (million of persons)	27.1	38.6	46.1
Annual rate of growth	3.0	2.6	
Gross National Product per head (Bahts, current price)	2,056.0	4,057.0	12,067.0
Gross National Product (millions of Bahts, current price)	55,816.0	164,626.0	564,431.0
Gross National Product (millions of Bahts, 1972 price)	59,400.0[1/]	164,626.0	284,747.0
Annual rate of growth (%)		7.1	8.1
Rate of capital formation (% of GNP)	14.9	21.0	25.4
Value added of agricultural sector (% of GNP)	40.0	30.3	25.8
Value added of industrial sector (% of GNP)	13.1	17.0	20.4
Utilities, constrctions, services,etc. (% of GNP)	36.7	50.9	52.1
Importations in percentage of GNP	17.2	18.8	28.9
Importations of manufactured products in percentage of total of importations	74.6	74.2	66.1[2/]
Exportations in percentage of GNP	15.4	13.7	22.7
Exportations of manufactured products by SITC (% of exportations)	1.4	10.1	23.4
Exportations of manufactured products by I-0 code (% of exportations)	n.k	28.0	37.0
Employment in industry (% of total employment)	3.4	7.7	6.8[2/]
Share of industrial production in the Central Region	73.2	73.9	78.9
Share of industrial production at Bangkok	n.k	n.k	37.4

Note : [1/] in 1962 price
[2/] Given in 1978

Source : NESDB

will be viable if a through reform of the national economy is carried out. One of the reform recently proposed is to revive market mechanism which has been down-played by the past intervention of the State. It is viewed by these proponents that market is the most appropriate institution for the allocation and reallocation of resources, defined as scarce, in the most economical and rational way. Privatisation of the economy is being encouraged to do away with the bureaucratic and administrative ways of managing the economy.

The crisis of Fordism* in the early 1970 has created the tendency of a fractionment of industrial capital of the *'Core'* countries and to *'relocate'* certain segments of the fordist industries toward the basin where labour force is abundant and cheap, where the labour-movement is weak or absent and labour productivity is high. This internationalization coincides with the desire of certain Third-world government to modernize their productive and State apparatus through integration into the world economy in order to create the general requirement of capital accumulation in the country. Thus, in recent years, we witness the establishment of export processing zones (Free Trade Zones) in various *'development'* countries. There also occurs a rapidly increasing tendency for firms in developed countries to contract out to producers or subsidiaries of the MNC in the developing countries the manufacture of certain products or components, and the performance of certain processes. Final sales or assembly of the components at the final stage are in 'developed' countries. Electronic is an example.

Overall, the production of semi-conductors is both skill and capital-intensive, but one particular phase in production assembly is very intensive in its use of easily trained labour. Multinational corporations cans, thus, obtain by moving certain segments of production from a *'developed'* to a *'developing'* country an even greater fall in total (rather than labour) cost of production by some substitution of labour for capital, or put it in another way, greater profit.

A study of the U.S. Tariff Commission, published in 1970, found the greatest difference between labour productivity in the U.S. and overseas in the case of garment-making. For electronic assembly, foreign labour productivity was about 92% of the U.S. level. With regard to wage-level, in 1972, an hour's workship labour by an electrical worker would be costed at U.S. $ 0.80 per hour in Morocco

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* Fordism is a regime of intensive accumulation of capital based on the articulation of gain in productivity and rising wage rate.

as against U.S. $ 3.00 to U.S. $ 3.50 per hour in France[1] . Thus, a huge amount of profit is created on place (developing countries) and is siphoned off to the mother firm in form of charging high price for the inputs and fixed capital imported by the subsidiary, while buying the assembly-products of the subsidiary firms below the normal market price.

The electronic industries were set up in Thailand since 1974. Four out of five firms are American-owned with a 100% ownership, producing mainly integrated circuits. In recent years, high competition from the Japanese in this field has pushed many firms to introduce more capitalistic technology in order to maintain a greater share of the world market. Electronic industry is placed high on the BOI's list, i.e' given preferential treatment in the matter of foreign exchange regulations and produce repatriation. Such industry is viewed by the government as generating employment, increase skill formation of the workers but also technological transfer. The necessary inputs, about 98% are imported from outside or the mother firm while the products of the subsidiary firms are wholly exported, mostly to the mother firm. Export to the United States attained the highest value, totalling 3,401 million bahts in 1985.

Since the mid-sixties, the industrialized world has been caught with declining productivity and rising wage-rate. The crisis of 'Fordism' broke out in 1973, followed by the oil crisis the following year, sending the world economy into deep recession as comparable as the one known in the 1930. The crisis of intensive accumulation at the 'Centre' has led the multinational firms to practice the policy of 'segmentation-delocalisation', to relocate certain segment of the fordist industries to the 'Periphery' where labour force is abundant and cheap, where the labour movement is weak or absent and labour productivity is high.

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1) Michel Sharpston 'Internation sub-contracting' Oxford Economic Papers, March 1975, Vol. 27 Number1, pp. 101-106.

Table C : Total Value of Exportation of Integrated Circuits. (million bahts)

Year	1981	1982	1983	1984	1985
Total value of exportation	6,193	5,930	5,879	7,352	8,248

Source: Bank of Thailand

Objective of the research

With the advents of internationalisation of capital, it appears that sectors of the national economy of the 'developing' country such as Thailand largely exposed to the penetration of the multinational firms have correspondingly high rate of women's participation in industrial activities. The objective of our research is to make a comparative study of the effects of different strategies of integration into the world economy on the adaptability and participation of women in the process of industrialization. Special emphasis would be given to the analyse of the labour process and the acquisition of new skill in work.

Study site and sample selection

Two factories, located at the suburb of Bangkok, have been selected for the study. One is an American owned electronic factory, producing integrated circuit. It is a substitution of export industry (SE), the product of which is entirely exported wheras more than 90% of raw material are imported. The firm is 100% American ownership. Of about 2,000 workers employed in the factory, we were able to interview 151 women. At present, such type of investment is encouraged by the Thai government who is pursuing actively an export oriented policy of industrialization and the country's participation in the New International Economic Order (NIEO).

In contrast, a Japanese-Thai joint venture is chosen for comparison and we were able to interview 117 women. This factory produced consumer's durable goods, the products ranging from television sets to battery cells, sold mainly in the home-market. It is a typical import-substitution industry (IS), implanted in Thailand since the early sixties. Data collection was begun in October and completed in December 1985.

Methods of investigation

Two methods of collecting information on the women workers were employed:-

1) Interview of the workers were conducted with structured questionnaire.

2) Specific informations on the system of work, skill formation and adaptability of women workers were collected through interviews with groups of workers.

Chapter 2

The integration of women into the capitalist labour process: A comparison of an export-oriented industry and an import substitution industry.

Firm A, an American electronic factory is a subsidiary firm, producing integrated circuits (ICs) the products of which are wholly exported to the mother firm in U.S.A. The fabrication of ICs is labour - saving but also a very labour - intensive one. Due to the miniscule size of the component fabricated, some segment of the production process do not render themselves easily for mechanization. In this segment, women workers are employed in immense number. The objective of the firm is, thus, to search for the maximum efficacy of work executed by these workers. Such research passes through: (1) the implementation of Scientific Work Organization, based on the principle of Taylorism; and (2) the politics of recruitement of workers.

2.i System of work: the Taylorism

At the heart of Scientific Work Organization is laylorism. Taylorism is based on a strict division of labour between those who command and those who execute the work. The objective is to assemble all the conditions necessary for the creation of a continual flow of information which the command could be erected and declenched. For establishing such flow, a division of labour has to be implemented at the directive level as well as the standardization of work.

Normally, there are 4 laws of rationalization of work:-

(i) division of labour or specialization of individual.
(ii) transfer of skill or specialization of machines.
(iii) specialization of products.
(iv) division of effort.

And a corollary, the law of linear progression of work, where the work advances in continual line without go-and-return, is the most economical.

The technical superiority of dividing tasks as finely as possible would permit a great increase in the quantity of work done owing to 3 different circumstances: first, to the increase of dexterity, secondly, to the saving of time which is commonly lost in passing from one species of work to another, and lastly, to the introduction of machines which facilitate and abridge labour, and enable one man to do the work of many. But the social function of specialization of work is to discipline and control the manner in which work is performed as to guarantee the dominant position of capital in the labour process.

The system of work at Firm A is organised on the above concept just mentioned. The production of integrated cricuit is divided largely into 8 stages:-

1. Visual, where die (ICs) are cut, separated and place on the carrier. Defect die are selected out.
2. Die attach, die is attached to frame
3. Lead bond, circuits between die and frame are connected through bonding.

2.ii The policies of recruitement

Workers at Firm A are grouped into 2 categories: the daily-wage workers and the monthly paid employees. Daily-wage workers are those who receive payment according to the working days. They can be further divided into 4 sub-categories:-

- direct producers
- line-leaders
- foreman

Direct producers are the majority of workers, organised to work in chained production along the line. About 64% of the workers interviewed at the American

electronic factory aged between 19-24 years old, the majority of them were single (76.2%). About half of the female workers had completed secondary school, and about 64.2% of them came from the Central Region. Most of these workers have no prior experience working for a salary. There is a tendency for the firm to employ these freshly, single, educated girls but unable to find employment in the province to work in the first-five sections of the production process, the work of which is one of assembly. Thus, attempts to contain labour were already put in place even before the workers join the production line. Certain types of workers are taken in : criteria for age, sex, marital status, origin, height and education in the choice of applicants.

The motivations of Firm A in employing relatively young female workers are due to the following reasons:-

a. the nature of the labour process and the post work : they are repetitive, monotonous and do not require any physical effort. The components which the workers work on are miniscule, they require small but skillful hands and dexterity.

b. the productivity of female labour force : women work better than men in this kind of post because they work quicker, they are patient and attentive. The quickness and dynamism have as a corollary the youthfulness of workers. And being unmarried, they could be subjected to a very particular condition of work, such as the night shift. Also, the firm do not have to bother about the reproduction-aspect of these workers or the need to regulate the contradiction between production and reproduction activities of women working outdoor through the provision of health and maternal care.

c. the cost of female labour power : cheap. According to Scott's survey in 1985, the average hourly wages in semi-conductor industry in Thailand is the second lowest among the countries of South - East Asia.

Table D : Wages in Semiconductor Assembly 1985

Country	Wage (US $)	Firms	Workers employ
Hong Kong	1.33	5	3,749
Indonesia	.35	1	1,800
Malaysia	.84	6	11,776
Philippines	.63	8	11,021
Singapore	1.58	6	4,263
South Korea	1.19	3	13,073
Taiwan	1.36	7	3,196
Thailand	.43	3	868

(Source: Allen J. Scott, "The Semiconductor Industry in South-East Asia : Organization Location and the International Division of Labor," 1985, Department of Geography, UCLA, Los Angeles, CA, 90024).

d. the nature of the product and investment : the strategy of the multinational corporation (MNC) to practise the policy of segmentation-delocalisation of the production line, producing product which is highly competitive in the international market has made the stabilisation of workers not its primary aim. The company, however, search for a fast turn-over of capital through the intensive use of abundant female labour force at cheap price, and quick profit. It is an offshore plant with no linkage to the internal economy of the country.

e. the abundant supply of young, female workers ; since the 1960's, the population growth rate of Thailand was more than 3%, this has an impact on the population structure which is young. The size of the labour force will 27.7 million in 1986. And the second period of women's integration into the industrial process began with the implantation of export oriented industries, especially the electronics.

Between 1979 female employment grew at an annual rate of 4.6 percent, a higher rate than the 3.9 percent male employment growth rate.[1]

On the contrary, at Firm B, a Japanese Thai joint-venture producing consumer's durable goods for domestic market, the policy of stabilization of the workers is searched for. Of the 1,317 workers employed in 1985, about 60% are women. Women working in this company are generally less educated. About 80% of them have at least 7 years of education, compared to 49% at the American electronic firm. The majority of women here are older, about 60% of them aged between 25 to 34 years, where as at the American electronic firm, 64.2% of them aged between 25 to 34 years, where as at the American electronic firm, 64.2% of the women are below 25 years old. With regard to their marital status, 49.5% of the women worker at the Japanese electrical factory are married compared to 22.5% , at the American electronic factory. And when we inquired about their place of origin, 79.5% of the workers in the Japanese factory said that they came from the Central Region, of which one-third were from Bangkok. In the American electronic factory, the percentage of women from Bangkok is much lesser, 12.6%. The Japanese firm also tends to hire more experience workers, i.e. about 40% of the workers interviewed had past working experience, mostly as wage-workers.

From these statistics, it reveals that Japanese investment tends to be more durable. This is certainly due to the nature of the products manufactured and the finality of the products. As domestic market for consumer's durable goods in Thailand is quite secured in the hands of the Japanese, for the stability of production, the policy of the firm is, thus, to search for the maximum stabilisation of the work force for the production of surplus. Thus, right from the beginning, workers are assured of a *"guaranteed"* employment.

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1 Sumalee Pitayanon, "Labour markets, labour flows, and structural change in Thailand", Paper prepared for the ASEAN-Australia Joint Research Project on Labour Market Behaviour, 1985.

2.iii Quantity and quality control : The production of surplus.

(a) Quantity Control

The fabrication of integrated circuits is mainly the assembly of components, where young female workers are employed along the line and subjected to a system of chained production.

During its first phase of implantation in the country in the mid-seventies, a salary of 27 bahts per day, 2 bahts higher than the minimum wage, was offerred to attract workers to the plant site. At that time, workers had to work long hours, 9 hours a day, the welfare was negligence and the environment of work was unpleasant due to the small space of the building. After testing the profitability of production of ICs, the firm began its second phase of implantation in 1979 by moving some departments to the new plant on a 40-rai (16 acres) piece of land. In the same year, trade union came into existence, and since that time onwards, the reduction of working hours, the demand of wage increase and welfare of the workers became main issues of the struggle.

At present, workers work 8 hours a day and 6 days a week, with 90 minutes breaks in between. Production workers in this IC industry appear to be highly paid. Over 61% of the workers interviewed received monthly income between 3,000-4,000 bahts, excludes bonuses or living allowances (Table 6).

As one member of the trade union said, "the demand for wage increase has become less important issue of the struggle of the workers, while condition of work and welfare of the workers have primed above". With the disappearance of favourable condition of abundant labour at nil price, the mechanization of production, thus, becomes indispensable. It was in 1981-82 that new machines, the so-called "technological transfer", were introduced successively into the factory. For the American electronic firm, modern machines were, thus,

introduced well after women were employed on the production line and not vice-versa as expounded by certain theorists.*

Since 1982, capital intensity at the U.S.-owned factory, is gradually increasing. Today, the production of IC is not especially labour-intensive, but one employing a capital-intensive technology. This fact is also revealing the study of Scott. Measuring the capital intensity of the textile and printed circuit board industries in Los Angeles, Scott contends, "By these standards, U.S. owned assembly plants in South-East Asia today are not especially labor-intensive even though they do employ large but diminishing numbers of workers."

Automatic machine is introduced in the forward section of the production line, especially the bonding operation. In the old system, the workers had to do all the bonding himself which is time consuming. Now, the bonding is done automatically by machine in seconds, all the workers have to do is to key in the program and press the buttons. The introduction of new machines have made it possible for one worker to control 3-4 machines at the same time, while facilitating the institution of work rotation in 3 shifts.

At the end of the month, Industrial Engineers (I.E.) are sent down to conduct "Time and Motion Studies" on a sampled workers in order to determine the appropriate time of the gest used to accomplish certain task. A standard time is arrived at and the rhythm of the machine is adjusted correspondingly. Industrial Engineers are also encouraged to make innovation, to design appropriate placement of the imported machine as to reduce the unnecessary stage of production and increase its functionality in the Thai environment.

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* The theory which asserts that the introduction of machinism has rendered the task less difficult, more simple and which does not require physical strength so as to facilitate the employment of women.

Furthermore, the firm sorts to accelerate the cadence of workers by introducing "norm breakers" on the production line. These "norm breakers" work faster than the average worker and do not take repose even during the rest time. Monetary prizes are usually awarded to these "outstanding" workers every quarter of a years, but they are usually isolated from the rest of the workers.

Automation and the implementation of work rotation in 3 shifts play a determinant role in the intensification of work. Now, machines could be made to function through 24 hours, the period of amortization of capital is, thus, greatly shorten. While high rotation of capital implies the acceleration of the cadence of workers, as workers have to adjust their pace of work to the rhythm of the machine. As a result, "the method of slow-down" said a worker at Firm A, "becomes less and less practical, while absenteeism is kept in check by the wage and bonus policy of the company." Thus, at this stage, there is a real subsumption of labour to capital.

With automation, workers said that the speed of work in the factory has increased by about 10 times. This might not be too much an exaggeration when we examine the production statistics. During the first year of operation (1974), with around 1,900 employees, the firm produced only 60 million ICs. Two years later, they received permission for a production increase of up to 200 million pieces of ICs a years. For 1986, the company's production target is about 500 million pieces. Presently, it employs 2,100 persons.

At Firm B, a Japanes electrical factory, given the delicacy of work, most of the women are assigned to work in the television section. They work along the assembly line which leaves them little room to move about as compared to the male workers, who usually control the machine or do manual work. There are altogether 10 sections, each one of them specialises in the production of a product ranging from televisions, radios, tuners, electrical fans, plastic parts, battery cells and containers.

Although the workers are subjected to longer hours of work, i.e. from 8 a.m. to 17 p.m, each worker has to contribute 450 minutes to effective production, the pace of work at the Japanese electrical factory which is local market oriented is, however relatively less intense than at Firm A. An explanation to this is a fact workers are mostly employed in one-shift. As production depends much on the capacity of absorption of the local market, excess capacity is a problem. And the firm tries to resolve this externally, i.e. through the exportation of certain products. The limitation of local market, thus, acts as a barrier to the intensification of work but also to the process of renewal of machines. Rotation of capital and labour is, thus, slower than at the American electronics factory.

At Firm B, production target plays a determinant role in increasing the quantity produced. This reflects that the technology used is less sophisticated. In such case, the work pace in the factory is standardized in unit of products produced per hour worked. Every month, time studies would be conducted, in which an average ideal time of production is arrived at. This is translated into production norms, which are subjected to constant revision. Such a practice often creates contradiction among the workers. From our survey at Firm B, about half of the women interviewed said that they had conflicts with their collegues compared to 24.5% at Firm A. Most of these conflicts occured during production, some of which were; difference of opinion about work, unfair distribution of tasks and lack of co-ordination in work among workers (Table 11).

(b) The Quality control

When the products leave the assembly section, they are subjected to testing operation. The American electronics firm under our study does both assembly and testing operation, which include the QC. As integrated circuits are products used for commercial (e.g. radio, television, computer, etc.) and military (satellite, airplane, rocket, etc.) purposes, quality control is thus an essential stage in production. Quality control is performed by workers, promoted from the rank of workers with outstanding performance and many years of work experience.

Although the work is not hard, but it is a tedious one. Their work consists of taking sample of the products from each lot, and to check for conformity with the specification before discharging them to another section. The post of Q.C is one of high responsibility, it requires vigilance and constant presence of workers while at work. Thus, women of relatively older age and married are usually employed in this post.

To improve the quality of the products, workers in each section of production are encouraged to form a 'Quality Control Circle' (QCC.) Through discussion, workers have to collectively search their own weakness, the cause of the delays in production in their section but also how to increase efficiency and reduce the unnecessary stage of their works. A worker said : "the Q.C.C. as implemented in this factory has but one sole objective, i.e., the increase in the quantity of work and the reduction in the cost of the enterprise. All benefit goes to the owner of the factory, while we get none." This system is uncomparable to the one existing in Japan where active participation of workers in group discussion is sorted for, not only in the matter of solving production problems but also the workers' welfare and benefits"

At the Japanese electrical factory, workers, are also encouraged to form a group of about 10 persons along the same line production. Again, group discussion is oriented one-sided towards the detection of problems that arise during production, increase quantity and quality of product and the reduction of cost.

2.iv The role of line-leaders and supervisors in production

At American as well as Japanese factories, line-leaders are mostly women. Being women, line-leaders often inspire confidence among women workers. They listen to all problems of the workers, personal as well as those relating to work. Line-leaders are usually promoted from the rank of ordinary worker on the basis of their outstanding, past performance. With many years of long working experience, line leaders know the worker's attitude and aspiration. They know very well how

to deal with the contradiction among workers which arises during production, to dislodge bottlenecks on the production line and to distribute work among the workers so that the work flows smoothly. The main responsibilities of line-leader are to check on the performance of workers, to assist the supervisors or foreman in recording the job-card and also to assist the management in organising the 'Quality Control Circle'.

The immediate superior of line-leaders are supervisor or foreman. Foremen are usually men (Table 13). Their duty is to collect statistics, keep daily record on the workers' performance and specify problems which arise out of production in detail whether they are due to the break-down of machine of the absence of workers from the post. And at the end of the year, the foreman will evaluate each worker according to the performance all year round. Workers are evaluated according to 7 or 8 indices, some of which were the quantity and quality of work done, attendance, discipline, human relation, etc. Bonus plays a complementary role to wage. The distribution of bonus is linked to worker's attendance through-out the year. It is one of the mean to combat absenteism.

2.v The discrimination of sex

The attraction of one's job lies in the possibility of advancement which is offerred and which will permit workers to acquire more responsibility by passing from the post of daily wage-earners to the post of employee of the enterprise. This ascending mobility which is normal for men becomes exceptional for women.

At the American electronics factory, foremen or supervisors are mostly male while at the Japanese, the distribution of sex occupying this post is much more equitable. However, in both firms, the workers complained that given the same number of years worked and experience, women have less opportunity of advancement in career than men. "this may be because there are far fewer male workers than women in the factory, so whatever they do is always considered

outstanding. There are fewer competition between men was the reason given by a worker. However, the post of management is almost closed to women workers.

The situation of equal work but unequal pay is the cause of discouragement among women workers and has become an issue of conflict between workers and the management. At present, many workers at the Firm A have been pursuing further studies in opened-universities. To promote internal mobility of women workers within the company, the Trade Union has been active in demanding that the management should upgrade women-workers to the post of employee by changing its policy of recruitement, i.e., new employees should be recruited among the rank of ordinary workers who possess the necessary qualification.

The blockage of advancement of women's workers, thus, results in the under-evaluation of their work and qualification. Although the Thai constitution recognises the right of men and women to equal pay for equal work. But, in practice, this formal equality has not been respected. The lack of State reglementations in the worker's world especially on the employment of female and child labour reveals the nature of the State not only capitalist but sexist too. The State ignores the inequalities of sex in the same manner as it obscures class inequality. The State is a form of social relation of production, articulating for its reproduction the relation of class domination and the domination of sex.[1]

2.vi Skill formation

From our survey, it appears that Firm A puts more emphasis on training than at Firm B, the Japanese. This is because the majority of the workers at Firm A are young, in-experience and have to work side by side with modern machine but also the process of learning is not the same. The training is conducted by a special bureau by the specialists. The content of the training gives emphasis on machine

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1 Helena Hiragta, "Division sexuelle du travail et role de 1' Etat : 1' exemple bresilien" Gitique de 1' economic politique, No.11, Oct. - Dec 1981.

operation as well as the definition of technical words. The duration of the training in different sections of the production varies greatly. The shortest being less than a day and the longest about 2-3 months. The training is held 2 times a year. When asked whether they have gained any new experience which might be useful if they have to work in another company, most of the women workers interviewed (96%) replied positively (Table 18). Among the new experience cited by the workers were : knowledge about the technique of production, some technical words, system of work and factory life (Table 16)

However, from our indepth interview with the workers, it seems that workers, especially the assembly line workers cannot hope to gain much skill in their work. One of the main reason is that the mobility upward of women workers is blocked. Another reason is that the labour process installed through the implantation of multinational firms in electronics, the so-called "technological transfer", contains a pre-set program in advance, which already fixed the limit and the characteristic of women's integration into the productive apparatus.

All machines are prepared and standard norm of production is set in advance by the Industrial Engineer (I..E.), the workers are exteriorised from direct participation in the conception of production, and loose control of the labour process. At the American electronics firm certain types of workers are recruited. These young, educated girls but finding no employment, uprooted from their origin, join the production line as assembly workers. Being made to specialize in one task of production, professional formation is thus in-utile. The disqualification of the post that they help, signifies thus a considerable reduction of cost for the firm, while it entails for the workers a monotonous and repetitive work with no responsibility. The scope of the training especially the assembly workers is very narrow. It concerns a particular movement of hands and body to accomplish certain task.

Our opinion is that women workers cannot gain much in the matter of skill formation, firstly, because the workers have no access to the whole conception of

the production process, their knowledge on the activity of the firm is very fragmented ; secondly, the repetitiveness of work excludes any initiative on the part of the workers with regarding to innovation ; and lastly, the nature of such type of investment has made the firm to overlook the problem of upgrading the skill of workers. For example, last year, a large number of workers were asked to quit their job, called "voluntary lay-off", on the reason of economic recession. Several "voluntary lay-off" workers were re-employed by the firm this year, although receiving the same salary as before but they lost the seniority of years worked which is an important factor in the promotion. The pre-occupation of the firm in cost reduction, thus, acts as an obstacle to increase the skill of workers, while the workers themselves are not motivated to seek for new skill as they deem their job but a temporary one and the work along the production line out enriching, producing but one product.

However, to be optimistic, one can say for certain that workers at the American electronics factory have gained other invaluable experience when they came to work in this company. Some of these experiences were : the factory life, the group participation in problems solving and the knowledge on modern system of work. From these experiences, these workers came to recognise their strength as collective workers, as a pre-requisition for the operation of modern machines. Al these factors, together with their high level of educational attainment, play an important role in raising the consciousness of the workers and to collectively organised.

As the Japanese investment is more permanent due to the nature of industry, the policy of stabilisation has obliged the firm to try to upgrade the skill of women workers as to raise their productivity. Firstly, security in the working environment is provided for, where workers are assured of the stability of employment. Secondly, all workers are kept informed about the firm's financial situation, about the production and sales of the products. This is to make them concerned with the company as if it was their own home. Thirdly, in recent years, less unskilled

workers are recruited. And lastly, training plays an important role in the skill formation.

Training at the Japanese electrical factory intervenes in 2 sequences, i.e. when the workers first join the company and when there is a change in products. The nature of the training is one of apprentice-ship, where practical knowledge is passed from the foreman to production workers (Table 14). For example, when the model of a product changed, foreman or line leaders would be selected for training in Japan, at least for 2 months. The training puts emphasis on the content of work : the method of production, the set-up of A.C.C., safety appliances, discipline of work, etc. It is the responsibility of the foreman or leaders to pass on their new experience to workers through on job training. First, a group of workers would be selected for experimentation in the new products. For each task, the I.E. conduct "Time and Motion Studies" where the average work time is arrived. The quality control is performed. When it is thought to be the ideal system of work, the trained workers have the duty to transmit this experience to another. Thus, training with demonstration together in large group is not practiced. When such a system of work become a common knowledge and workers become skill in their job, the company would then conduct the chronometre every month to determine the ideal production time and set the production target for the workers.

2.vii Adaptation to work

Although 90% of the women workers interviewed at Firm A said that they were satisfied with their present jobs, 15.2% of them felt that their job is too tiring as compared to 28.2% at Firm B (Table 19). When the work is too tired, workers at Firm A said that they would resort to a "slow-down" whenever possible while workers at Firm B said they would move about, e.g. going to the toilet more often (Table 20).

When asked about adaptation to the job, women workers at the American electronic factory appears to have more problem than women at the Japanese

electrical factory 29.1% of workers at firm A said that they have much problem of adaptation to the job as compared to 5.1% at Firm B. The reason may be because most women workers at the American electronic factory are of rural origin. Being familiar with the countryside where life is more relax and where they could plan their work flexibly with no time constraint, many workers find it hard to adapt themselves to this new rhythm of work which requires continual presence inside the factory with fixed working hours and under close surveillance of the foreman.

Job rotation is sometime implemented by the company as to provide workers with a little comfort in an otherwise boring working environment. But surprisingly, 60.9% of the workers interviewed at Firm A do not prefer such practice as compared to 29.1% for workers at the Japanese electrical factory (Table 24). The reason given was because they did not consider such mobility especially on the assembly line as that enriching. Moreover, the production is but on product,i.e. ICs, workers are, thus, not motivated to seek new skill. From our indepth interview, a worker said, "in higher post, the works are more specialized and they do not prefer to undergo another training ; while in the lower post, the condition of work is more harsh and workers are at risk of being exposed to chemical substance or lead.

At the Japanese electrical factory, workers seemed to have lesser problem of adaptation to the working environment as many of them are from Bangkok or the suburb, they are already used to the city-life and some had already some experience working in another factory. Although the workers complained about repetitiveness of work but they did not deem it as that hard. Workers preferred to have job rotation (to work in other sections producing other products), as a mean of enriching the post and acquiring new skill (Table 24). One of the skill most cited by many was the capacity of reparation of electrical appliances, radios for example. The workers also said that this knowledge also help them in their daily life when it comes to the matter of buying electrical appliances.

Chapter 3
The process of labour entry

It is generally acknowledged that the labour force in the urban economic sector of developing countries is mainly composed of female workers who have migrated to large metropolitan areas either temporarily or permanently (Fawcett et al. 1982; Pryor 1977; Smith 1977; Dungca 1980; Eviota and Smith 1984.) Thailand, as a case in this point, is no exception to this demographic phenomena. Since many young female rural labours have taken this option and became employed in various types of economic activities. Among those activities industrialising sectors have become more popular within the last two decades with young female labourers enjoying factory work in the Bangkok Metropolis more than domestic involvement or participation in other service sectors. Still, differences exist in terms of the skills and labour entry possibilities among these who were successful in job seeking. From survey results and research evidence revealed in other studies, the network of job searching either for the female migrants or their local counterparts depended entirely on having relatives or friends working in such sectors apart from the women's work experiences and education (NSO 1983; Chamratrithirong et al. 1979). This part of the report will discuss the process of labour entry for female workers who joined in industrialising sector. This examination will take a closer look at 3 main points of interpretation, namely brief working histories and the nature of their occupations, job seeking methods, and job satisfaction and expectations, respectively.

3.i Brief working histories and the nature of their occupation:

Since the majority of the respondents are from the Central Region (Bangkok and Samutprakarn) especially Firm B (IS) recruited workers from Samutprakarn where the factory is located. Only a few of the respondents stated that their place of residence was different from Bangkok and Samutprakarn.

Presumably, the geographic location of the factory is one main reason for finding that the study's respondents were employed in Firm A (SE) and Firm B (IS) when they first came into the labour force. Table 27 shows that of the total respondents, 72.8 per cent stated that they had never been employed in any factories before the present time. When the nature of previous employment was addressed to those respondents who had worked elsewhere, the data indicates that the majority had been working in the private sector as shop assistants, or in commercial activities. Working in the textile industry exhibited the second highest rate while the workers from the agricultural sector comprised the lowest rate. If the respondents who stated their place of origin as being outside of Bangkok Metropolis and Samutprakarn, most were employed in the industrialising process rather than in the agricultural sector as expected. This could be explained by the nature of the questions asked, i.e., they were asked to identify as least 3 jobs they possessed in the past years. Only 9 respondents had possessed two jobs and 3 individuals had stated 3 jobs. The place of previous employment and job duration as well as the reasons of quitting the job were also asked of the respondents. Interestingly, working for the private employers in Bangkok Metropolis and Samutprakarn was their responses.

Reasons for switching to the new job were mentioned, and 3 main reasons were identified : very low wages, job contact terminated, and no security for employment. Concerning the duration of years worked, the workers had worked for a very short period as per their last job; less than a year comprised of the majority of the respondents.

3.ii Job seeking methods :

In order to seek a job in the big city, generally job seekers needed certain networks to assist them in obtaining employment. Skills or work experiences were not always advantageous criteria for admission into urban labour force. Source of information in some conditions played and important role in job seeking. Among those who were acquainted with relatives or friends who had been working or used

to work at a certain job, i.e., in the industrialising industries, might have a better information about job as compared to those who did not know anyone.

Findings from this present study firmly supported this argument. Table 28 shows that respondents generally found their present job through information provided by relatives and friends. This source of job information was outstanding for both Firm A (SE) and Firm B (IS), and recruitment by the company was often done through personal relations. Since workers usually have either friends or relatives already working with the company. Such a practice would guarantee the company's access to an almost inexhaustible supply of young and educated labourers.

3.iii Job satisfaction and their expectations :

One half of the total sample have been working in both two factories for more than 5 years. This might indicate that they are satisfied with their job and, of course, the wages. This assumption was supported by results from group interviews. The workers discussed that they were quite satisfied with the overall working conditions, and wages. They thought it was quite fair for those who have not had a high level of education. Their work does not require a high skill level, eventhough it is quite labour intensive and they must work alongside modern machines. Although over 90 per cent of the workers interviewed said that they were satisfied with their job, many of them complained that their work is boring and monotonous. Some of them found it hard to adapt themselves to the new rhythm of work, which requires their continual presence inside the factory with fixed working hours and under close surveillance of the job leaders. Job rotation however is instituted by the company to provide workers with a little comfort in an other wise monotonous working condition. When asked about looking for another job, workers did not think that they wanted to change employment in a near future. If they have to make an occupational choice, they prefer self- employment as their first priority. However, to work with a big company like Firm B (IS) satisfied them on a more or less basis. Compared with those workers of Firm A (SE) the

workers were frank and ready to face the situation of "turn over" at any time and under any conditions. They mentioned that the company compensated them whenever their employment ceased.

Chapter 4
Family arrangement and family survival strategies

This discussion on the interpretations of family arrangement and strategies for survival will center on differences between unmarried employees and the wives of employed. Consequently, three types of "adaptation" will be synthesized to explore the process of family arrangement and family survival strategies among female workers who were involved in the industrialising sector. These include adaptation to residence ; adaptation to household expenditures and lastly adaptation to the work environment and life-style.

4.i Adaptation to residence :

Workers of Firm A (SE) usually live in a group of two or three persons in a rented room. Workers in this company seem to have of a problem in adapting to the new living environment as compared to the workers at Firm B (IS) where workers are more stable. Most workers in the latter company are local residents and live in their own homes nearby the factory. Some of them have been working for quite a long time and can afford to own their own houses. Some of them still live with their parents. The workers of Firm A (SE), having migrated from provinces in the North and the Northeast, generally rent rooms and share them with their co-workers. Some of them live in private houses nearby the company and share the rent. These sorts of residence although less comfortable are convenient for commuting between their residence and the company (Table 30).

The workers of Firm A (SE) are mostly single and young and have experienced a similarity in environment and adjustment in terms of the location of residence. As already described in this report, young female workers live in apartments or flats not too far from the company. People who live in other flats or apartments also work for the private companies. Some know each other and join group activities and some do not. During their days-off, they leaves for their homes in other provinces.

4.ii Adaptation to household expenditures

The single employed;

Being single, the workers who fall into this category exhibited different patterns of family arrangement and family survival strategies as compared to their married employed counterparts. Most single employed are found at Firm A (SE) where their working hours are organized on a 3 shift bases. They work 8 hours a day, 6 days a week, and are paid extra if they work for more than one shift. They therefore can earn more money if they work double shifts, contrary to the one shift basis as performed at Firm B (IS). Overtime working is organized and depends on local market demands. Workers can earn approximately 3,000 baht a month as their mean income. With a mean income of less than 3,500 bahts, further observations examined how the workers manage their household budget of daily expenditures.

Questions about the amount of monthly savings, household expenditures, expenditures for leisure were asked, and the data showed that almost 75 per cent of the respondents could save at least 500 bahts a month for their savings. The amount of savings ranged form 500 to 3,000. However, the majority of the workers normally saved between 500 bahts to 1,000 bahts a month. (Table 33).

Moreover, the single employed were asked to identity the amount of remittance they sent to their families. The single employed remitted from 444.40 bahts and 670.31 bahts per months for the workers of Firm B (IS) and Firm A (SE) respectively.

Among the single employed, they were asked to describe the economic situation of their family about the number of income earners within the family, outstanding debts and the person who is responsible for the family's welfare. Among them, 140 respondents from the total 183 singles stated that they requlary must send a portion of their salary to their parents, and the amount of remittance

varied from 500 bahts a month to 2,000 bahts or more. Of 23 respondents, they sometimes sent money, but not requlary. Also one half of the single respondents stated that their parents still bear economic burden for their families. Only 17 per cent of the single respondents claimed that they were the income earners for their family (Table 31).

Further analysis has been attempted to examine the pattern of budget arrangement for household expenditures without splitting the respondents by marital status. The mean value of expenditures showing the household expenditures are presented in Table 35. To be more precise, the figures are tabulated by factories. Overall, workers of Firm A (SE) appear to spend more on their expenses. This presumably can be explained by the fact that they are single and younger, they are more independent and less bound to familial responsibilities. Data in Table 32 revealed some differences between the workers of these two factories. Workers at Firm A (SE) obviously spent more money on the expenses for clothing and entertainment, with the mean expenditures per month for clothing and leisure being as high as 639.06 and 707.12 respectively as compared to their counterparts at Firm B (IS) paying 477.65 and 260.20 for those same expenditures. Especially, the entertainment expenses of Firm A's workers are almost three times greater than the Firm B's workers. Such differences are partially accounted for because most of the workers are young migrants who live together and join as well as share similar lifestyles. In looking at other expenditures, there are few difference among the workers. As relevant examples, workers generally spend less than 50 baht per day for food and this same amount of money was spent for personal expenditure.

As the mean income of the workers stands at 3365.3 and 3403.1 baht per month excluding bonuses and overtime payments, it is interesting to investigate how much they could save from this amount. Even though the workers must face a severely high standard of living in Bangkok Metropolis, findings from our observation revealed that only 23.6 per cent of the total respondents found themselves without monthly savings while 42.5 per cent stated that they could save

Furthermore, information about their satisfaction in choosing this occupation was elicited in this study in order to investigate the attitude of female workers towards the most suitable and desirable professions in which they wish to participate.

The occupations in which the workers mainly wanted to participate were very diversified. As a result, 5 occupational categories are presented in table 37. The most desirable occupation was being employed in private companies. This includes sale workers or office staff. Interestingly, some of the workers preferred working in factories outside of Thailand (11.2 percent of the total). For those who opted for self- employed and government service held an even proportion of the total respondents.

Conclusion

If the implantation of Japanese multinational firms in the industries of consumer's durable goods such as the one we have studied, has created, at production level, semiqualified and qualified posts but bias towards masculine, the entry of multinational firms but of American origin in the industries of products in series such as electronics has a consequence more diverse on the female employment.

In the latter, which is an export-oriented industry, the intensity of work and its repetitiveness required in the production of integrated circuit, imply the presence of fresh, young and single girls with much enthusiastic to work, but also highly discipline and obedient. These workers are subjected to a double work load, i.e. the intensification of work but also the extension of the workday. Such a working condition has led to a "premature used-up" of the labour power. As a worker said, "in such a case, an alternative left to worker is to lay-off himself because of deterioration in health or get married and find another job". Thus, as a result of high turn-over of labour, the policy of recruitement of the company plays a vital role. Recruitment is often done through personal relations, as can be seen by the

fact that many workers came to work here because they have friends or relatives already working with the company. Such practice would guarantee the company with and inexhaustible supply of young educated and docile rural labour force.

Significantly, another two main issues were analysed in completion of the study; process of labour entry and family arrangement and family survival strategies. A closer look at three main points of interpretation of process of labour entry were taken over. Those included brief working histories and the nature of their occupations; job seeking methods and lastly job satisfaction and expectations In conclusion, the findings revealed that 72.8 percent of the total respondents had never been employed in any factories before the present time. Among those who had worked elsewhere had been working in the private employment. Concerning with job seeking methods, the workers found their present job through information provided by relatives and friends who usually already working with the company. When job satisfaction and expectations were examined in order to obtain feedback. The workers were more or less satisfied with their job. The only difference among the workers at Firm A and Firm B was stability of employment. Workers at Firm A had less stability of employment. This was due to the company's policies in reducing capital if its products were disturbed by world consumption. In a choice of occupation most workers preferred self-employment in spite of being employed as private employees.

The discussion on strategies for familial survival was shown in various aspects i.e., an arrangement of expenditures, an adaptation to residence and general daily environment as well as an adaptation to work environment and lifestyle. The date showed that the adaptation to household expenditures seemed to be the biggest burden the workers were struggling for. Especially, the workers at Firm A seemed to have more a problem of adaptation to their environment and lifestyle. They spent more on clothing and entertainment as compared with their counterparts at Firm B. Rationally enough to remark that workers under an americanized oriented environment easily absorbed and were influenced more or less by "the modernized

lifestyle" within three components of avant garde namely; to be the best; to be so different and to be more modernized.

Bibliography

Aglielta, M.A. 1979 *Theory of Capitalist Regulation.* London : New Left Book

Bedford, R.D. and Mamak, A.F. 1976 *Bougainvilleans in urban wage employment : aspects of migrants flows and adaptive strategies.* Oceania 46 pp. 169-87.

Braverman, H. 1975 *Travail et capitalisme monopoliste : la degradation du travail en xxe siecle.* Paris : Maspero.

Coriat, B. 1979 *L'Atelier et la chronometre.* Paris : Christian Bourgeois.

Epstein, S. 1982. A Social anthropological approach to women's role and status in developing coutries : the domestic cycle. *In women's roles and population trends in the third world* R. Anker (ed.). London.

Eviota and Smith. 1984 The migration of women in the phillipines. pp. 165-190 in *Women in Cities of Asia, Migration and Urban Adaptation.* J.T. Fawcett et al (eds). Boulder, Colorado : Westview Press.

Hiragta, H. 1981 *Division sexuelle du travail et role de l'Etat : l' example bresilien* Critique de l' economic politique No. 11

Odhnoff, J. et al 1983 *Industrialization and the labour process in Thailand : the Bangkok area.*

Pitayanon, S. 1985 *Labour market, Labour flows and structural change in Thailand.* ASEAN-Australia Joint Research Project on Labour Market Behaviour.

Salama, P. and Tissier, P. 1982 *L'industrialisation dans le sous-development.* Paris : Maspero.

Scott, A.J. 1985 The semiconductor industry in South-East Asia : Organization location and the international division of labour Department of Geography UCLA, Los Angeles.

Sharpston, M. 1975 International sub-contracting Oxford Economic Papers Vol. 27 No.1 pp. 101-6.

Tissier, P. 1981 Conditions de travail et zones franches d' exportation dans quelques pays d' Asie, Critique de l' economic politique N.14.

Annex A

Table 1 : Distribution of age by factory

Age	Firm A (SE)		Firm B (IS)	
	Number	Percent	Number	Percent
19 - 24	97	64.2	34	29.1
25 - 29	49	32.5	50	42.7
30 - 34	5	3.3	23	19.7
35 - 39	-	-	8	6.8
40 - 45	-	-	2	1.7
Total	151	100.0	117	100.0

Table 2 : Marital Status

Marital Status	Firm A (SE)		Firm B (IS)	
	Number	Percent	Number	Percent
Single	115	76.2	53	45.3
Married	34	22.5	58	49.6
Widow	-	-	3	2.6
Divorce	2	1.3	3	2.6
Total:	151	100.0	117	100.0

Table 3 : Educational Status

Education	Firm A (SE)		Firm B (IS)	
	Number	Percent	Number	Percent
No education	-	-	-	-
Primary School	74	49.0	49	80.3
Secondary School	72	47.7	21	17.9
University, but drop-out	4	2.6	2	1.8
University level	1	0.7	-	-
Total	151	100.0	117	100.0

Table 4 : Place of origin of the workers

Origin	Firm A (SE)		Firm B (IS)	
	Number	Percent	Number	Percent
Central region	97	64.2	93	79.5
- Bangkok	(19)	(12.6)	(38)	(32.5)
Northern region	21	13.9	12	10.3
North-eastern region	27	17.9	6	5.1
Southern region	6	3.9	6	5.1
Total	151	100.0	117	100.0

Table 5 : Past working experience

Past working experience	Firm A (SE) Number	Percent	Firm B (IS) Number	Percent
No	126	83.4	69	58.9
Yes :	25	16.6	48	41.1
- agriculture (peasants)	(3)	(12.0)	(1)	(2.1)
- textile workers	(5)	(20.0)	(17)	(35.4)
- employees in department stores	(5)	(20.0)	(24)	(50.0)
- employees in public enterprise	(3)	(12.0)	(1)	(2.1)
- traders	(8)	(32.0)	-	-
- teacher	(1)	(4.0)	(4)	(8.3)
- others	-		(1)	(2.1)
Total	151	100.0	117	100.0

Table 6 : Worker's salary (baht)

Salary	Firm A (SE)		Firm B (IS)	
	Number	Percent	Number	Percent
> 2,000	3	2.0	2	1.7
2,000 -3,000	18	11.0	16	13.7
3,001 - 4,000	93	61.6	57	48.7
4,001 - 5,000	32	21.2	37	31.6
5,001-6,000	3	2.0	5	4.3
6,001-8,000	2	1.3	-	-
Total	151	100.0	117	100.0
Mean	3365.3		3403.1	

Table 7 : Duration of years worked

Duration	Firm A (SE)		Firm B (IS)	
	Number	Percent	Number	Percent
less than 1 year	1	0.7	3	2.5
less than 5 years	48	31.8	1	0.9
Five years	26	17.2	54	46.2
More than 5 years	76	50.3	58	49.5
Do not know	-	-	1	0.9
Total	151	100.0	117	100.0

Table 8 : Production target assigned to achieve each day

Marital Status	Firm A (SE)		Firm B (IS)	
	Number	Percent	Number	Percent
Yes	70	46.4	96	82.1
No	80	53.0	21	17.9
Do not know	1	0.7	-	
Total	151	100.0	117	100.0

Table 9 : Need of production target revision

	Firm A (SE)		Firm B (IS)	
	Number	Percent	Number	Percent
Yes	60	85.7	88	91.7
No	10	14.3	7	7.3
Do not know	2	-	1	1.0
Total	70	100.0	96	100.0

Table 10 : Attitude toward the production target assigned to accomplish

Attitude	Firm A (SE) Number	Percent	Firm B (IS) Number	Percent
Too hard to accomplish	14	20.0	12	12.5
Just all right	24	34.3	62	64.4
Not too hard	29	41.4	19	19.8
No answer	3	4.3	3	3.1
Total	70	100.0	96	100.0

Table 11 : Conflict with colleague while working

Conflict	Firm A (SE) Number	Percent	Firm B (IS) Number	Percent
No	37	37.0	57	50.0
Yes	73	73.0	57	50.0
- difference of opinion in work	(20)	(54.1)	23	(40.4)
- fight for equipments	(2)	(5.4)	-	-
- work too fast,no quality	(3)	(8.1)	1	(1.8)
- unequal work	(4)	(10.8)	13	(22.8)
- no coordination in work	(3)	(8.1)	10	(17.5)
- personal reason	(4)	(10.8)	7	(12.3)
- no answer	(1)	(2.7)	3	(5.3)
Total	110	100.0	114	100.0

N.B. Exclude n.a. = 41, cases (Firm A), and 3 cases (Firm B)

Table 12 : Composition of workers in working section

	Firm A (SE)		Firm B (IS)	
	Number	Percent	Number	Percent
Majority are men	2	1.3	15	12.8
Majority are women	38	25.2	89	76.1
Same proportion	-	-	6	5.1
Only women	111	73.5	7	6.0
Total	151	100.0	117	100.0

Table 13 : Gender of the superior

Gender	Firm A (SE)		Firm B (IS)	
	Number	Percent	Number	Percent
Women	32	21.2	53	45.3
Men	95	62.9	61	52.1
Both women and men	24	15.9	3	2.6
Total	151	100.0	117	100.0

Table 14 : Person who offered training

	Firm A (SE)		Firm B (IS)	
	Number	Percent	Number	Percent
Older worker	38	25.2	24	20.5
Supervisor	25	16.6	82	70.1
Trainer	64	42.4	1	0.9
Self-trained	5	3.1	5	4.3
Other	1	0.7	-	-
No answer	18	11.9	5	4.3
Total	151	100.0	117	100.0

Table 15 : Availability of training at the factory

	Firm A (SE)		Firm B (IS)	
	Number	Percent	Number	Percent
Yes	144	95.4	72	61.5
No	7	4.6	40	34.2
Do not know	-	-	5	4.3
Total	151	100.0	117	100.0

Table 16 : Attitude toward the most important content of the training

	Firm A (SE)		Firm B (IS)	
	Number	Percent	Number	Percent
Usage of machines	94	65.3	30	41.7
Quality of work	36	25.0	22	30.6
New ideas	10	6.9	2	2.8
Worker safety	-	-	2	2.8
Rules and regulations	-	-	1	1.4
Others	1	0.7	-	-
No answer	3	2.1	15	20.8
Total	144	100.0	72	100.0

Table 17 : Attitude toward skill formation gained from the factory

	Firm A (SE)		Firm B (IS)	
	Number	Percent	Number	Percent
No	3	2.0	4	3.4
Yes	147	98.0	113	96.6
- method of production	(50)	(34.0)	(42)	(37.2)
- know about machine	(11)	(7.5)	(6)	(5.3)
- technical words	(42)	(28.6)	(2)	(1.8)
- repair electrical appliances	(-)	(-)	(14)	(12.3)
- system of work & factory life	(43)	(29.3)	(32)	(28.3)
- others	(-)	(-)	(5)	(4.4)
- No answer	(1)	(0.1)	(1)	(0.9)
- Do not know	(-)	(-)	(11)	(9.7)
Total	151	100.0	117	100.0

Table 18 : Attitude toward work experience and its usefulness

	Firm A (SE)		Firm B (IS)	
	Number	Percent	Number	Percent
Yes	145	96.0	73	62.4
No	2	1.3	10	8.6
Not sure	4	2.6	32	27.4
Do not know	-	-	2	1.6
Total	151	100.0	117	100.0

Table 19 : Attitude toward being tired of work

Attitude	Firm A (SE)		Firm B (IS)	
	Number	Percent	Number	Percent
Very tired	23	15.2	33	28.2
A little tired	91	60.3	73	62.4
So and so	13	9.3	5	4.3
No tired	23	14.6	2	1.7
No answer	1	0.7	4	3.4
Total	151	100.0	117	100.0

Table 20 : Method of getting rid off being tired

	Firm A (SE)		Firm B (IS)	
	Number	Percent	Number	Percent
Stop working	67	58.8	16	15.1
Continue working	15	13.2	21	19.9
Move about	31	27.2	69	65.1
No answer	1	0.8	-	-
Total	114	100.0	106	100.0

Table 21 : Attitude toward work repetition

	Firm A (SE)		Firm B (IS)	
	Number	Percent	Number	Percent
Yes	98	64.9	72	61.5
No	34	22.5	21	17.9
So and, so	19	12.6	23	19.7
No answer	-	-	1	0.9
Total	151	100.0	117	100.0

Table 22 : Problem with adaptation to work

	Firm A (SE)		Firm B (IS)	
	Number	Percent	Number	Percent
Very much	44	29.1	6	5.1
Little	10	6.6	13	11.1
Sometimes	46	30.5	40	34.2
No problem with adaptation	47	31.1	57	48.7
No answer	4	2.6	1	0.9
Total	151	100.0	117	100.0

Table 23 : Availability of a job rotation

	Firm A (SE)		Firm B (IS)	
	Number	Percent	Number	Percent
Available	141	93.4	108	92.3
Unavailable	10	6.6	7	6.0
Do not know	-	-	2	1.7
Total	151	100.0	117	100.0

Table 24 : Satisfaction with having job rotation

	Firm A (SE)		Firm B (IS)	
	Number	Percent	Number	Percent
Unsatisfied	92	60.0	34	29.1
Satisfied	58	38.4	83	70.9
No answer	1	0.7	-	-
Total	151	100.0	117	100.0

Table 25 : Reason for satisfaction with work adaptation

Reason	Firm A (SE) Number	Percent
Can do better work	13	14.1
More familiar with the work	62	67.4
No involvement with other section	2	2.2
No need for re-training	13	14.1
Others	2	2.2
Total	92	100.0

Table 26 : Reason for problems with work adaptation

	Firm B (IS) Number	Percent
Want to know other work	19	22.9
Want to have more experience	15	18.1
Not repetitive	39	46.9
Higher post	-	-
No responsibility	1	1.2
Can replace other worker	4	4.8
Other	1	1.2
No answer	4	4.8
Total	83	100.0

Table 27 : Previous occupation carried out by the workers

Occupations	Total		Firm A (SE)		Firm B (IS)	
Never worked elsewhere	195	(72.8)	126	(83.4)	64	(59.0)
Farmers	4	5.6	3	12.5	1	2.1
Textile workers	22	30.6	5	20.8	17	35.4
Private employees	29	40.3	5	20.8	24	50.0
Govt./non Govt. employees	8	11.0	3	12.5	5	10.4
Self-employed	9	12.5	8	33.4	1	2.1
Total	72	100.0	24	100.0	48	100.0

Table 28 : Source of information for job seeking by factory

Occupations information	Total		*Firm A (SE)		Firm B (IS)	
Company's advertisement	97	36.3	25	16.7	72	61.5
Relatives/friends	168	62.9	125	83.3	43	36.8
Others	2	0.8	-	-	2	1.7
Total	267	100.0	150	100.0	117	100.0

* 1 case failed to answer

Table 29 : Years worked for current job by factory

Years worked	Total		*Firm A (SE)		Firm B (IS)	
Less than a year	4	1.5	1	0.7	3	2.6
1-4 years	49	18.4	48	31.8	1	0.9
5 years	80	30.0	26	17.2	54	46.5
over 5 years	134	50.1	76	50.3	58	50.0
Total	267	100.0	116	100.0	151	100.0

*1 case failed to answer

Table 30 : Types of current residence

Types of residence	Number	Percent
Rented or shared rooms	150	47.3
Live with relatives	33	10.4
Own houses	131	41.3
Others	3	0.9
Total	317	99.9

1 failed to answer

Table 31 : Selected characteristics of the single employed for family arrangement measures

Person who entirely is responsible for household expenditures

	Number	Percent
Parents	88	49.4
Self	31	17.4
Everybody who earns income	59	33.2
Total*	178	100.0

*4 failed to answer

Number of wage earns in the family

	Number	Percent
1	40	22.0
2	57	31.3
3	49	26.9
3+	24	13.2
None	12	6.6
Total	182	100.0

Number of those who send remittance for the family

Yes	140	76.5
No	20	10.9
Sometimes	23	12.6
Total	183	100.0

Amount of remittance sent back home (baht) per month

<500	11	7.1
500-1000	100	64.9
1001-2000	35	22.7
2000+	8	5.3
Total	153	100.0

Table 32 : Selected mean expenditures per individuals (baht)

Mean expenditures	Firm A (SE)	Firm B (IS)
Food matters (per day)	45.45	41.82
Clothing (per month)	639.06	477.65
Entertainment (per month)	707.12	260.20
Transportation (per day)*	*-	15.12
** Remittance (per month)	670.31	444.40
Savings (per month)	706.55	640.77
Personal expenditures (per day)	45.97	48.58

Notes: * Transportation is provided
** Single employed only

Table 33 : Percentage distribution monthly savings (baht)

Amount of money	Total		Firm A (SE)		Firm B (IS)	
	Number	Percent	Number	Percent	Number	Percent
<500	39	13.9	26	17.2	13	11.1
500-1000	119	42.5	71	47.0	48	41.0
1001-2000	31	11.1	17	11.3	14	12.0
2001-3000	17	6.1	5	3.4	5	4.3
3000+	6	2.1	1	0.6	-	-
None	66	23.6	31	20.5	35	29.9
No answer	2	0.7	-	-	2	1.7
Total	280	100.0	151	100.0	117	100.0

Table 34 : Expenditure which might be mitigated

Expenditures	Number	Percent
Food matters (1)	98	53.0
Households expenditures (2)	41	22.1
Unnecessary expenditures (3)	46	24.9
*Total	185	100.0

(1) For daily consumption
(2) clothing, gas, electricity, water, etc.
(3) leisure, social obligations,
* excluded those who stated that they could not save any. (66 cases).

Table 35 : Household income management by expenditures which the wives' income mostly go for

Expenditures	Number	Percent
Food matters	62	48.8
Household expenditures	33	26.0
Financial matters	18	14.2
Matters pertaining to children	8	6.3
Other financial matters	6	4.7
*Total	127	100.0

* excluded the singles

Notes : Household expenditures (rent for accommodation, clothing household assets)
Financial matters (loans, investment, savings)
Other financial matters (self-expenditures)

Table 36 : Selected conditions of life adjustment

Conditions	Firm A (SE)		Firm B (IS)	
	Have	Don't have	Have	Don't have
Unfamiliar with job specification	68.9	31.1	51.3	48.7
Self- adjustment to to the work system	66.2	33.8	49.6	50.4
Adaptation to residence	54.3	45.7	29.9	70.1
Adaptation to job mates	34.3	65.7	39.3	60.7
Adaptation to expenditures	59.6	40.4	57.3	42.7
Adaptation to rules and work disciplines	55.6	44.4	51.3	48.7

Table 37 : Preference of enterprises

Types of enterprises	Number	Percentage
Private employees	62	23.1
Factories abroad	30	11.2
Government service	36	13.4
Self-employed	35	13.1
Services	32	11.9
Others*	73	27.3
Total	268	100.0

Note : * Within this category there are more than ten jobs chosen by the respondents and the number of cases are too small to be grouped separately.