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ARAB WOMEN IN THE MANUFACTURING INDUSTRIES

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Preface

The Women and Development Unit of the Economic and Social Commission for Western Asia (ESCWA) attaches particular importance to the participation of Arab women in the activities of all economic sectors including the industrial sector, and to promoting their participation in production with a view to increasing their integration in the development process. With financial support from the United Nations Development Fund for Women (UNIFEM), the ESCWA Social Development Division (Women and Development Unit) and the Industry Division cooperated in undertaking an in-depth and comprehensive study on the participation of women in the industrial sector. A series of studies on women's participation in traditional processing industries such as textiles and food-processing and in modern industries such as pharmaceuticals and electronics were carried out. These studies were based on field surveys and case-studies of selected countries in the ESCWA region, namely Egypt, Iraq, Jordan, the Syrian Arab Republic and Yemen.¹

This project was designed in response to international and regional resolutions and legislation. On the international level, the Lima Declaration and Plan of Action on Industrial Development and Cooperation stresses the importance of integrating women fully in economic and social activities, and in particular in the industrialization process. The International Development Strategy for the Third United Nations Development Decade also stresses the importance of ensuring women's effective and productive participation. Moreover, in its resolution 40/105 of 13 December 1985 on incorporation of the interests of women in the work programmes of the regional commissions, the General Assembly invited the executive secretaries of the five regional commissions to propose measures to incorporate women's concerns in their overall work programmes.

On the regional level, both the Regional Plan of Action for the Integration of Women in Development in Western Asia and the Strategy for the Development of Arab Women in Western Asia to the Year 2000 stress the need to make effective utilization, within the cultural framework of society, of all available resources including women, who constitute half of the human resources and whose potential has not yet been utilized in the development process.

International and regional legislation provides member countries with guidelines for creating a new concept and reformulating their national policies with a view to encouraging women to participate fully in the labour market. The said legislation calls for the adoption of policies which provide equal opportunity for women in education, training and work, as well as in recruitment and promotion to decision-making levels,

¹ The United Nations Development Fund for Women (UNIFEM) financed the studies on women's contribution in the textile and food-processing industries as well as in the pharmaceutical industry.

and encourages them to participate fully in the various areas of work, especially the non-traditional ones. This legislation also stresses the importance of using new and innovative methods of incorporating indicators on women's situation as inputs and variables in development models.

ESCWA initiated implementation of this project in 1989 in two phases: in the first phase (1989-1991), a field survey of women's participation in the food-processing and pharmaceutical industries was implemented in five selected countries of Western Asia endowed with a relatively diversified industrial base, namely Egypt, Iraq, Jordan, the Syrian Arab Republic and Yemen. In the second phase (1992-1993), three studies were carried out on the situation of women in the pharmaceutical and electronics industries² in Egypt, Jordan and the Syrian Arab Republic, where women's participation in these two industries is relatively high in comparison with other industries in the countries of the region.

The long-term objective of the project is to develop these industries by improving the skills of their human resources and creating conditions favourable to production, in addition to encouraging women to participate effectively and fully in the industrial sector. The immediate objective of the project is to determine the areas in which women's participation is effective and significant and the areas in which it is below the average and where radical measures have to be taken. The project also aims at assessing the skills and determining the training requirements for increasing women's participation in the industrial sector.

The short-term objective of the field surveys was to increase awareness of the productive activities of women in the industrial sector by shedding light on the demographic and economic characteristics of working women in comparison with men, in terms of scientific level, job and training opportunities and the nature of their work in that sector. The importance of these surveys is obvious as women's work is usually restricted to specific areas which do not require skilled labour and also in view of women's underrepresentation in administrative posts and high positions.

The country studies which were prepared on women's participation in the textile and food-processing industries, as well as in the pharmaceutical and electronics industries, have provided the main material for the preparation of a regional overview of the demographic, social and economic characteristics of women's participation in industry in Western Asia.

I should like to seize this opportunity to thank the United Nations Development Fund For Women for supporting the activities of ESCWA on women and development.

² The ESCWA Industry Division prepared the three country studies on the electronics industry.

I should also like to take this opportunity to express my deep appreciation for the efforts made by experts, professionals and consultants. In this respect, I should like to thank especially Malak Zaalouk, Suhair Lotfy, and Shahida al-Baz for providing consultancy services to the Arab Center for Development and Future Research in Egypt. I should also like to express my gratitude to Ahed Badaoui, Salwa al-Solh and Nihad Hanbali from the Syrian Arab Republic, Nour al-Dajani and Nouha Sweis from Jordan, Fathiya al-Manqosh from Yemen, and Amal Shlash and Widad Yousouf from Iraq for their valuable contribution in carrying out field surveys for the country studies, analysing preliminary data, and throwing light on the objective factors that restrain the development of women's economic and social role in the Arab countries.

Sabah Bakjaji
Executive Secretary

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I. DEMOGRAPHIC, SOCIAL AND ECONOMIC CHARACTERISTICS OF WOMEN WORKING IN INDUSTRY IN WESTERN ASIA

When women engage in productive work, they do so within the framework of a society that has economic, social, political and cultural structures. These structures dynamically influence all human beings in the society regardless of sex. It is therefore impossible to study the status and characteristics of women working in a certain field of activity without a knowledge of the general context of this particular field. Hence, in order to define the overall characteristics of women's work in industry, one should look into the characteristics of the industry itself, the prevailing modes of production, the development strategy in general, and the level of supply and demand for women's participation in industry in particular.

The transformation of the Arab world which began in the early 1970s has taken on a character of its own. The region increased its oil wealth with the high prices of oil after the 1973 war. The oil boom resulted in qualitative transformations in the economic, social and political fields all over the Arab world in both oil and non-oil countries. The soaring rise in oil prices became a sort of regulator of development in the whole Arab region. Part of the huge oil profits were transferred to non-oil Arab countries through remittances from their emigrant labour force and capital investment. The Arab countries were, therefore, divided into two groups as a result of the oil boom: one exporting capital and the other exporting labour. However, the heavy dependence of the Arab oil-producing countries on oil and other extracting industries for their investment, and the dependence of non-oil countries on services and remittances for their income led to a lack of equilibrium in the structure of the modes of production in these countries. Investments in such productive sectors as agriculture and industry showed a steady decrease. By contrast, there was an increase in imported goods notwithstanding the establishment of some large-scale modern industries based on technology imported from abroad. In 1987, for instance, oil and extracting industries in the Arab countries accounted for about 19 per cent of gross national product (GNP), while services accounted for 13.8 per cent, agriculture about 12 per cent, and manufacturing industries 9.4 per cent. Most of the new investments in manufacturing industries were capital-intensive, thus leading to a decrease in demand for labour in industry in general and for women workers in particular. This in turn limited the number of new opportunities for the growing number of migrating Arab workers, thus increasing unemployment to an unprecedented level. The Egyptian census of 1986 showed an increase in unemployment, which rose to 14 per cent: the unemployment rate for males was 10 per cent, while the rate for females was 40 per cent.

Such development policies have resulted in the relative weakness of industry in most of the Arab countries, perpetuating the concentration of the workforce, especially

women workers, in the agricultural and services sectors. Women are particularly vulnerable, as they are the most technically unskilled part of the working population.

A. ECONOMIC CHARACTERISTICS OF ARAB
WOMEN IN INDUSTRY

Although Arab women have been working in various industries since the beginning of industrialization, and currently number more than 1 million workers, they still make up a smaller proportion of the workforce than men, as is shown in table 1.

It can be noted from this table, which covers only the 1980s, that in most Arab countries the percentage of women workers in industry was lower than the percentage of men workers. The percentages of women workers were highest in Tunisia (26.4 per cent), Morocco (23.6 per cent), Lebanon (17.5 per cent) and Egypt (13 per cent) and lowest in some Arab oil-producing countries such as Kuwait (1.5 per cent), Qatar (about 0.5 per cent) and the United Arab Emirates (about 1.5 per cent). These low averages could be attributed to the insignificant share of industry in income generation in the oil-rich countries. However, these low averages are also noticeable in countries considered to be more advanced industrially, such as Algeria (where the share of women workers in industry is 3.8 per cent of the total), Iraq (5.7 per cent) and the Syrian Arab Republic (5.5 per cent).

It should be noted that the low average of women's participation in economic activities which were recorded in the national censuses do not accurately represent the actual rate of participation. These quantitative indicators are mostly a social product reflecting to a great extent the prevailing levels of social awareness, together with class as well as gender bias. Furthermore, in most cases, the lack of expertise necessary to carry out statistical surveys made for less accurate information.

Another element that decreases the percentage of females in the workforce, as shown in the statistics on the subject, is the narrow definition of economic activity which tends to limit such activity to permanent paid jobs. This definition excludes a number of traditional female jobs such as seasonal and part-time work, as well as other work undertaken in urban areas by women in their homes, including dressmaking, traditional handicrafts or embroidery. However, the definition was altered in Egypt in 1983. Until 1982, a woman was regarded as economically active only if she worked a minimum of 15 hours per week at home on an unpaid basis. That stipulation has since been removed, thereby allowing for a greater number of persons working at home to be considered economically active, and has consequently affected the workforce averages.

All the above factors have contributed to some extent to the low level of Arab women's participation in industry. However, the main reason for this situation must be attributed to current development policies as well as the scant amount of investment being directed to the industrial sector.

The industrial sector includes oil and gas, mines and quarries, manufacturing, and electricity and water as well as construction.

The average of women's participation in industry varies with the level of development of the industrial structure in the countries concerned. In table 1 this average is high in the more highly industrialized countries such as Algeria, Egypt and Tunisia; it is at medium level in the less industrially developed countries, such as Jordan, and reaches its lowest level in the oil-exporting countries.

The same table also shows that the highest averages of female participation in industry, compared with the total number of women who are economically active, are in Tunisia (43 per cent), Morocco (34 per cent), Lebanon (20 per cent) and Egypt (19 per cent). These percentages can be considered relatively high even when the base of female industrial activity is rather limited. This situation led some writers to add another indicator, namely the share of women working in industry compared with the total number of men working in the same branch. Thus the percentage of females in Arab industries becomes 36 per cent in Tunisia, 31 per cent in Morocco, 21 per cent in Lebanon and 15 per cent in Egypt. These are considered relatively high.

With regard to sector distribution of labour within industry, female workers are concentrated in the manufacturing industries. In Egypt female workers in manufacturing constituted 87.4 per cent of the total number of female workers: the percentage in Jordan was 88.7 per cent; it was 87.1 per cent in the Syrian Arab Republic and 93 per cent in Morocco. The averages decreased in Bahrain and Kuwait because a number of females took only administrative jobs in oil, gas, mines and quarries: therefore the percentages in these two countries were 53.3 per cent for Kuwait and 47.9 per cent for Bahrain (table 3). The average percentage of female workers compared with men in manufacturing reflects the feminization of this sector: the percentages of women in this sector have reached 125 per cent in Tunisia, 56.7 per cent in Morocco, 31.5 per cent in Lebanon, 14.3 per cent in Jordan, 19.7 per cent in the Sudan, 18 per cent in Egypt and 13 per cent in Iraq, while the percentage for the rest of the Arab countries ranged from 2 per cent to 8 per cent (table 2).

As for the mines and quarries sector, the percentage of female workers as compared with men reached its highest in Lebanon (28 per cent), followed by Egypt (19 per cent). In the sector of electricity, gas and water, Egypt was on top with 23 per

cent, followed by Yemen (14 per cent); in the construction sector the percentage was only 4 per cent in Egypt and is still considered the highest among all Arab countries.

Out of the concentration of women workers in the manufacturing industries, there is a high percentage of women in certain branches of these industries. Most of the female workers are employed in the textile, garment and leather industries. In Egypt the percentage in these branches was 58 per cent of the female workers in manufacturing industries and 50 per cent of the females working in industry in general. The respective percentages in other Arab countries were: 70 per cent and 62 per cent in Jordan; 74 per cent and 63 per cent in the Syrian Arab Republic; in Morocco the percentage in the second category was 85 per cent of all women workers in urban areas.

The rest of the women working in the manufacturing industries are distributed among chemical, mineral and foodstuff industries, with variations in the order of percentages from one country to another (table 3). One can deduce from the above that most women who work in industry are concentrated in activities requiring traditional female skills or a great deal of accuracy and patience, which are attributes found more in women than in men.

With regard to the distribution of female workers in industry according to profession, the highest percentage is in wearing apparel: 40 per cent in Bahrain, 43 per cent in Egypt, 67 per cent in Jordan, 48 per cent in the Syrian Arab Republic, 80 per cent in Kuwait and 57 per cent in the United Arab Emirates. There is a considerable number of women workers who fall into "non-defined professions," reaching 36 per cent and 32 per cent of the total number of women workers in industry as a whole in Egypt and the Syrian Arab Republic respectively.

In respect of female production supervisors, their percentage reached its lowest in all countries except in Bahrain, where it was 32 per cent of all women working in industry (this may be due to the fact that educated women are employed in the oil sector), while it was 2 per cent in Egypt, 0.04 per cent in Jordan, 0.8 per cent in the Syrian Arab Republic, nil in Kuwait and 14 per cent in the United Arab Emirates (table 4).

With regard to categories of women workers in industry according to sectors (public, private, cooperative, organized, non-organized) there is a shortage of information in the available data, which makes the data somewhat misleading, together with a certain prejudice in favour of the public sector in general. The lack of accurate statistics makes it difficult, if not impossible, to present an overall picture of women's position and their characteristics in the industrial sector, all the more so because the

majority of female workers engaged in industry in the Arab countries are working in the private, informal sector which includes dressmaking, foodstuffs and crafts. In addition, there are many obstacles facing working women, not least among which is the discrimination against women in the private sector, where employers can easily evade the provisions of the labour laws. Most women working in this sector are unmarried, divorced or widowed, and are usually engaged in low-paid jobs requiring little qualification. Women are subject to exploitation in the private sector in general and can rarely occupy high-level positions. There are other gaps in the statistics concerning females in their capacity as businesswomen. However, one may assume that women have difficulty in obtaining bank loans, and their insufficient scientific and/or professional qualifications disqualify them from the administrative and marketing professions.

Opportunities for work in the industrial sector are further limited by the fact that employers usually refrain from employing women because of the added costs arising from maternity leaves and other benefits. One of the provisions for employing married women is for the employer to provide a nursery whenever the number of married women workers exceeds 100 in any one establishment (in Egypt) or whenever the percentage of married women reaches 30 per cent (in the Syrian Arab Republic). Statistics covering all these aspects of women's employment are all the more necessary for the development policies in the Arab world which are being directed more and more towards an open-door policy and privatization. A sound statistical base is also important for devising policies for the protection of women's rights and the enhancement of their economic participation in industry.

Although available data showed no difference in the number of working hours per week between the males and females engaged in industry, they registered a noticeable discrepancy in wages between the two categories for jobs in manufacturing industries, mining, quarries, transportation and communication in Egypt and Jordan which extended over several years. The average wage for a woman in all sectors other than agriculture was 75 per cent of a man's wage in Egypt and 85 per cent in Jordan. As for manufacturing industries, the average was 74 per cent in Egypt and 63 per cent in Jordan. There are no data concerning wages in the mining, quarries, and transportation sectors except for Egypt, where the average wage for a woman was 72 per cent of a man's wage in the mines and quarries sector and 80 per cent in the transportation and communication sector. The low level of women's wages is attributed to variations in the kind of work they are engaged in, as men are employed in all job levels while women occupy only low-level jobs.

**B. SOCIAL AND DEMOGRAPHIC CHARACTERISTICS OF
ARAB WOMEN IN INDUSTRY**

Available data on this subject are incomplete and, with the exception of a few countries, do not cover information about the educational and marital status of women engaged in economic activities. However, an attempt will be made to shed some light on the characteristics of Arab women in industry, even if only partially, based on the information in table 5.

Table 5 indicates that most women usually go to work before getting married while they are still relatively young. Many of them continue in their jobs well after marriage. The percentage of unmarried women engaged in economic activities in Egypt was 42.9 per cent, which is almost the same as the percentage of the married women; the percentage of unmarried women engaged in economic activities was higher than married women in other countries such as Jordan (64.5 per cent) and the Syrian Arab Republic (57.1 per cent). The percentage difference between married and unmarried women is much lower in the oil-producing countries, probably because married women in these countries can afford to hire someone else to take care of the house, which makes it possible for them to keep their jobs.

If the number of unmarried women is added to the number of divorced and widowed women, all of whom are independent, it can be seen that their percentages in relation to married women are higher in all countries. In Egypt it is 55.1 per cent, in Jordan 69.9 per cent, in the Syrian Arab Republic 64.1 per cent, in Bahrain 55.4 per cent, in the United Arab Emirates 51.8 per cent and in Kuwait 34.8 per cent. This means that the more women rely upon themselves in life, the more they prefer to work.

In respect of the state of education, owing to the high level of illiteracy of Arab women over the age of 15, those working in industry have either a low level of education or none at all. This applies to female workers in traditional industries such as textiles and food-processing, while those working in modern manufacturing industries, such as pharmaceuticals and electrical industries, have higher qualifications. It may be of interest to refer here to a study carried out in Egypt on women's economic participation. The study noted that one condition which had recently been introduced was that women applicants must hold at least a preparatory school certificate to be eligible for jobs. This in itself would deprive the majority of uneducated women of the opportunity to work in industry. The study concluded that the decrease in the number of women working in industry was not due to their unwillingness to work but rather to the strict application of the above condition as far as women applicants were concerned. One can assume that it will be a long time

before the low level of education will be redressed in most industries unless special attention is paid to the question of eradicating women's illiteracy by opening up classes in factories where they work to teach them, and making attendance in such classes a condition for their continuation in their jobs. This question should also be linked to raising the standard of vocational and technological training of female workers with a view to improving women's skills, which are considered not adequate compared with those of male workers in the Arab industries.

Finally, the average age of women working in industry is somewhere between 20 and 39 years. A great number of these women start work before getting married and resign either immediately before or after giving birth. Many of them remain on the job, but, unlike men, they do not usually continue to work until retirement age. The male age group is extended much longer, up to retirement, since, according to prevailing values, males are still considered to be culturally as well as practically responsible for sustaining the family. The sharing of women in this responsibility is still regarded by society as the exception rather than the rule.

TABLE 1. ARAB WOMEN'S SHARE IN THE INDUSTRIAL SECTOR AND THE PERCENTAGE OF FEMALES COMPARED WITH MALES

<i>Country</i>	<i>Year</i>	<i>Percentage of males in industry</i>	<i>Number of women in industry</i>	<i>Percentage of women in industry compared with total number</i>	<i>Percentage of women in industry compared with women workers</i>	<i>Percentage of females compared with active males</i>
Egypt	1986	21.7	332 946	13	19	15
Iraq	1986	26.8	57 692	5.7	7	6
Jordan	1986	30.7	4 677	3.8	8	5
Syrian Arab Republic	1986	32.5	41 433	5.5	13	6
Yemen	1986	14	8 918	4.6	5	5
Sudan	1973	7.8	23 245	9.6	3	11
Lebanon	1986	26.5	30 444	17.5	20	21
Bahrain	1986	24.7	826	4.9	5	5
Kuwait	1985	34.7	2 893	1.5	2	2
Tunisia	1984	32.6	186 780	26.4	43	36
Morocco	1982	25	343 798	23.6	34	31
Algeria	1985	34.2	4 800	3.8	15	4
Qatar	1986	31	32	0.56	2	0.6
United Arab Emirates	1986	7	88	1.56	3	2

Sources: ILO Yearbook of Labour Statistics; ESCWA Demographic and Related Socio-economic Data Sheets; and Europa Yearbook.

ARAB WOMEN IN THE MANUFACTURING INDUSTRIES

TABLE 2. PARTICIPATION OF WOMEN IN ECONOMIC
ACTIVITY: MANUFACTURING INDUSTRIES

<i>Country</i>	<i>Year</i>	<i>Total number of workers</i>	<i>Number of males</i>	<i>Number of females</i>	<i>Percentage of feminization</i>	<i>Percentage of females</i>
Egypt	1986	1 872 426	1 585 251	287 175	18.1	16
Iraq	1986	386 809	342 129	44 680	13	6
Jordan	1986	31 438	27 495	3 943	14.3	7
Yemen Arab Republic	1986	48 474	--	--	--	--
Syrian Arab Republic	1986	330 223	316 694	13 529	4.3	4
Saudi Arabia	1986	301 699	--	--	--	--
West Bank and Gaza	1986	--	--	--	--	--
People's Democratic Republic of Yemen	1986	46 439	44 381	2 058	4.6	1
Lebanon	1986	123 647	93 957	2 969	31.5	1
Oman	1986	5 144	--	--	--	--
Bahrain	1986	5 302	4 997	305	6.1	2
Qatar	1986	485	456	29	6.3	1
United Arab Emirates	1986	895	881	14	1.6	--
Morocco	1982	930 615	593 738	336 877	56.7	32
Libyan Arab Jamahiriya	1973	32 173	20 523	1 650	8	5
Algeria	1985	595 000	556 000	39 000	7	12
Sudan	1973	135 153	112 854	22 299	19.7	3
Tunisia	1984	317 740	141 180	176 560	125	40
Kuwait	1985	51 089	49 814	1 275	2.5	1

Source: ESCWA Demographic and Related Socio-economic Data Sheets, 1986; The Middle East and North Africa 1989 (Europa Publications); Yearbook of Labour Statistics (Geneva, ILO).

DEMOGRAPHIC, SOCIAL AND ECONOMIC CHARACTERISTICS

TABLE 3. PERCENTAGE OF WOMEN WORKERS IN VARIOUS BRANCHES OF THE MANUFACTURING INDUSTRY COMPARED WITH THE TOTAL NUMBER OF WOMEN ACTIVE IN INDUSTRY

<i>Branch</i>	<i>Egypt 1976</i>	<i>Jordan 1979</i>	<i>Syrian Arab Republic 1981</i>	<i>Kuwait 1985</i>	<i>Bahrain 1981</i>	<i>Morocco 1989</i>
Oil and gas industry	0.6	0.2	0.1	16.28	19.01	0
Mines and quarries	1.41	1.9	0.2	16.28	19.24	0.42
Food, beverages and cigarettes	8.88	6.5	12.7	4.92	4	7.4
Textile, leather and garment industry clothes	50.89	61.9	64.1	3.03	8.45	85.6
Furniture	2.37	2.1	1.1	0.38	0.93	0
Paper and paper products	2.65	4.4	0.6	8.33	0	0
Chemical industries	10.30	10.5	0.3	35.22	16.43	0
Non-mineral industries	2.53	0.9	1.7	1.14	0.23	0
Mineral industries	9.23	2.1	3.2	0	15.72	0
Other manufacturing industries	0.54	0.2	0.8	0	2.11	0.28
Manufacturing industries as a whole	87.39	88.7	87.1	53.03	47.88	93.3
Electricity, gas and water	4.51	1.3	2.3	20.45	19.1	0.43
Building and construction	6.70	8.1	10.3	10.23	13.85	0.58

Source: The Arab country censuses.

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TABLE 4. ECONOMIC PARTICIPATION OF WOMEN PER OCCUPATIONAL SPECIALIZATION BY BRANCH AND KIND COMPARED WITH FEMALES ACTIVE IN INDUSTRY

<i>Occupational specialization</i>	<i>Egypt 1976 (percentage)</i>	<i>Jordan 1979 (percentage)</i>	<i>Syrian Arab Republic 1981 (percentage)</i>	<i>Kuwait 1985 (percentage)</i>	<i>United Arab Emirates 1983 (percentage)</i>	<i>Bahrain 1981 (percentage)</i>
Female participation in supervision	2.18	0.04	0.79	0	14.3	32
Female participation in food and beverages industries	6.12	2.83	3.70	0	0	1.52
Female participation in tailoring and cloth manufacturing	43.30	67.07	48.15	80.5	57.2	39.66
Female participation: categorized occupations	35.94	6.44	32.03	7.6	0	7.82

Source: The Arab country censuses.

TABLE 5. AVERAGE OF ECONOMIC PARTICIPATION OF WOMEN ACCORDING TO THEIR SOCIAL STATUS

<i>Country</i>	<i>Year</i>	<i>Total number female labour</i>	<i>Not married (percentage)</i>	<i>Married (percentage)</i>	<i>Divorced (percentage)</i>	<i>Widowed (percentage)</i>
Egypt	1976	6 816 943	42.9	42.8	2.3	9.9
Jordan	1983	2 776	64.5	30	1.7	3.7
Syrian Arab Republic	1981	174 919	57.1	35.8	1.6	5.44
Kuwait	1985	24 703	28.5	65.2	4.8	1.5
United Arab Emirates	1980	1 876	31.3	48.1	9.4	11.1
Bahrain	1981	7 874	47.7	44.6	4.6	3.1

Source: The Arab country censuses.

II. SUMMARY OF PARTICIPATION OF WOMEN IN THE TEXTILE AND FOOD-PROCESSING INDUSTRIES IN EGYPT, IRAQ, JORDAN, THE SYRIAN ARAB REPUBLIC AND YEMEN

Introduction

Studies were conducted in five Arab countries—Egypt, Iraq, Jordan, the Syrian Arab Republic and Yemen—with the aim of examining the role of Arab women working in the textile and food-processing industries, and to identify the level to which these working women positively contribute to industrial development in the Arab world. The countries involved in the study are representative of the Arab world in general, except for Algeria, Morocco and Tunisia. However, one has to be cautious in generalizing the findings of the five studies because the samples on which they were based do not statistically represent the population under investigation. Therefore, the findings can only be viewed as preliminary indications of the role of Arab women working in the textile and food-processing industries. The results of these studies should be corroborated by other studies before they can be generalized.

The findings of the studies may provide researchers and decision makers with an idea about the contribution and potential of women working in the textile and food-processing industries, as well as industry in general.

A. DEMOGRAPHIC, SOCIAL AND ECONOMIC CHARACTERISTICS OF FEMALE WORKERS IN THE STUDY SAMPLES

Table 6 shows the survey samples in each of the five countries covered in this study. For each country, one major textile company and one major food-processing company was selected. There were considerable variations in the total numbers of workers in each company and also in the percentages of female and male employees covered in the study. For example, the Syrian sample consisted of 326 male and female subjects, whereas the Jordanian sample consisted of only 65 individuals. The percentage of the female employees from each factory varied from one country to another. For the textile factory in Iraq, 8 per cent of females employed by the factory were included in the sample; in Jordan and the Syrian Arab Republic, every female employee participated in the survey of textile factories; in Egypt 12.5 per cent were included in the survey sample; and in Yemen 15.8 per cent. For the food-processing industries surveyed, 10.7 per cent of female employees were included in the sample of Egypt, and 100 per cent were included in the samples of both Iraq and Jordan. This variation in the percentages may be ascribed to variation in the numbers of female

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employees in each country, on the one hand, and to the practical and financial limitations of conducting the study using larger samples, on the other hand. The percentage of males in the five samples was less than females, except in Yemen where the percentage of males was 69 per cent against 60 per cent for females.

TABLE 6. STUDY SAMPLES

Country	Females	Males	Total
A. Egypt			
1. ESCO Textile Company	156	92	248
Percentage of company employees	12.5%	1.1%	2.6%
2. Kaha Company for preserved foods	31	21	52
Percentage of company employees	10.7%	2.7%	4.9%
B. Iraq			
1. Public Organization for Cotton Industries	41	31	72
Percentage of company employees	8%	1.8%	3.2%
2. Dairy Public Organization	50	41	91
Percentage of company employees	100%	11.7%	22.8%
C. Jordan			
1. Jordanian Broadcloth Factories Company	13	25	38
Percentage of company employees	100%	50%	60%
2. Jordan Dairy Company Ltd.	12	15	27
Percentage of company employees	100%	50%	64%
D. Syrian Arab Republic			
1. The United Trading Industrial Company (Pentagonal)	122	122	244
Percentage of company employees	100%	6.6%	12.3%
2. The Syrian Arab Company for Dairy Products	43	39	82
Percentage of company employees	82.7%	32%	47.1%
E. Yemen			
1. Textile Factory in Aden	38	32	70
Percentage of factory employees	15.8%	12.6%	12.9%
2. Fish Canning Factory	39	11	50
Percentage of factory employees	60%	69%	61.7%
<i>Total number of surveyed subjects in the five countries</i>			
1. Textile industry	370	302	672
2. Food industry	175	127	302
TOTAL	545	429	974

There was a total of 974 workers in the five samples, including 672 individuals working in the textile industries and 302 working in the food-processing industries. The total number of females working in both industries was 545, against 429 males.

The samples varied in the details provided on social and demographic characteristics, although the questionnaire items in the five studies were the same (see the questionnaire provided in the annex). This variation may be attributed to the fact that some reports focused on the social and demographic characteristics of the sample, whereas other reports disregarded these features. Variations were also seen in the unit of analysis. In some reports, the female and male workers were considered the unit of analysis regardless of the type of industry to which each one was affiliated. Other reports, however, distinguished between workers in the food-processing industries and those working in the textile factories. Table 7 gives a breakdown of social and demographic characteristics.

1. Age

The five reports contained different results with regard to the ages of the sample subjects. In Egypt, for example, the mean age of females working in the textile and food-processing industries was 27.8 years, whereas it was 42.4 years for males. This indicates that similarity in age was not considered as a variable in selecting the subjects of the study. The difference between the mean ages for female and male workers was about 14.6 years. All female workers in the sample were found to be concentrated into two age groups: 44.9 per cent were in the age group 15-24 years, and 34.8 per cent were 25-34 years old. Male workers were mostly distributed into two age groups as well: 35-44 years (46 per cent) and 45-54 years (31 per cent). The Syrian report stated only that the percentage of females below the age of 40 was 87 per cent against 61 per cent for males working in the textile factory. The report also showed the relative distribution of ages for the workers in the dairy factory. Seventy-seven per cent of female workers were in the age group 20-29 years, against 31 per cent for males in the same age group. The mean age of females was 26.1 years against 37.2 years for males.

The Iraqi report gave the distribution of age for both males and females in the textile industries as follows:

Males below the age of 20 years	38.7 per cent
Females below the age of 20 years	12.1 per cent
Females in the age group 25-29	22 per cent
Mean age for females	30.7 years
Mean age for males	31.6 years

No details about ages were provided in the report of Yemen. It was only stated that the ages of workers in the textile factory there ranged from 15 to 40 years and from 21 to 50 years in the fish-canning factory.

As for Jordan, the report stated that the mean age of the female workers was 23.1 years against 31.6 years for males.

2. Education

All the reports highlighted the high percentage of illiteracy in the Arab world, particularly among females. In Egypt, for example, the illiteracy rate among working females was 48.7 per cent against 22.1 per cent among males. The situation in Yemen was similar to that in Egypt; the illiteracy rate among female subjects of the Yemeni sample was 48.1 per cent against 14 per cent among males.

In Iraq, the illiteracy rate among the females in the sample was 18.7 per cent against 13.9 per cent for males. The illiteracy rate among the males in the Syrian sample was 25.5 per cent against 17.6 per cent for females. Finally, the Jordanian report indicated a very low percentage of illiteracy. There were no illiterate females in the Jordanian sample, and the percentage of illiteracy did not exceed 6.7 per cent among males in the dairy factory.

Table 7 indicates the different levels of education in the five countries included in the present survey.

The Egyptian report showed that 30.1 per cent of the males had an elementary school diploma against 21.9 per cent of the females. The percentage of those able to read and write (but with less than an elementary-level diploma) was 29.2 per cent among males against 7.5 per cent for the females. The Egyptian sample did not include any university graduates.

The situation in the Syrian Arab Republic was similar, in that those with elementary school diplomas represented the highest percentage (43.5 per cent) among males and (36.4 per cent) among females. The percentages of those literate but with less than an elementary education for females and males were 24.8 per cent and 21.7 per cent respectively.

The relative distribution of the levels of education in Iraq did not differ significantly from that in Egypt and the Syrian Arab Republic. The holders of an elementary school diploma accounted for the highest percentage, 47.2 per cent among the males against 39.1 per cent among the females. Those who could read and write but who did not have an elementary school education made up 35.6 per cent of females and 18.1 per cent of males.

In the Iraqi sample, 1.4 per cent of males held a university degree. In Yemen, the percentage of females who could read and write only was higher than the percentage of those with elementary school diplomas (36.4 per cent against 9.1 per cent).

The situation in Jordan differed markedly from that in the other countries. The holders of a preparatory stage certificate represented 44 per cent of the females against 42.5 per cent of the males in the Jordanian sample. The percentage of females holding a secondary-level or vocational diploma was 44 per cent against 27.5 per cent among males. The percentage of university graduates was 5 per cent.

One can say that the level of education among the five samples was low, except in the case of Jordan. Most of the subjects had only an elementary education or less. The samples included a considerable percentage of illiterate workers.

3. Marital status

The percentage of married females was low in the five samples. The Egyptian report attributed this phenomenon to the fact that females preferred to start work at an early age and to stop working after marrying or having children. The percentages of married females in the five countries covered by the survey were as follows: Egypt, 34.8 per cent; Iraq, 23.1 per cent; Jordan, 4 per cent; the Syrian Arab Republic, 35.2 per cent; and Yemen, 50.6 per cent. Moreover, the percentages of married males were high in all the countries—91.2 per cent in Egypt, 63.9 per cent in Iraq, 62.5 per cent in Jordan, 78.9 per cent in the Syrian Arab Republic and 58.1 per cent in Yemen.

Marital status is an indication of family stability, and divorce rates indicate the level of this stability. The percentages of divorced females in the samples were as follows: Egypt, 11.8 per cent; Iraq, 8.8 per cent; Jordan, 8 per cent; the Syrian Arab Republic, 2.4 per cent; and Yemen, 9.1 per cent. As for males, the divorce rates were 1.8 per cent in Egypt, 1.4 per cent in Iraq, zero in both Jordan and the Syrian Arab Republic, and 11.6 per cent in Yemen.

4. Home ownership

Owning a home may indicate a high economic status and sharing a house with others may be a sign of low economic status. In Egypt, the report indicated that the rate of female respondents indicating that their home was privately owned was 25 per cent against 50 per cent for males. The average number of rooms in the homes of female respondents was 2.9, against 3.3 for males. However, the Egyptian report did

not include anything about shared residences, although this matter is socially and economically significant.

In the Yemen sample, 67.5 per cent of the females owned their own houses, as opposed to 69.8 per cent of the males.

In the Syrian sample, 62 per cent of the females working in the textile factory were living in private houses (33 per cent owners and 66 per cent renters). The percentage of shared houses was 38 per cent (13 per cent owned and 87 per cent rented). As for males 85 per cent had private houses (77 per cent owned and 23 per cent rented). The percentage of shared residences for males was 15 per cent (66 per cent of which were owned and 34 per cent of which were rented). In the dairy factory, the percentages of those owning or renting houses were 79 per cent for females and 82 per cent for males, where they lived in a private (as opposed to shared) house. The percentages of shared houses were 21 per cent for females and 18 per cent for males.

The report for Iraq did not give any information about this variable. In Jordan, the report stated that the majority of those in the sample owned their own homes. The percentage was 80 per cent for females against 75 per cent for males.

5. Family size

The Egyptian report showed that 75 per cent of females and 71 per cent of males lived in nuclear families in which the mean family size of the male worker was 6 persons, and the mean family size of the female worker was 5 persons. The report also stated that the mean number of children for working married females was 2.

According to the Yemeni report, most workers lived in families of 6-10 persons; some lived in families consisting of 11-15 members.

Most of the families of working females (75-77 per cent) consisted of 3-8 members, whereas 64 per cent to 69 per cent of the families of the working males consisted of six members or more.

In Iraq, 34 per cent of the families of the working females consisted of 7-8 members, and 41 per cent of the families of the working males consisted of 4-5 individuals.

TABLE 7. SOCIAL AND DEMOGRAPHIC CHARACTERISTICS OF THE TEXTILE AND FOOD-PROCESSING WORKERS IN THE SURVEY SAMPLE

Variable	Egypt		Iraq		Jordan		Syrian Arab Republic		Yemen	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
A. Sample size	187	113	91	72	25	40	165	161	77	43
B. Age (mean of age group in years)	27.8	42.4	30.7	31.6	23.1	31.6	26.1	37.2	..	..
Education										
1. Illiteracy rates (per cent)	..	..	19.5	12.8	..	..	21.3	27	26.3	9.4
For textile workers	..	..	18	15	..	..	10	20	69.2	27.3
For food-processing workers	48.7	22.1	18.7	13.9	..	..	17.6	25.5	48.1	14
Total sample	7.5	29.2	35.6	18.1	4	2.5	24.8	21.7	36.4	30.2
2. Education level (per cent)	21.9	30.1	39.1	47.2	8	20	36.4	43.5	9.1	32.6
Elementary	17.1	9.7	3.3	12.5	44	42.5	9.7	5.6	6.5	16.3
Preparatory	4.8	8.8	3.3	6.9	44	27.5	11.5	3.7	..	2.3
Secondary/vocational	..	..	..	1.4	..	5	..	..	..	..
University graduate	..	..	..	..	..	..	..	..	..	..
3. Marital status (per cent)	34.8	91.2	23.1	69.3	4	62.5	35.2	78.9	50.6	58.1
1. Married	11.8	1.8	8.8	1.4	8	..	2.4	..	9.1	11.6
2. Divorced/separated	53.4	7.0	58.2	33.3	88	37.5	58.2	20.5	29.9	30.3
3. Single, never married	..	..	9.9	1.4	..	..	4.2	0.6	10.4	..
4. Widowed	..	..	..	..	..	..	..	..	..	..
4. Home ownership (per cent)	25	50	..	..	80	75	37	77	67.5	69.8
1. Owning residence	75	50	..	..	20	25	63	23	32.5	30.2
2. Renting	5	6	7.5	8.5	4.3	4.1	5.5	6.8	..	..
F. Family size (average)	..	..	..	..	..	..	..	..	..	..

Note: Two dots (..) indicate that data were not available or were not separately reported. An em dash(-) indicates that the amount is zero.

In Jordan, the report showed that 72 per cent of working females lived in families consisting of 6-10 individuals, whereas 44 per cent of the working males lived in families of 5-10 members.

It was evident that all five countries covered in the survey, except Egypt, ascribed to the prevailing traditions and conventions, i.e., the tendency towards extended families rather than nuclear ones, the reason for this being low economic standards.

B. CHARACTERISTICS OF LABOUR AND PRODUCTIVITY

1. *Years of experience*

This variable is an indication of the level of the acquired experience and the levels of satisfaction and stability in work. In the Egyptian report, 25.2 per cent of the males in the sample had 25-29 years of experience. The percentage of females who had worked from 5-9 years was 37.8 per cent. The mean years of experience for males was 24 years, against 9 years for females. This phenomenon was ascribed to age variations between males and females and to the tendency of females to work at an early age and to quit working after marrying or having children.

The mean number of years of experience for males working in the textile factory in the Syrian Arab Republic was 15.23 years against 5.73 years for females. In the dairy factory, the mean years of experience were 13.21 for males against 4.84 for females. It was also found that 95 per cent of the working females had worked for 9 years or less, whereas 59 per cent of the males had worked for 10 years or more. However, this variable was not reviewed in the reports of Iraq, Jordan and Yemen.

2. *The tendency to change jobs*

This is another indicator of the level of worker satisfaction and the desire to remain in the same job. In Egypt, 38 per cent of those in the sample expressed their desire to change jobs (in the case of males because of low wages and in the case of females because of hard work). It was found that 38 per cent of the females desired to work at home; 26 per cent of them wanted to work at another place. As for males, 35 per cent of them preferred to work in the private sector. In the Syrian Arab Republic, 40 per cent of the female sample preferred to work at home, whereas 47.5 per cent of them preferred to work part-time. It was noted that all these females were married. The reasons for changing jobs for females were: dirtiness of the place of

work, 26.2 per cent; boredom, 17.2 per cent; work-related risks, 17.2 per cent; and maltreatment, 14.8 per cent.

The reports of Iraq, Jordan and Yemen did not provide any information about this variable.

3. Complexity of the production process

This variable refers to the technological level of the tasks that the workers were called upon to perform in their jobs. The questionnaire contained the categories: machinery, mechanical tools, and manually operated machines and tools. For the report from Egypt, a different classification system was used; it included: complicated tasks, semi-complicated tasks and simple tasks, instead of the questionnaire items. It was found that 83.4 per cent of the working females worked with mechanical tools and automated machinery against 76.1 per cent of the males. These figures contradicted what the report presented. The report stated that tasks in the two companies in the sample (Kaha Company and ESCO) were divided between females, who were required to perform simple manual tasks, and males, who were assigned more physically and mentally demanding tasks. This was the view of the department directors as stated in the report.

In Yemen 52.6 per cent of the females in the textile factory performed manual tasks, and 44.7 per cent used mechanical tools and machines. Of the manual workers in the fish-canning factory, 63.7 per cent were males and 61.5 per cent females.

In the Syrian Arab Republic, 58 per cent of the females working in the dairy factory were involved in production and quality control tasks. These females used manual and mechanical tools and automated machinery. The management of this factory considered these employees skilled workers.

In the report of Jordan, it was found that the majority of working males and females used manually operated machines. Only 1 female and 4 males used automatic machines.

This variable was not detailed in the Iraqi report. It was only stated that there were no significant differences between males and females as far as task distribution was concerned. There were no jobs assigned specifically to either males or females. Furthermore, there was no difference in the technical level of males and females.

4. *Wages*

This variable raised many controversial issues about the Egyptian and Syrian reports. In the Egyptian report, a number of hypotheses were put forward, and an attempt was made to verify these hypotheses through statistical procedures. In the Syrian report, a unique analytical method was employed to differentiate between the income of males and females. The Syrian report concluded that the differences between the wages of males and females were due to objective reasons having nothing to do with sex discrimination, as was also concluded in the Egyptian report.

The Egyptian report stated that there was a difference in the monthly salaries between males and females in favour of the males. A number of factors affecting wages were ranked as follows: seniority, complexity of the production process, level of education and sex. It was concluded that the monthly salary of females was 18 Egyptian pounds (LE) less than that of males. The purpose of this procedure was to determine the effect of the sex variable on wages. The report stated that further study was needed.

In Yemen, it was found that 31.3 per cent of males received the highest salaries (71-80 Yemeni dinars [YD]) and that 31.3 per cent of males received median salaries (YD 51-60). As for females in the textile factory, it was found that 52.6 per cent of them received median salaries. In the fish-canning factory, it was found that the salaries of 45.5 per cent of the males were below the median (YD 41-50), whereas 69.2 per cent of the females received median salaries (YD 51-60).

The Syrian report indicated a mean income for employees of the textile factory in July 1989, as follows:

Syrian pounds (LS)

Females:	2,034
Males:	2,965

This difference was attributed to extra wages, i.e. production bonuses and bonuses for years of experience. A statistical study was conducted to investigate the influence of bonuses on net income. Production incentives, extra wages, and in-kind remunerations were excluded from the study. The result was that the relative difference between wages of males and females was reduced from 24 per cent to 7 per cent. This variation was ascribed to differences in the average years of experience. Another study was conducted to investigate the correlation between income, on the one hand, and years of experience, level of education, and age group, on the other hand.

It was concluded that years of experience was the decisive factor in determining income level.

The same study was applied to workers in the dairy factory and the same conclusions were reached.

The Iraqi report found that half of the females working in the textile factory received the lowest level of wages (50-60 Iraqi dinars [ID]) against one fourth of the males. On the other hand, 43.75 per cent of the males received the highest salary (ID 100) against 2.43 per cent of the females. The report attributed this discrepancy to the variations in the level of education and the number of years of experience. In the dairy factory, it was found that 68 per cent of the females and 56 per cent of the males received salaries ranging from ID 150 to ID 200. This group comes after the group receiving the highest salary (ID 200 or more). This was at a time when 29 per cent of the males received the highest salary (more than ID 200), and 26 per cent of the females were earning ID 100-150. The report also stated that this level of income was satisfactory and was reflected by the workers' job satisfaction (68 per cent among males and 80 per cent among females).

The Jordanian report only stated that the mean income (base salary, allowances, bonuses and savings) was 72.4 Jordanian dinars (JD) for females and JD 105.5 for males. No other details were provided in the report. However, it seemed that the income level for both males and females was low. This was reflected in the percentage of dissatisfaction (75 per cent) among both males and females with their salaries.

5. Training

The five reports stated that the level of training was very low in all the factories involved in the study. It was also noted that the management of the factories did not pay proper attention to this issue. They did not realize the economic, technological, and human benefits that could result from training workers on a regular and systematic basis.

The reports of both Egypt and Yemen stated that the percentage of trainees was very low, and that training was carried out individually and not in groups. There was no regular training either in-country or abroad. The Syrian report stated that training was given through senior workers, who themselves had not usually received regular training. The reports of both Jordan and Iraq stated that in-service training was given only occasionally. The Yemeni report stated that training required advanced educational levels and assumed some foreign language knowledge. There were also

some social barriers, especially in regard to females, who were usually not allowed by their families to go abroad.

6. *Services*

The reports of the five countries indicated the availability of certain services in the factories involved in the study. The problem lay in the level of these services and the extent to which workers benefited from them.

The Egyptian report referred to the availability of various services in both the textile and canning factories. These services included health, transportation, food, housing and child-care services. But 19 per cent of the sample did not benefit from the health services because of their poor quality and difficulty in obtaining them. Furthermore, management restricted the cases in which medicine could be dispensed. As for child-care services, they were very limited because very few mothers worked and many of them left their children in the care of relatives. The housing services were restricted to senior workers and their children. Transportation and food services were the best and the most important ones offered.

In Yemen, the most important service offered to workers was transportation. The other services were offered with very low standards. Health care, for example, was mostly a matter of first-aid treatment. Child-care services were ineffective because many of the working mothers lived far from the place of employment and left their babies in the care of relatives. All sample subjects stated that they did not benefit from the housing services (though these were partially available, i.e., provided to workers coming from some distance) because they had their own homes. Even eligible workers preferred not to live in the factory houses.

In the Syrian Arab Republic, 90 per cent of the workers in the survey benefited from the transportation service. Health and child-care services were offered free of charge or with minimum charges. More than 75 per cent of the workers benefited from these services. There was a central restaurant and a commissary with reduced prices.

In Iraq, the report indicated the importance of transportation for both males and females. In fact, the unavailability of this service caused workers to change their jobs. This service had been utilized by 58 per cent of the females and 74 per cent of the males. Only one meal was provided, at a nominal price, and workers were not allowed to bring their own food with them. Health services were satisfactory and free, but child care was not available.

In Jordan, transportation was available for 88 per cent of the workers in the two companies included in the survey. Any worker who did not use the company transportation was usually reimbursed for this. Meals were available at reduced prices, and each company employed a physician to offer first-aid services. More complicated cases were usually referred to medical centres outside the company. The availability of transportation and health services had positive effects on the likelihood of the worker continuing in the same job. Offering free meals did not have the same positive effect on workers. There was no positive effect because of housing or child-care services.

C. ATTITUDE TOWARDS AND SATISFACTION WITH WORKING CONDITIONS

1. *Satisfaction with work*

The Egyptian report indicated that the percentage of female workers who were satisfied with their work was 33.7 per cent, against 31 per cent for those who were dissatisfied. The percentage of satisfied males was 43.4 per cent. The percentage of general dissatisfaction among the sample as a whole was 32 per cent. For males, the main causes of dissatisfaction were low salaries and hard work. Dissatisfaction among females was due to maltreatment at work and to hard work.

The report also referred to the fact that female workers were dismayed by the stereotypical views restricting women to their traditional status and the preference to employ males because they were considered more competent. It was found that 69.6 per cent of the females said it was better to employ males, and 97.6 per cent of the males had the same preference. The female workers' motivations for working were ranked as follows: contributing to the family budget, 48.1 per cent; sharing in marriage preparations, 16.6 per cent; self-actualization, 12.3 per cent; supporting the family, 10.7 per cent; having a personal income, 8 per cent; and occupying leisure time, 4.3 per cent.

The report of Yemen did not provide details about this variable; it merely stated the positive influence of these services. The percentage of workers who said there was a positive effect was 66 per cent of males and 49.45 per cent of females in the two factories. The percentages of those who said these services had a negative effect were 27.6 per cent of males and 14.35 per cent of females.

The Syrian report focused on the relation between income on the one hand, and marital status, level of education, years of experience and age group, on the other hand. The results were as follows:

(a) Among females in the textile factory 56.6 per cent were satisfied with their income against 72.1 per cent in the dairy factory;

(b) Among males in the textile factory 62.3 per cent were satisfied with their income against 92.3 per cent in the dairy factory.

The report also referred to the basic laws regulating the work of women and specifying the types of jobs in which they could work. All other laws applied equally to both males and females, especially in regard to appointments, promotions, training, remunerations, rewards, incentives, leaves and services.

The Iraqi report referred to the various problems and obstacles that females encountered in carrying out their various tasks. These problems included balancing job and family responsibilities. The negative aspects of work as it affected marriage were that it was physically demanding and involved long hours and low income, and that there was discrimination between males and females in appointments, promotions, incentives, and opportunities for travel.

In Jordan, the percentage of males at the dairy factory satisfied with their work was higher than for females (20 per cent of males and 8.3 per cent of females). In the textile factory, the percentage of dissatisfaction among females was 46.21 per cent against 24 per cent of males. These variations are due to the fact that a higher percentage of the females (23.1 per cent) had obtained a vocational degree (community college diploma) against 4 per cent of males. The percentage of females who were satisfied with their salaries was 24 per cent, compared with 24.6 per cent of males. These percentages mean general dissatisfaction with salaries (76 per cent).

2. The status of women and harassment at work

The Egyptian report indicated certain problems peculiar to women and others common to both males and females. These problems included on-the-job harassment and maltreatment of women at work. This type of problem represented 50 per cent of the problems facing working females. Problems faced by males included lack of respect and exposure to health hazards. Working females complained of the severe penalties imposed on them (33.8 per cent). It was reported that 22.2 per cent of the males faced problems with job promotions and wages. It was found that 11 per cent of the females reported incidences of maltreatment or harassment from their co-workers

and that 62 per cent of those females refrained from taking any legal action. It was also found that 74.4 per cent of the working females did not know their level at work against 10.1 per cent of the males. This indicated an inability of females to defend their rights. The report also stated that a considerable percentage of females did not know the breakdown of their salaries; 11.5 per cent of them did not know their basic salaries, 28.4 per cent did not know their allowances, 32.4 per cent did not know the amount of remunerations, 14 per cent did not know the amount of rewards and incentives and 13.7 per cent did not know the amount of distributed profits.

In the report of Yemen, the practices that interfered with the work of women were reviewed. It was found that 57.91 per cent of the females working in the textile factory were not aware of these laws against 64.1 per cent of women in the fish-canning factory. The remaining responses were about matters such as the lack of incentives and the discrimination between females and males with respect to disciplinary procedures. Other responses were related to overtime work, and to the fact that women were denied the right to take their earned vacations, and that they were not allowed to leave before the end of working hours, which presented particular difficulties for pregnant women and those nursing babies.

In the Syrian report, the problems that females encountered were ranked as follows: dirtiness of the workplace, 26.2 per cent; boredom from the work itself, 17.2 per cent; hazards at work, 17.2 per cent; maltreatment, 14.8 per cent; maltreatment and harassment, 5.7 per cent; and night work, 1.6 per cent.

The Iraqi report listed the following problems facing females: dirtiness and hazards of the workplace, maltreatment, harassment, overwork, domineering managers, infliction of penalties for trivial reasons, threats to apply punitive laws and regulations.

The problems facing working females in Jordan were boredom from work, maltreatment, harassment and discrimination against females in wages, rewards, incentives, promotions and types of work assigned.

D. WOMEN'S ROLE IN DECISION-MAKING AT WORK, IN THE FAMILY, AND AT THE PUBLIC LEVEL

The report of Egypt indicated that the most important area in which women played a role involved their contributions to the household budget. It was found that 37.3 per cent of the single females and 63 per cent of the married ones contributed more than half of the household income. It was also found that 44.1 per cent of the single females and 28.3 per cent of those married contributed less than half but more

than nothing to the family income. Therefore, contributing to the family income was one of the basic functions of women at the family level. In addition, married women were also responsible for household chores. As for decision-making at the level of the institution or company, only 19.3 per cent of the working females participated in this process. This phenomenon was ascribed to the fact that management did not allow women to participate. At the public level, the participation of females was very low in all the samples. Women did not join political parties, and this reflected a general social stand. Nevertheless, 45.8 per cent of the working females were members of unions, compared with 43.1 per cent of the males. However, participation often amounted to nothing beyond the deduction of dues from the member's salary.

In Yemen, half of the female sample participated in decision-making related to the family budget, and selling or purchasing properties, and less than half participated in making decisions related to the marriage of their children and to the daily family budget. The percentage of females participating in making decisions related to the department or the company in which they worked was found to be very low. The highest percentage of participation was 15.8 per cent at the department level and 10.3 per cent at the company level. As for participation at the public level, all working males and females were members of the labour union, and 7.9 per cent of the females working in the textile factory were members of the leadership committees. There were no female members in the leadership committees of the fish-canning factory, but there was one female member in each factory committee responsible for women's affairs. A very low percentage of females participated in community activities—2.6 per cent in the textile factory and 5.1 per cent in the fish-canning factory. The same applied to membership in various associations; 2.6 per cent of the females in the textile factory were members of the peace and solidarity society. This situation was attributed to the feeling of women that they had no role in society, and that they worked simply to satisfy their basic needs. Furthermore, women were not encouraged to work outside their home because they were responsible for household duties.

The Syrian report indicated that there were two or three male and female workers who participated in making decisions concerning the department in which they worked, with no preference given to either males or females. The major decisions in the company, such as those related to specifying wages, incentives, prices and training, were usually made by the relevant ministerial authorities. All the workers were considered members of the union for the trade which they practised. There was a female member on the union committee, which consisted of 7 members in each company. In the textile factory 24.5 per cent of the working females were members of a political party against 36 per cent of the males. In the dairy factory, only 2 female workers were members of a political party against 17 males. The report also stated that participation of women in local social activities was unusual in the Syrian

Arab Republic because of a lack of free time for women given their family responsibilities.

In the sample of the textile factory in Iraq, it was found that only 12.5 per cent of the females participated in all decision-making related to the family but that 32 per cent of them played a role in making some decisions. In the dairy factory, the percentages were much higher; 62 per cent of the females participated in making decisions pertaining to the education of their children, 70 per cent participated in decisions related to major expenditures, 74 per cent participated in decisions on day-to-day family spending, 70 per cent participated in decisions to sell or to purchase property, and 58 per cent played a role in making decisions pertaining to the marriage of their children.

As for the decisions taken by the company (a dairy factory), workers had no role in decision-making because they were only production workers. The report also stated that the labour union in the dairy factory had been dissolved after the status of the workers had been changed to production workers only. As for political activities, 18 per cent of the females were members of a political party against 49 per cent of the males. Community services were not available in most areas. The percentages of males and females participating in social activities were 7 per cent and 22 per cent respectively.

The report of Jordan indicated that 50 per cent of the females working at the dairy factory contributed more than half of the family income against 30.8 per cent of the females at the textile factory. It was also found that 68 per cent of the females participated in making decisions related to the daily household budget, that 64 per cent participated in the total household budget, and that 60 per cent played a role in decisions about the education of their children. In general, these percentages are considered high. It was also noted in the report that 8.3 per cent of the females working in the dairy factory played a role in making decisions related to the department in which they worked, against 23.1 per cent in the textile factory. No participation of females at the level of the company itself was reported in either factory. Membership in the company union was 66.7 per cent in the dairy factory and 76.9 per cent in the textile factory. The report stated that 8.3 per cent of the females working in the dairy factory and 7.7 per cent in the textile factory participated in social activities. The report did not specify the percentage of participation in political parties.

E. CONCLUSIONS AND RECOMMENDATIONS

1. *Conclusions*

The reports of Egypt, Jordan and Yemen included a section that presented the findings of the study. The Syrian report did not state conclusions but did mention the weaknesses in the statistical data on working females and offered some suggestions to improve the quality of these data. The report of Iraq contained specific recommendations. The following are summaries of the five reports.

The Egyptian report stated that the results of the study were contrary to what was expected in that the sample was selected from the working females in the public sector. It was hoped that the problems raised in the introduction would not arise. These problems were job isolation, job discrimination and role conflict. In a situation where the administrations of the public sector claimed that they protected female workers, it was obvious that this protection did not exist even theoretically. The study concluded that the problems encountered by working women in Egypt were the same as those facing working women in most of the countries in the world. Another conclusion was that the above-mentioned problems affected the productivity and social involvement of women. In the companies in the study, women faced the problem of job isolation since they were only allowed to work in manual jobs not requiring advanced tools or machines. The report also stated that the females in the sample had a lower level of education and less social freedom than males. They were neophytes in the labour market and had less training than men. These conditions prevented working females from obtaining certain jobs. There was also discrimination in wages. Females were paid less than males working in the same job simply because they were females. The report mentioned other aspects of discrimination:

- (a) Females were maltreated by their managers and colleagues;
- (b) Females were less aware of their legal rights, which accounted for the variations in the wages of males and females;
- (c) There was a conflict between the role of the working women at home and at work. They tried to balance these roles because of their need to supplement the family income. It was difficult for women to adhere to a schedule of official working hours and regular attendance according to strict regulations and procedures.

The Yemen report contained the following findings:

- (a) The percentage of females in production in the textile factory was 55.5 per cent of the total number of production workers; it was 67.1 per cent in the fish-canning factory. The percentage of married females was 47.5 per cent in the textile factory and 53.8 per cent in the fish-canning factory. Their ages ranged from 15 to 50 years.
- (b) The level of education among working females was very low, the illiteracy rate among the females in the fish-canning factory reaching 69.2 per cent. This low level was attributed to the fact that females quit school at an early age, which affected their chances for training and promotion.
- (c) The mean income of females in both factories was 89 per cent of that of males. The system of incentives and overtime hours applied to all workers, and men received extra pay because they worked as supervisors.
- (d) Absenteeism among female workers was greater than that of males because of family responsibilities.
- (e) The women's opportunities for training and promotion were very limited owing to their low level of education and the type of work they were assigned to do.
- (f) The two factories offered some social services: transportation, health services, child care, and meals for some workers. They did not, however, give away to the workers anything produced by the factory, except in some cases where selected workers were thus singled out.
- (g) Housing facilities were available to some extent in the fish-canning factory (in the form of boarding facilities for technicians coming from other villages).
- (h) Working females were subject to the same laws and regulations as males, but women complained of some barriers standing in their way, barriers such as physically demanding work, family problems, obsolete machinery, lack of material incentives, and maltreatment by supervisors.
- (i) The lack of participation in social activities on the part of women was due to their various family responsibilities. Their participation in the labour union was also very limited.
- (j) Female workers did not participate in making decisions at the level of the company or institution. They also played only a minor role in making decisions about the family budget, selling and purchasing property, education of children, and planning for their children's marriages.

(k) The females from rural areas had 6-10 children while those with an urban background had 1-5 children.

(l) Working females were exposed to some degree to occupational hazards. There were no accurate statistics about diseases caused by work.

(m) Working females tried to reach a compromise between their various roles at home and at work; their elder sons and daughters who had quit school usually helped them.

The Jordan report concluded the following:

In Jordan, the participation of females in industry was still confined to traditional work. In 1984, 63 per cent of them worked in the services sector (administration and education) against 4 per cent in the industrial sector. The report stated the following reasons for the low female participation:

(a) Males were preferred over females in some jobs;

(b) Females worked in lower-paying jobs;

(c) Males were given more opportunities for promotion;

(d) Females were offered fewer training courses than males;

(e) There was a lack of laws and regulations that protected women's rights in any jobs. Furthermore, the labour law was not applied and was thus not binding on employers;

(f) Attitudes of females towards work were subject to social and cultural limitations that might not conform to technical and economic requirements;

(g) Females faced problems at work, especially after marrying or having children. They also encountered difficulties in coping with their responsibilities at work and at home, compelling them sometimes to quit work to take care of their children;

(h) The primary motivation for working among females was their need to support their families despite the unsatisfactory work conditions;

(i) Some services such as health care were confined to the workers and did not include their families. The non-availability of nurseries for children forced females to quit their jobs;

(j) In addition, working females were not excused from their home responsibilities.

The Syrian report did not include a separate section for conclusions. However, it provided a section indicating the weaknesses in the data about women's work and offered proposals for the improvement of these data.

The report stated that the information and data obtained on the working females were out of date and unreliable, and lacked the required breakdown between males and females. The results were therefore unreliable because of the inappropriate methods of obtaining the data. The report proposed that regular surveys be conducted on the labour force, particularly on the conditions of working women.

The Iraqi report stated that working females did not give proper attention to themselves because they were busy at home and at work. This situation negatively affected their morale and hopes of establishing social relationships. The report also stated that the incentives at work varied from one worker to another. The primary incentive for most workers was the feeling of commitment to their work. The second incentive was getting higher wages and a good reputation. No male worker mentioned self-actualization as an incentive, whereas 4 per cent of the females did. The report also stated that the incentives listed in the questionnaire were related to material aspects, except for two incentives, which were the feeling of commitment to work and self-actualization.

2. Recommendations

(a) The major recommendations of the Egyptian report

(i) Academic and conceptual proposals

(a) Conducting a study to investigate the causes of differences between the wages of males and females;

(b) Investigating the relation between family stability and the work of females;

(c) Devising techniques to measure the productivity of females' work, taking into account the social pressures to which women are subjected and their activities at home and outside;

(d) Establishing new parameters pertaining to the work of females such as female harassment and maltreatment, type and quality of available services, awareness of females of their rights and roles, advanced technological tasks which could be carried out by women, training opportunities, professional history, and degree of mobility;

(ii) Recommendations on policy

These are social and administrative reforms aiming at enhancing the productivity of women's work:

(a) Creating the appropriate social conditions that enable men to participate in household chores, by promoting awareness among women of their rights, especially those pertaining to the responsibility of all family members to participate in household chores;

(b) Supporting and improving all the services and facilities offered to females, including ready prepared meals, laundry and nurseries;

(c) Studying the issue of working at home;

(d) Adopting a flexible work schedule in a way that does not impede production (as opposed to the issue of working at home);

(e) Promoting and intensifying literacy programmes and training working females formally, in groups, rather than individually;

(f) Encouraging females to share in decision-making at the level of the enterprise;

(g) Stopping the practice of assigning women particular tasks on the assumption that these tasks or jobs are more appropriate for females;

(h) Giving working females the freedom to choose their jobs and type of training to develop their skills;

(i) Providing legal redress to protect women from maltreatment and harassment at work and to ensure that working females receive the wages and services to which they are entitled.

(b) Recommendations of the Yemen report

The report put forward the following recommendations, which could be implemented by the Government, factory management or national organizations:

(a) Providing nurses and nursery school teachers from the Ministries of Health and Education and expanding the services of the nursery at the textile factory;

(b) Carrying out regular medical check-ups for elderly women;

(c) Offering regular transportation at the fish-canning factory;

(d) Specifying a clean place for relaxation and having meals at the fish-canning factory; reducing meal prices and improving the cafeteria in the textile factory;

(e) Modernizing machines in the textile factory;

(f) Educating women in health and social affairs, especially in regard to birth control and child care;

(g) Allowing nursing mothers to leave work an hour earlier to breast-feed their babies;

(h) Encouraging literacy programmes;

(i) Making opportunities available for in-service training for women at the factory, especially for those who have a level of education over the elementary level.

(c) Recommendations of the Syrian report

(i) Proposals to enhance the contribution of women in the textile and food-processing industries

(a) Holding regular training sessions to avoid the flaws of the current training situation. There should be vocational training as well as training about occupational hazards. Training should aim at upgrading administrative performance and production;

regular external training course
the production process;

workers in

(b) Qualifying women
and its work style;

(c) Holding training
safety to protect the workers

(d) Improving the
including transportation, health
dairy factory, some service
as a nursery, restaurant and

(e) Adapting process
of working females in an
women from working
reduce exhaustion and stress
providing dust-protective

(f) Solving the
of the workplace and
discourage women from

s
s

(g) Finding
working at home or

as

(ii) Proposals for
food-processing industries

and

(a) Textile industries: Establishing a national project financed by external
sources for 2-3 years. This project would include:

- (i) Preparing local and external professional training courses (health, safety, administration) supervised by local and outside experts;
- (ii) Keeping abreast of technical progress in industry, and preparing females for jobs in administration and production;
- (iii) Holding training sessions in the areas of health and professional safety to prepare females to supervise this activity;

- (iv) Providing local and foreign expertise in coordination with the concerned parties;
- (v) Supplying workers with devices to protect against work hazards such as dust, noise and poor ventilation.
- (b) Food industries: Establishing a national project, similar to the first one, that would include:
 - (i) Training workers in areas of health and professional safety to protect themselves from accidents on the job;
 - (ii) Sponsoring the training of a number of female workers abroad;
 - (iii) Educating female workers in modern administration and preparing them for positions of responsibility;
 - (iv) Providing local and foreign expertise in coordination with the relevant parties;
 - (v) Supplying the required machines needed for successful training.
- (d) Recommendations of the Jordan report

The report offered some proposals to promote the participation of working females:

- (a) Encouraging married women to work by providing nurseries and flexible work schedules;
- (b) Extending health services to all the female worker's family members;
- (c) Allowing female workers to rotate job assignments to alleviate boredom;
- (d) Providing equal opportunities for promoting both males and females;
- (e) Increasing material and in-kind incentives;
- (f) Improving food services at factories;

(g) Enhancing social activities at the factory in order to instil a sense of belonging among the workers;

(h) Expanding the opportunities for females to receive professional training;

(i) Issuing the necessary regulations to protect females' rights in different jobs;

(j) Compelling employers to apply the labour law, especially in regard to women's rights;

(k) Linking the technical and economic requirements of the labour market to the aspirations of women to work.

(e) Recommendations of the Iraqi report

(a) The future opportunities for increasing the integration of female workers in the manufacturing branches in Iraq are promising, but they are also highly dependent on the employment policies of the Iraqi Government and the local forces of supply and demand.

(b) There is a trend to enlarge manufacturing industries such as the electronics and electric manufacturing sectors, especially with the transfer from traditional to modern manufacturing. Therefore, an in-depth study must be undertaken in each manufacturing branch to assess the market demand for females and the availability of technical skills to support increasing female employment.

(c) The workers' performance in industries is more dependent on training capabilities than on the general educational system. Factory administrations have not made an effort to benefit from the industrial training centres, owing to their reluctance to give time off for female workers to attend training courses.

(d) Since the income incentive is one of the major motivations of job-seekers, and owing to the important contribution of female workers to the family income, an increase in monetary incentives to female workers will promote and increase their participation and performance in the productive manufacturing sectors.

(e) Some administrative practices, such as assignment of supervisory and leading roles to women workers and taking into account their opinions in the decisions of the unit, section or production line where they work, would remove all discriminatory feelings of not belonging.

(f) Company administrations should demonstrate their interest in female workers' performance and careers by promoting procedures that enhance the female workers' success. Administrations should offer continued education, give workers leave for tests and exams, and provide advanced training courses for upgrading skills.

(g) Health-care facilities should be increased and extended to cover workers outside working hours. Studies and reports should be prepared on health risks and work-related accidents that contribute to deterioration in the health of female workers because of their long working hours or owing to unsafe use of industrial chemicals and machines and unsafe conditions in the workplace.

III. SUMMARY OF PARTICIPATION OF WOMEN IN THE PHARMACEUTICAL AND ELECTRONICS INDUSTRIES IN EGYPT, JORDAN AND THE SYRIAN ARAB REPUBLIC

A. DEMOGRAPHIC, ECONOMIC AND SOCIAL CHARACTERISTICS

Tables 8 and 9 demonstrate the general framework of the study samples of Egypt, Jordan and the Syrian Arab Republic. They represent one or two of the pharmaceutical and electronics companies in each country, except in Jordan, where the sample was selected from several electronics companies owing to the limited labour force in this industry. The sizes of samples and their representation of the total labour force in each company, male and female workers alike, varied. While the total sample of the Syrian Arab Republic consisted of 325 workers of both sexes, the sample of Jordan included 237 and that of Egypt 300 female and male workers. The percentage of females working in the production divisions of Egyptian pharmaceutical companies reached 82 per cent of the total of female workers in the sample, 39 per cent in the Syrian sample and 83 per cent in the Jordanian sample. As for the samples of the electronics companies, the percentages were 72 per cent in Jordan, 35.6 per cent in the Syrian Arab Republic and 82 per cent in Egypt. The disparity in female representation was due to the discrepancy in the numbers of working women in the industrial sector in the three countries, as well as the practical problems that confronted the carrying out of the studies on larger samples. Nevertheless, a wider representation of females in the three samples was taken into consideration.

The total size of the three samples reached 862 workers, including 362 in the electronics industry and 500 in the pharmaceutical industry. The total number of females in the three samples was 534 and the total number of males was 328.

Concerning the social and demographic characteristics in the samples, the studies differed in reviewing the details of these characteristics although the questions in all the forms and the analysis unit were the same. The reports considered the female and the male worker as a unit of analysis inside the industry.

1. Demographic characteristics

The tables below indicate the following:

(a) Age

The age structure of female and male workers in both industries, and the total number in each age category differed. The variance of the quantitative sequence of age structure for males and females denoted the increase of the number of male workers from one category to another until retirement age, when it decreased; the number of females fluctuated between increase and decrease according to social status, the quality of responsibilities and priorities. For example, the Egyptian report on the pharmaceutical industry indicated that the average age was 37.76 for females and 40.62 for males; the highest number of females were 40 years old or more (42 per cent), and most of the females were married. The large number of females in this age category reflected their declining role as mothers at this age, and their need for extra income. The percentage of females in the age group 20-30 reached 35 per cent, most of whom were married. The high percentage of female workers in this age group was due to the high cost of living, the need for additional income and the relatively older age of marriage of female workers, which lessened the possibility of their having children in the first years of marriage. The percentage of females in the age group 30-40 declined to 19 per cent, most of whom were married. This age category was considered the age of highest fertility for women owing to the high average age at marriage. At this age, female productivity was less when there are no child-care services; the number of working women therefore decreased.

The majority of female workers left their children in nurseries, and only three females (9.4 per cent) left them in the factory nursery. More than one third of female workers believed that having children was an obstacle to their participation in the labour force; therefore, many women used contraceptive devices.

In connection with the electronics industry, the age differences between the sexes were less compared with the pharmaceutical industry; the age averages amounted to 42.94 years for males and 39.59 years for females. The percentage of those between 30-40 years old increased to 40 per cent and the percentage of those 40-50 years old decreased to 30 per cent.

The Syrian report stated that 51 per cent of the females in the pharmaceutical factory were over 40 years old, 19 per cent between 30-40 and 16 per cent between 20-29. As for males the percentages of both categories (20-30 and 30-40) reached 42 per cent and 38 per cent respectively. In the electronics factory, the age structure of females was young, as 47.4 per cent of the females were under 30 years of age and only 5 per cent were over 50. In general, the female workers in the Syrian Arab Republic were younger than males, and their ages were concentrated in one category while the variances in age distribution for males were obvious.

The Jordanian report only noted the average ages in the pharmaceutical industry: 21 for females and 29 for males. In the electronics industry, the average age of workers was 24 for females and 26 for males. The age in this industry is considered young and is due to the recency of the electronics industry in Jordan, and because the private sector employed young, newly graduated workers.

(b) Marital status

The Egyptian report on the pharmaceutical industry stated that most workers were married. In the electronics industry the percentage of married males was higher (88 per cent) than females (81 per cent).

In the Syrian report on the pharmaceutical industry, a higher percentage of unmarried females (57 per cent) was noted, against 42 per cent of males. In the electronics industry, the percentages of unmarried females and unmarried males were 49.3 per cent and 30.6 per cent, while the married females and males were 46.6 per cent and 69.4 per cent respectively.

In Jordan, 89.3 per cent of the female workers in the pharmaceutical industry were unmarried and 10.7 per cent were married. The percentage of married males reached 52.6 per cent and the percentage of unmarried males 44.7 per cent. In the electronics industry, the percentages of unmarried workers amounted to 87 per cent and 58 per cent for females and males respectively. The reason for the high percentage of unmarried female workers is due to one or both of the following: (a) the administration practice not to hire females; and (b) the preference of married females to stay at home (the percentage of married female workers was only 13 per cent of the sample).

2. Social and economic characteristics

(a) Education

Most country studies reports confirmed the high level of education for the workers in the samples of the pharmaceutical and electronics industries owing to the special technological and scientific requirements for these industries. The reports also revealed disparities in the education levels in favour of females. Only in the Egyptian report was a high percentage of females with intermediate-level certificates noted in the pharmaceutical sector: 28 per cent of the females had completed preparatory classes and 38 per cent secondary, against 10 per cent and 22 per cent of males. As for the electronics industry, the percentage of females who completed secondary classes was

64 per cent and the percentage of females who completed preparatory classes 33 per cent, against 50 per cent and 10 per cent respectively for males. The percentage of barely literate male workers reached 32 per cent against 6 per cent of females. In electronics, the percentage of females who had completed secondary classes was 64 per cent and the percentage who had completed preparatory classes was 33 per cent. The respective figures for males were 50 per cent and 10 per cent.

The Syrian report on the pharmaceutical industry reached almost the same conclusions: 70 per cent of the females finished secondary-level courses against 63 per cent of the males, and 27 per cent of the females and 32 per cent of the males completed primary or preparatory classes. In the electronics industry, the percentages of the primary, preparatory and secondary and above certificate holders amounted to 24.7 per cent, 43.8 per cent and 31.5 per cent of females respectively, against 14.5 per cent, 14.5 per cent and 71 per cent of males. This means that more than two thirds of the workers in the company were either university graduates or secondary certificate-holders.

The Jordanian report revealed that the majority of the labour force in both industries had completed secondary level or above (90.3 per cent of the female workers and 94.7 per cent of the males). This indicated that the pharmaceutical industries tended to employ the workers at the required educational level for these industries.

The electronics sample came to the same conclusion. The percentage of females who had completed secondary level or above was 92.5 per cent against 100 per cent of the males.

(b) Home ownership

The ownership of houses was usually a reflection of the economic standard of the families, while the sharing of one residence was a reflection of a low standard of living.

The Egyptian report stated that 42 per cent of the male workers in the pharmaceutical industries owned their houses against 25 per cent of the females. About 73 per cent of the females and 58 per cent of the males lived in rented houses. On the other hand 78 per cent of the females lived in rented houses and only 30 per cent of the males and 20 per cent of the female workers owned their houses. The prevailing traditions and the responsibility of men to provide the residence accounted for those indicators.

The Syrian report did not refer to the house ownership of workers in either industry.

The Jordanian report revealed that 65.6 per cent of the females and 36.8 per cent of the males working in pharmaceuticals owned their houses while 28.7 per cent of the females and 47.7 per cent of the males lived in rented houses. In electronics, 62 per cent of the females and 70 per cent of the males owned their houses and 10 per cent of the females lived with their families. This conforms to the traditions prevailing in Jordan, among which is the continuity of the extended family.

(c) Number of household families and dependants

The number of household family members and dependants was almost the same for females and males in the Egyptian reports on both industries. The average number of family members in households of male workers reached 5.52 persons against 4.82 for households of female workers, while the average number of dependants per male was 4.24 against 3.61 per female. The average number of household family members ranged between 4-8, which is relatively low. In electronics, the sizes of household families for both males and females were almost the same, but there were differences in the average number of dependants, which reached 3.54 persons per male against 1.40 per female. Although the role of females in supporting the family was limited, the contribution of the supporting working females was an indicator of women's contribution to the family budget.

In the Syrian report on electronics, a difference between the sexes was noted with regard to size of household family. The majority of males belonged to medium-size and large families. A distinction also existed with regard to the average number of dependants, which reached 3.5 persons for the male worker against 2.3 persons for the female worker. This is attributed to the higher percentage of married males, and the traditional responsibilities assigned to husbands. As for the number of children per family, no males or females working in electronics had 10 or more children; 38.5 per cent had less than three children and 13.3 per cent had 4 to 6 children. The effect of work on the number of children per family was apparent. The average number of children per worker in the total sample of the company was 3.2 (approximately the same average per female). Of the total number of workers (females and males), 47 per cent had less than 4 dependants and 8.3 per cent had no dependants.

In the pharmaceutical industries in Jordan, most females were single and were living with their extended families. Concerning the percentage of dependants, 63 per cent supported less than five persons against 76.3 per cent for males because most females were unmarried. In the electronics industry report, the average number of

household family members was 4.4 for married females, and for the rest of the sample this number reached seven to eight. The highest percentage of dependants was for married males (five persons) and for unmarried females (4.2 persons), against 3.5 persons for unmarried males. This result conforms to the traditional responsibilities of husbands and single women in Jordanian society, which obliges these groups to support family members. The limited number of household family members was an indicator that the nuclear-type family is prevailing, owing to the social changes in the society during the past few decades.

B. WORK AND PRODUCTION CONDITIONS

1. *Actual years of work*

This indicator reflects expertise, stability and satisfaction with work. The Egyptian report pointed out that 25.3 per cent of the total number of persons in the sample of the pharmaceuticals industry had worked between 5-10 years. The average number of years of work was 16.72 for males and 16.1 for females. The two groups were close in the data pertaining to age and years of work: the oldest persons in both groups were between 40-50 years of age and had worked more than 10 years. In electronics, 32 per cent of males had worked from 25-30 years and 28 per cent of the females had worked from 20-25 years. About 94 per cent of the females had not worked before, and more than 68 per cent of the males had not held previous jobs. Of the females who were working for the first time, 98.3 per cent had intermediate certificates compared with 70.6 per cent of the total number of workers. This is due to the emigration of male holders of such certificates.

The Syrian report indicated that 60 per cent of the female workers in pharmaceuticals had worked less than five years against 53 per cent of the males. The difference in this respect was in favour of the males. In electronics, the percentage of females who had worked more than 10 years reached 16.6 per cent; the number of females who had worked less than one year was 14.6 per cent; the number who had worked from 1-2 years was 20.2 per cent; from 3-4 years 20.4 per cent; and 27.9 per cent had worked from 5-9 years.

In the Jordanian report the data showed that the number of years of service in the electronics industries did not exceed 7. Fifty-one per cent of females had not held jobs before, against 45 per cent of the males. The data further revealed that 87 per cent of the females and 85 per cent of the males had been hired recently. The average number of years of service for senior workers reached 7 for females and 4 for males, which confirmed the stability of female workers in their work. In pharmaceuticals the

report did not mention any data, which signified the recency of both industries in Jordan compared with the Egyptian and Syrian industries.

2. Stability in work

This is another indicator of satisfaction with work. In the Egyptian report, it was stated that contentment with work was related to the Egyptian character. Concerning the desire to change jobs, many workers in pharmaceuticals wanted to leave their current jobs because of the low standard of wages, the limited incentives and the availability of other job opportunities inside the country or abroad. The females wanted to change jobs because their current work was too tiring. In electronics, the tendency of females to change jobs was less than that of males: the main difficulty for females was coping with all their responsibilities. Many females wanted to change jobs because of the work risks, uncleanliness of the workplace and maltreatment, in addition to the inconvenience of work and exhaustion.

The Syrian report indicated that the low wages in pharmaceuticals were the main motivation for workers to change jobs, especially those who worked in the public sector. The report stated that 80 per cent of males and 46 per cent of females expressed dissatisfaction with their incomes, compared with a percentage of 18 per cent of the males and 16 per cent of the females who worked in the private sector. The percentage of those satisfied with their work was 68 per cent of females and 50 per cent of males. The dissatisfaction of females was attributed to work hardships (53 per cent) then work risks, inconvenient environment and boredom. About 58 per cent of the females preferred to work at home, while 71 per cent preferred to work part time. In electronics, the data referred to the percentage of male workers who tended to change their jobs (50 per cent against 31.5 per cent of the females). This was expected, taking into consideration that the man is usually responsible for the family income and consequently looks for a better job more in line with his qualifications and skills. The main reason for the tendency of women to change jobs was the problem of coping with work both inside and outside the house (63 per cent).

In pharmaceuticals, the Jordanian report stated that a high percentage of females and males desired to change jobs (65.6 per cent of the females and 21 per cent of the males). This proved that men were cautious in leaving their jobs owing to the high level of unemployment and their heavy financial burdens. The essential motivations for changing jobs were work hardship (48.4 per cent of females and 35.8 per cent of males) and working hours (8.3 per cent of females). Most of those workers desired to change their careers completely. In electronics, 77 per cent of the females and 82 per cent of the males had no intention of changing their jobs, owing to the recency of this industry. Of those who desired to have another job, 63 per cent of the females

mentioned several reasons: working hours (33 per cent), transport problems (22 per cent), and family circumstances (22 per cent). Out of the males, 64 per cent preferred to change their jobs inside the factory.

3. *Specifications of work equipment*

This variable comprises the technological level of the system of work inside the factories.

The Egyptian report stated that 82 per cent of the total number of workers in the pharmaceutical factory worked in the production divisions against 44 per cent of the males. The females were more expert in using the mechanical instruments, because of their accuracy and dexterity. Seventy-nine per cent of the females worked with their hands; most of them had intermediate certificates, against 64 per cent of the males. About 51 per cent of the females worked in the operation divisions and 24 per cent in the control division, a finding which confirmed that females were engaged in jobs inappropriate to their qualifications. The report of the electronics factory revealed that 82 per cent of the females worked in the production divisions against 50 per cent of the males. Ninety-five per cent of the females used their hands and manual instruments against 70 per cent of the males. This result affirmed the fact that women's work was concentrated in some divisions while jobs varied for men.

The data in the Syrian report indicated that most jobs assigned to females in the pharmaceutical industry required high qualifications. Both sexes were required to be well-educated and trained. As for electronics, the report mentioned that 14 per cent of the workers used mechanical and electric machines while 29 per cent worked with their hands. The percentage of females who used automatic instruments amounted to 59.5 per cent against 49.5 per cent of the males. The percentages of those who used mechanical instruments were equal for both sexes.

The Jordanian report stated that working with the hands and manual instruments was the prevailing system for females (68 per cent), although 28 per cent used mechanical and automatic machines. Concerning males the percentage was 36.8 per cent for using hands and 39.5 per cent for mechanical and automatic machines. In electronics the nature of the job varied for both sexes, as 61 per cent of the females were engaged in the agriculture line in electronics production where no males worked. Work in this line did not require any skills; it only needed qualities of patience and accuracy which the females possessed. The highest percentage of males were working in the verification line (29 per cent); in titration and maintenance the percentage reached 23 per cent for each sex.

4. *Wages*

The Egyptian report revealed that sex did not affect the total wages or the averages; wages only differed according to the workers' educational level and years of experience. Those who received overtime were 26 per cent of the males and 25 per cent of the females; the difference in average was in favour of females. Concerning bonuses the percentage was 69 per cent of females against 50 per cent of males. Females also received more compensations (5 per cent) against nothing for males. In electronics the total wages were the same for both sexes. The overtime was approximately the same and the percentage of workers who received a bonus was 90 per cent for both sexes. As for compensations the percentage was 16 per cent of the females and 8 per cent of the males, with no disparities in the averages. Both factories were public sector and that ensured the rights of female workers.

The Syrian report referred to an increase of 3 per cent in the net salary of male workers in pharmaceuticals compared with female workers. This difference is too small to be considered as constituting inequality between the sexes; it could be ascribed to the difference in work quality. The total income of the workers was more than the females by 14 per cent; incentives and bonuses accounted for that difference. In the production and administrative divisions, 98 per cent of the females and 87 per cent of the males got equal net wages, while in the services divisions the females received 9 per cent less than the average salaries of the males. In electronics, wages were allotted according to the quality of work and educational level, in addition to the incentives or compensations. In general, more than half the workers in the factory (57.8 per cent) were at the top of the wage ceiling against 73 per cent of the females.

In the Jordanian pharmaceutical company, the report revealed discrepancies in the average wages of both sexes (152.3 Jordanian dinars (JD) for males and JD 83.4 for females per month). This is attributed to the difference in jobs. The variance was also apparent in the electronics factories. The male worker received an average wage of 27 per cent more than the female (after excluding the two big factories working in this field, owing to the high educational level and expertise of workers in these factories). The difference reached 15 per cent when both factories were counted. This variance is very important when considered against the fact that most of the workers had similar education levels. The same could be said about current job expertise, which was in favour of females. The incentives and bonuses were in favour of males, particularly the overtime. This disparity in wages was apparent in the Jordanian report. In the Egyptian and Syrian reports, wages were similar, and depended more upon education level and expertise; there were only slight differences in the averages. This is attributed to fact that the two industries in Jordan are private sector.

5. Training

All the reports referred to the low standard of training—in particular outside training—because of the problems of finance and debts. Female workers attended fewer courses, especially abroad, owing to their duties at home and family circumstances.

The Egyptian report affirmed the concern of the companies with training, particularly in the pharmaceutical sector. The percentage of female workers who participated in local training courses was 45 per cent of the total of female workers against 24 per cent of the males. Concerning outside training the percentage was 18 per cent of the males and 6 per cent of the females. In electronics the number of females who attended local courses was higher than that of males. The programmes were confined to workers in the engineering and production divisions.

In the Syrian report the findings revealed limited training opportunities for both sexes in pharmaceuticals. Only 9 male workers and 11 female workers attended at least one training programme; all the training comprised local courses except for the cases of one male and two females who were trained abroad.

The Jordanian report revealed discrimination in pharmaceuticals, with 73 per cent of the females and 63.2 per cent of the males affirming that they had not attended any courses inside the country. With regard to outside programmes, 5.7 per cent of the females and 10.5 per cent of the males had been sent abroad. In electronics, 15 per cent of the males had attended outside training courses. The factory administration concentrated on training programmes inside the factory. There was a significant indicator in electronics, which was the high percentage of workers who participated in courses on their own initiative (26 per cent of the females, 24 per cent of the males for inside training, and 8 per cent of the females and 12 per cent of the males for training abroad). This indicated a desire to acquire more expertise and knowledge.

6. Services

All reports cited numerous services inside the factories surveyed.

The Egyptian report stated that 68 per cent of the males and 61 per cent of the females continued in their jobs because of the services provided by the pharmaceutical factories. In electronics 74 per cent of the females and 60 per cent of the males reported that the services supplied were the main reason for their continuity in the factory, and that the most important of those services were medical care and transport.

In the Syrian report 43 per cent of the females and 6 per cent of the males corroborated the importance of the services as a reason for their continuing to work in the pharmaceutical factory; they benefited more from the transport, medical and nursery services.

The Jordanian report stated that the most readily available services in pharmaceuticals were transport (25.6 per cent) and medical care (15.6 per cent), which had a positive effect on both sexes. In electronics, 47 per cent of the females and 58 per cent of the males reported that the services provided were a significant reason for their continuing to work.

C. PROBLEMS

The reports referred in general to some troubles faced by both sexes, among which were work hardships and working hours; other difficulties concerned only female workers.

The Egyptian report revealed the extent of suffering of the females in pharmaceuticals owing to the dual role performed by married workers inside and outside the home; 41 per cent of the females had problems in looking after their children; 33 per cent mentioned other difficulties such as working conditions and exhaustion. Female workers did not feel any discrimination between the sexes although the statistics disclosed a bias in favour of males in training opportunities, work quality, incentives, promotions and supervision. However, 56 per cent reported that they had no trouble at work; the rest cited several problems including work hazards, boredom and maltreatment. In electronics, 30 per cent of the female workers said that the essential problem was taking care of their children; 26 per cent referred to maltreatment, and 19 per cent to the conditions of work. Nine women said that boredom was their main problem, while 59 per cent said they had no difficulties.

In the Syrian report the main problems cited by female workers in pharmaceuticals were conditions of work and the difficulty of coping with work inside and outside the home (59 per cent of the married women and 20 per cent of the single women). Six workers referred to the difficulty of finding transport and five cited other problems. In electronics the data revealed that 33 per cent of the total number of females found that coping with both responsibilities at home and at work came first; 23.5 per cent mentioned taking care of their children. As for difficulties, 6 per cent faced behavioural problems, 13 per cent were vulnerable to work hazards, 14 per cent to maltreatment and 22 per cent were bored; 43.5 per cent said they had no problems related to discrimination. One third of the female workers reported that the

administration was biased in favour of males in assigning posts (34 per cent) and incentives (23.3 per cent).

The Jordanian report stated that 45.1 per cent of the female workers in pharmaceuticals could barely cope with work inside and outside the home; 13.1 per cent could not cope at all. Neglecting housework was cited by 21.3 per cent, and difficult working conditions by 20.5 per cent. With regard to problems, 70.5 per cent of the female workers admitted that they faced difficulties. Maltreatment was cited by 25.4 per cent of the females and boredom by 23.8 per cent. About 27.9 per cent did not specify the nature of the difficulties they faced; therefore the working conditions should be carefully studied. The answers in the report were the same as in the Syrian report concerning discrimination. Of the female workers, 56.6 per cent admitted that male workers were more fortunate in receiving promotions, in quality of job, in travel abroad and in training. In electronics, 82 per cent of the females said they had no difficulties at work; 45 per cent of the rest said that boredom was the main problem, which accounted for the increase in vacations, particularly the leave without pay taken by the females. About 9 per cent of the female workers mentioned the work hazard and the dirtiness of the workplace. Another essential problem that confronted females was their dual role inside and outside the home, particularly when their children were still babies. There were no nurseries in the factories although the Jordanian labour law stipulated the provision of nurseries for female workers.

D. PARTICIPATION

The Egyptian report stated that 76 per cent of the females in pharmaceuticals contributed to the family budget by half or more while 16.2 per cent contributed less than half. The same process existed in electronics where 90 per cent of the female workers contributed half or more of the budget, and 8 per cent less than half. Married females made up the majority of the female contributors. These results supported the belief that women's work and their contribution to the budget gave them the opportunity to participate in some family decisions, such as education of their children, expenditure from the family budget, purchasing and selling property, and marriage of sons and daughters. Participation in unions, parties or political activities was very low for both sexes, as 80 per cent of the total number of male workers and 89 per cent of the total number of female workers did not participate. In electronics 99 per cent of the females and 90 per cent of the males were not members of any party, and 89 per cent of the females and 68 per cent of the males were not members of the union committee. This is attributed to the fact that right of participation is acquired by laws, in addition to the incapability of the unions and parties to satisfy the real social and political requirements of the workers.

Concerning the contribution of workers to the work decisions in the division and the company, the data revealed that 36 per cent of the total number of females participated in the decisions on the division's affairs in the pharmaceutical factory against 26 per cent of the males. In the electronics factory the percentage of contributors to the division affairs decisions reached 60 per cent of the males and 27 per cent of the females. This is attributed to the higher level of education of the workers in this industry.

In the Syrian report on pharmaceuticals there was no mention of the expenditure of female workers' income. Female workers in electronics worked to support their families (48.5 per cent of the married female workers). As for family decisions, 49 per cent of the females shared in purchasing and selling decisions, 50 per cent in their children's education, 34.2 per cent in the marriage of their sons and daughters and 93 per cent in the expenditure of the budget. The percentage of participation of both sexes in union membership was high in the public sector; those who worked in the private sector did not participate in unions. The number of males who were members of the parties was more than double the number of females, most of whom were workers in the private sector. Concerning participation in the decisions of the division or the company in electronics, the percentage of those participating amounted to 29.5 per cent of females and 52.6 per cent of males, owing to the assignment of supervisory posts and essential responsibilities to male workers.

The Jordanian report confirmed that most of the female workers in the pharmaceutical company were new in production. The main reason that they were working was to contribute to the family income (27 per cent) and to have a personal income (26.2 per cent), i.e. 53 per cent of the females worked for financial reasons; 86.9 per cent of those females contributed half their salaries to the family budget, while 5.7 per cent made no contribution. This result demonstrated the importance of work for both married and unmarried females to support the family financially. In electronics, 67 per cent of the married workers and 38 per cent of the single workers provided more than half of the family income, while 33 per cent of the married females and 36 per cent of the single females provided less than half. All married females contributed to the family budget, and 26 per cent of the unmarried provided no contribution. The participation of females in company and division decisions was very limited (25 per cent of the females and 48 per cent of the males in electronics). With regard to pharmaceuticals, the percentage of contribution reached 52.6 per cent of the total number of males and 29.5 per cent of the total number of females. The low level of female participation was attributed to the assigning of important responsibilities to males. Membership in unions and parties was low (4 per cent of the females and 12 per cent of the males were union members, and no females and 6 per cent of the males were party members). This reflects the negative role of the

specialized trade unions in representing the workers' needs and protecting their rights. For this reason, female workers did not complain to the unions or parties when confronted with injustice at work. About 55 per cent of the females were not convinced that the union played an effective role in lessening discrimination against workers.

E. FINDINGS AND RECOMMENDATIONS

1. Results

All the reports included a special section for the findings reached on the basis of the questionnaire and the analytical data.

(a) The Egyptian report

(a) The qualitative review revealed that the age structure had a social significance that reflected women's suffering from their dual role. Along with the high rate of young single workers, a high rate of working women of progressively older ages was also noted, as the women's responsibilities as mothers decreased with age. There was a difference in the averages of men and women in the age structure. The age of men increased from one stage to another till the age of retirement, when the number of male workers decreased. As for females, the average fluctuated according to the age stage and its relation to the responsibilities of the women as wives and mothers.

(b) The productivity of females was limited compared with men owing to the following reasons:

- (i) Non-availability of suitable training courses required for the industry;
- (ii) Inability of the women to work overtime;
- (iii) Underestimation of women's qualifications;
- (iv) The desire of women to work to contribute to the family income without caring about their productive role, or participating in the labour market and developing their skills;
- (v) The need to look after children, which was considered the main obstacle affecting the women's productivity in comparison with male workers. The credibility of this idea was confirmed when most female workers

admitted that they worked only to contribute to the family income;

- (vi) Discrimination between men and women in assigning jobs in the factory, particularly the supervisory assignments, almost all of which were confined to male workers. This resulted in the men acquiring more expertise than the women.

(b) The Syrian report

(i) Pharmaceutical factory

(a) Female workers were younger than their coworkers and were concentrated in one age category, while the difference in male workers' ages was apparent;

(b) Unmarried females reached 57 per cent against 42 per cent of the males;

(c) The percentage of females who had completed secondary level was higher than males among the younger workers, which indicated that the factories employed more younger female graduates than males;

(d) Wages for both sexes were equal in the factories of the public sector. Slight differences in wages were due to disparities in the nature of the work and inaccurate information offered by the workers surveyed;

(e) Additional wages were higher for males because of the variance in overtime hours;

(f) The male workers received a higher average of wages owing to more incentives and bonuses. The actual years of service accounted for this discrepancy, and not the education level, which was equal for both sexes;

(g) Female and male workers were distributed according to the nature of the jobs: 29 per cent of the females performed bottling and packing jobs against 4 per cent of the males, while 24 per cent of the females and 40 per cent of the males worked in the production lines;

(h) Training opportunities inside and outside the country were better for males;

(i) All jobs undertaken by females in pharmaceuticals required special high-level skills that needed expertise and years of education and training to acquire;

(j) The percentage of those satisfied with work and wages was higher among females than males. Male workers were more inclined to change jobs and transfer to the private sector;

(k) Gender-based discrimination was found in regard to promotions. Male workers were assigned more supervisory responsibilities;

(l) Females appreciated services offered by the factory more than males;

(m) All workers in the public sector were members of the union. This was not the case in the private sector;

(n) The participation of female workers in social activities inside and outside work and in their own districts was difficult to evaluate. Long working hours, and family responsibilities lessened the amount of leisure time of the female workers, so they had little spare time to pay visits, practise sports, take trips or enjoy social activities. They scarcely had time to visit close relatives.

(ii) Electronics industry

(a) The percentage of males who desired to change jobs was higher than females;

(b) The age structure of the females was young: the average age of the females was 32;

(c) Working women faced several problems, the foremost of which was coping with work inside and outside the house, and family responsibilities;

(d) Most female workers could hardly manage to carry out all their duties; those who answered that they could were single or had no children;

(e) The two main reasons for females to work were contributing to the family income and income generation. The answers varied according to marital and educational status;

(f) Women had to undertake many duties without assistance at home. All the women did housework and looked after their children without any help;

(g) Most female workers left their children in government, private or company nurseries;

(h) There was clear discrimination in favour of males in training, incentives, assignment of posts, and travel abroad, in different percentages. The highest percentage of discrimination was in assignment of posts.

(c) The Jordanian report

(a) Women's participation in pharmaceuticals was distinguished by a larger number of workers than other industries such as electronics, engineering or traditional industries. Women occupied production and administrative posts in pharmaceuticals and in the laboratories and medicine quality control divisions. The following results were noted:

- (i) Preference to promote males;
- (ii) Bias towards employing males in some activities;
- (iii) Lack of vocational training for female workers;
- (iv) Difficulty for women to continue to work after marriage and children, which obliged them to dedicate all their time to looking after the children;
- (v) Maltreatment of some female workers and other behavioural problems faced by women;
- (vi) Confining of health services to the female worker without serving her family as well;
- (vii) Non-existence of special services for women, such as nurseries;
- (viii) Traditional concepts of society concerning women's work which did not excuse any negligence in household duties.

(b) The participation of women in the electronics industry seemed more promising: the percentage of women's participation was 21 per cent of the labour force. In the production division, female workers represented 72 per cent of the total number of females working in this industry.

- (i) Recent female graduates were working in this industry but they lacked experience and the required specializations for electronic industries. They were employed at low wages. The private sector benefited from the

available workers with a high level of education in a period when job opportunities were scarce;

- (ii) Jobs requiring low-level technical skills were still assigned to women in the production lines (although both sexes lacked specialization and the skills required for this industry). The administration attributed this fact to the refusal of males to take such jobs, and to the patience and accuracy of the female workers. The female workers reported that they got bored with these jobs which were characterized by repetition and routine;
- (iii) Although the labour law stipulated equality between both sexes in rights and duties, the absence of supervision by the agencies concerned encouraged the factories in the private sector to practise discrimination and not to abide by the labour law;
- (iv) Discrimination appeared also in the health services (health insurance) offered to females, which was limited to the female without her family; such was not the case for her male coworkers;
- (v) Coping with all duties inside and outside the house was a problem for female workers because the administration did not provide special services such as nurseries and refused to be flexible in working hours;
- (vi) The factory administration avoided employing married women so as not to implement the labour law which granted some rights to females such as provision of a nursery in factories that employed 30 or more married women;
- (vii) The above-mentioned problems affected the productivity of female workers in the factory as well as the energy they had to participate in social activities. Women accepted difficult working conditions because their main motive for work was the financial need to sustain the family; moreover they were unaware of their rights and duties, and the unions were too weak to protect female workers.

2. Recommendations

Changes in the role of women are still confined to theories which claim to change women's lives and behaviour; however, nothing has ever been planned to translate these theories into economic and social policies and programmes.

(a) The recommendations of the Egyptian report

(a) It is important to carry out research, social, procedural and evaluation surveys concerning the duties of working women so as to diagnose and analyse the reasons for this conflict of roles, and then propose a pattern of social policies and programmes. It is not sufficient to analyse this problem; it should be overcome scientifically through practical and procedural process and by well-studied procedures.

(b) It is necessary to exploit the skills that distinguish women, such as the ability to work with their hands, as well as accuracy and the ability to work with mechanical instruments.

(c) The content and significance of social services in the industrial sector must be reviewed and developed, so as to confront the difficulties and challenges of social life and satisfy the basic needs of the female worker.

(d) All concerned agencies in training, education and industry must participate in preparing a plan for developing the labour force.

(e) A plan must be designed for gradual improvement of workers' qualifications in the factory with several levels of the required qualifications.

(f) Training must be expanded to all educational stages.

(b) The recommendations of the Syrian report

(a) The statistical data about manpower in industry must be updated and classified by gender and issued annually, particularly for the modern industries and the private sector.

(b) Current labour laws in each country must be reviewed, especially those concerning the employment conditions for women in production and industrial jobs, and those laws must be updated according to industrial technology development.

(c) Private sector companies must organize workers in trade unions, which could assist workers in solving job problems.

(d) There must be a study of how to alleviate the burdens of housework for working women; these burdens hinder their contribution to economic activities, particularly after marriage and children, owing to the unavailability of services to assist those women who want to work outside the home.

(e) More flexible working hours should be applied, so that married women and mothers can spend more time with their children—women could work part time and would be able to continue working for several years without neglecting any of their responsibilities.

(f) Working conditions inside the factory should be improved, and breaks should be allowed during working hours, the treatment of female workers improved and the technology of the industry developed.

(c) The recommendations of the Jordanian report

(a) There should be equal promotion opportunities for both sexes according to qualifications, skills and years of service in the factory.

(b) Vocational training should be expanded and opportunities provided for study to female workers so that they can improve their possibilities for promotion and be appointed to some leading positions in the different divisions of the company.

(c) Health insurance coverage should be provided to all the family members of the female worker, as is done for her male counterpart.

(d) Nurseries for children should be set up or, as is the practice in some companies, working mothers should be compensated if the factory does not have a nursery.

(e) Shorter working days (5-6 hours daily) should be instituted for married female workers, as was done in several companies and institutions in the developed countries.

(f) The possibility of establishing a trade union for workers in the manufacturing industry in Jordan should be studied.

TABLE 8. THE SAMPLES OF THE COUNTRY STUDIES
(Percentage)

Country	Female production workers out of the total females in the sample	Male production workers out of the total males in the sample	Total production workers out of total of workers in the sample
<i>Egypt</i> 1. Chemical Industries Development (CID) 2. Nasr Company for Television & Electronics	82 82	44 50	69.3 71.3
<i>Syrian Arab Republic</i> 1. TAMECO & OBRI 2. Syrian Arab Company for Electronic Industries	39.1 35.6	68.7 64.4	77.8 71.1
<i>Jordan</i> 1. Arabic Company for Medicine Industry 2. AKMA SAMSUNG GULVIT & SUDICO	83.6 72.0	92.1 59.0	85.6 61.6

Sources: Pharmaceutical industry, and electronics industry.

TABLE 9. DEMOGRAPHIC AND SOCIAL CHARACTERISTICS OF THE STUDY SAMPLES
(Percentage)

Country	Size of sample number		Average age		Education						Marital status						Home ownership				Average family size	
	M	F	M	F	Primary		Preparatory		Secondary and above		Married		Single		Div/Wid		Private		Rented		M	F
					M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
Egypt 1. CID	50	100	40.62	37.36	36	28	10	28	22	38	9.4	78	4	13	0.2	9.0	42	25	58	73	5.52	4.82
	50	100	42.94	39.59	6	2	10	33	50	64	88	81	12	17	-	2	30	20	46	78	5.62	4.82
Syrian Arab Republic 1. TAMECO & OBRU	95	95	31.2	28.8	32*	27	-	-	63	70	55.8	39.7	42.1	56.9	2.1	3.4	94	70	6	30	6.68	1
	62	73	-	32	14.5	24.7	14.5	43.8	71	31.5	69.4	46.6	30.6	49.3	-	4.1	-	-	-	-	-	-
Jordan 1. Arab Company for Pharmaceuticals	38	122	29.2	21.4	-	0.8	2.6	9.7	94.7	90.3	52.6	10.7	44.7	89.3	-	-	36.8	65.6	47.4	28.7	4.4	-
	33	44	26	24	-	8	-	-	100	92	42.4	13.2	57.5	86.7	-	-	70	62	30	38	-	-

Sources: Pharmaceutical industry; and electronics industry.

*Including primary and preparatory.

IV. REGIONAL RECOMMENDATIONS

The recommendations included in this chapter were formulated to submit proposals that could improve the conditions of working women, particularly in industry. They are aimed at developing and maximizing the economic participation of Arab women workers.

The following proposals are based on two kinds of research activities. The first focused on obtaining a clear picture of the situation of women workers and on how to develop and improve their conditions. The second covered practical and effective activities that would directly attain that goal.

WOMEN'S PARTICIPATION IN THE PRIVATE INDUSTRIAL SECTOR

The studies and research carried out on women's participation in industry indicated that the highest percentage of female workers was in the manufacturing industries. Although the public sector absorbed the largest number of workers in this industry, the private sector contained the highest percentage of women workers as permanent workers or owners of small enterprises. There was no law to protect them, and their work was not registered in any official statistics. This applied to women working in all industries, including food-processing, tobacco, pharmaceuticals, chemicals and electronics, with some disparities from one country to another. No macro data could be obtained about the circumstances and characteristics of the economic participation of women in order to deal with, plan for and develop this participation, without studying the situation of workers in the private sector. This importance of the private sector has also been increased because of the following:

(a) The accelerating tendency of the Arab countries to liberalize their economies through privatization, so that the private sector becomes the prevailing and governing sector in the national economy;

(b) The unfair conditions linked to participation of women in the private sector, which is often dominated by businessmen who ignore the laws that protect women's rights by refusing to employ females so as not to allow them leave for childbirth and child care. By so doing, they diminish the economic participation of females;

(c) The lack of detailed information about women in industry seriously hindered efforts to increase women's participation.

REGIONAL RECOMMENDATIONS

Research on the relation between working in a factory and marital status of women workers with regard to the following issues

(a) The impact of work on single women, as it affects their marrying and having children, and unmarried males' attitudes about marrying working women, taking into consideration this impact on the relationship and the way of managing all duties inside and outside the home;

(b) The interrelated effects of married women's work, family stability and having children;

(c) The attitudes of businessmen and company directors about the marital status of working women and its impact on their participation in the labour force; the manner of influencing those attitudes should be studied to develop and maximize the economic participation of women working in industry;

(d) The scope and role of special services that could be offered to working women to increase their capacity to continue working and improve their productivity. Those services should be developed qualitatively and quantitatively through the contribution of businessmen and directors of large economic institutions and local and foreign organizations;

(e) The conducting of a study on the relation between women's work and their role in raising children and whether the educational level of working women increases their capability to bring up their children better than housewives. Many people have assumed—without any serious research—that if women work outside the home, their children will fail in life. Others have claimed—without serious references—that since female workers were more educated and experienced they were better able to raise their children properly;

(f) The carrying out of studies of the Arab countries' labour laws that govern women working, particularly those concerning industry, then analysing the theoretical shortcomings, and the gap between theory and practice. The studies should cover the means used to flout the labour laws, and how to improve and develop these laws to prevent this, so that the laws become more effective in promoting conditions for women's economic participation;

(g) A survey on the attitudes of businessmen and company directors, concerned ministries and Parliament members towards issuing a law that would determine a minimum extent of women's participation in economic enterprises, and give women the opportunity to contribute to all aspects of production and

administration, as well as allowing them the same training and promotion opportunities as men.

Proposals to maximize women's participation in industry

1. Centres could be established in the workplace, or in crowded residential districts, with a public laundry, a facility with take-out meals and a nursery. All of these would be directed by females so that women workers could find all the needed services in one place. This could lessen their burdens at home. Those centres could be financed through the donations of businessmen and big economic institutions and foreign and local organizations. Governments should assist by providing the necessary sites and decreasing the prices of the energy needed for those services. These services should be provided at cost price in order for them to become financially self-sufficient and self-sustaining.

2. The necessary financing should be provided (through businessmen, public sector industrial institutions, foreign and local organizations, and social welfare funds) to establish several small centres for training females in the technical and administrative skills required and appropriate to the industrial sector in each country. Females could also be trained in safety and health measures at work. These centres should qualify expert women workers, improve their technical skills and supply enterprises with the female workers required.

3. Arab Governments should enact laws making it mandatory for the owners of institutions that employ more than 30 females to organize literacy classes. Several small factories could join in such a service. It should be stipulated that the women's success in the literacy classes would be a condition for their continuing in their jobs.

4. Effective programmes should be initiated to change the rigid distribution of work between males and females. As a result of the prevailing traditional system, women carry out their multiple duties at home and at work without assistance, and feel that this is their natural role. This system placed men under tension: they believed that assisting women in shouldering family burdens affected their manhood, although their personal beliefs often were in contradiction to this. To change such a system automatically or in a short time, organized mass media campaigns need to be arranged. Such campaigns should be directed to agglomerations of females and males and to educational centres so as to have an effective influence on young people starting from childhood.

5. The scientific education and skills level of women should be enhanced by encouraging universities and scientific research institutes to receive more women

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students, and by removing any problems that hinder women from specializing in technical and scientific education in universities and technical and vocational institutes.

6. The conditions of the industrial labour market in the Arab countries should be analysed to discover the real shortages in several job areas. Although there are many female job-seekers, most do not find jobs to fit their qualifications.

7. Research from surveys should be used which identify more accurately the averages of women's industrial activity by obtaining data pertaining to the size of industrial institutions, their activities and the average number of females working in these activities.

8. The system of measurement in the survey studies, which depended upon the unemployment factor, should be reformed. This factor should be replaced by the extent-of-readiness-to-work factor, so as to take into account those workers who have given up trying to find a job, especially females who could not find a job in the technical and scientific fields.

9. Research should be undertaken on systems and ways to increase the demand for female labour in the productive private sector and in several careers that were traditionally not available for Arab women.

V. COUNTRY CASE-STUDIES ON PARTICIPATION OF WOMEN IN THE TEXTILE, FOOD-PROCESSING, PHARMACEUTICAL AND ELECTRONICS INDUSTRIES IN WESTERN ASIAN COUNTRIES

This chapter includes the case-studies which were undertaken by research groups in Egypt, Iraq, Jordan, the Syrian Arab Republic and Yemen to study the conditions of women workers in the textile, food-processing, pharmaceutical and electronics industries, as female participation in these industries is higher than in any others. The studies were also designed to identify the common characteristics of working women for the purpose of suggesting proposals to develop their skills and improve their work, as well as identify the conditions that affect women workers in these industries, the problems facing them, the extent of participation in decision-making and how women can manage to meet all their responsibilities.

All the research groups agreed to choose one public or private sector factory in each industry surveyed in order to ascertain the relative position of women in these industries. A questionnaire was used as an essential tool of the study. It consisted of two parts:

(a) Data concerning economic, social and demographic characteristics, and the conditions of labour and production of both sexes in the same company, for purposes of comparison between men and women in these industries, identifying disparities and similarities, and discrimination, if any, against females.

(b) The second part of the questionnaire consisted of 25 questions to be answered by females only. This part was designed to identify the issues pertaining to women workers in industry, their responsibilities, the problems confronting them, and their opinions about their work and family situations. The questions also referred to the extent of their participation in decision-making at all levels.

The research groups also carried out several open interviews with the directors of the companies concerned to obtain information about working conditions. Some groups made use of office data and statistics of the Central Statistics Agencies, the surveys undertaken by ministries in the countries concerned and the information available in the factories under study.

The research groups were confronted with several obstacles during the surveys, all of which were referred to in the studies. These difficulties led to some variations

in the implementation of the plan agreed upon as regarded the mode of implementation and the study results.

It was agreed that public sector factories would be selected and that the sample should represent relatively large factories that employed a significant number of women workers. The research groups tried hard to comply with this stipulation, but circumstances impeded this in some countries. For example, in Jordan private sector companies were examined instead of public sector companies because of the non-existence of large public sector factories in these industries.

The survey studies of the pharmaceutical and electronics industries were carried out in three Arab countries (Egypt, Jordan and the Syrian Arab Republic) that have more local industrial expertise than other countries. A random sample was selected from chosen factories manufacturing medicine and others that prepared and assembled electronic parts, which are considered intermediate inputs in producing some electric apparatuses such as televisions. The research was undertaken on a sample of females and males, after it was ascertained that numerous female workers with technical and scientific skills were working in these industries, under the current stage of economic transition in the region. That transition included private industrial investment, privatization and industrialization for exporting. The economic, social and demographic characteristics of women workers in the electronics and pharmaceutical industries were identified and compared with the results of the country research previously undertaken in the textile and food-processing industries.

Pharmaceuticals and electronics are among the modern manufacturing industries; for this reason, the participation of women in this field, which requires technical and scientific skills, indicates an increase in women's participation and possibilities for expanding their role in industrial and economic activity and production in Western Asia.

An attempt was made in this review to shed some light on the women working in these industries by identifying their economic, social and demographic characteristics with special concentration on their economic and social circumstances, and the relation between female workers and factory working conditions. The review also examined their work situations, their personal requirements pertaining to promotions, training and services and the main obstacles and issues. The reader should be aware that this research—in spite of the efforts exerted—does not go beyond the study of a limited sample of women working in the textile, food-processing, pharmaceutical and electronics industries in these five countries, covering the public sector—except Jordan—and should consider that this sample representation may or may not be sufficient, according to the conditions of the research in each country. Therefore, in spite of the similarity of the study results with regard to the overall features of

women's position in industry in general and in some industrial sectors in particular, a scientific point of view requires that any attempt to generalize should be viewed with caution.

**A. PARTICIPATION OF WOMEN IN THE TEXTILE AND
FOOD-PROCESSING INDUSTRIES IN EGYPT**

1. Theoretical background and methodology

(a) Study framework

In the past women were confined to six main tasks: having babies, preparing food for others, washing clothes, taking care of invalids, educating children, and cleaning and decorating the house. When women recently started to work outside the house they were specialized in jobs related to their traditional tasks, such as nursing, teaching, bringing up children and cleaning.

There are three main issues that affect women's work. The first is their past seclusion, which hinders women from undertaking certain economic activities—for example, women are not permitted to be judges in Egypt—or indirectly through social pressures and heavy household commitments. Socialization plays a major role in keeping women away from certain jobs that society considers to be exclusively a male preserve. Such social values are part of the prevailing socio-economic system.

A second issue affecting working women is inequality in wages for the same jobs (in violation of laws that protect women) and prejudice against women with regard to measuring productivity.

A third issue involves the attacks made on the roles of women, which lead to psychological disorders resulting in increased rates of divorce and broken families. Such problems have increased the inclination of women to work inside their homes, reinforcing their seclusion and increasing unemployment rates among them. This problem continues owing to the Government's inaction in offering child care services and services related to easing the burdens associated with housework. Another reason is the refusal of men to share in such jobs because of their belief in the traditional distribution of work. At the same time, women who work outside the home are still responsible for their traditional tasks inside the home.

Egyptian working women suffer from all the above-mentioned problems. The percentage of women's participation in economic activities reached only 9.2 per cent

and 11.1 per cent during the period 1976-1986. The conflict of roles affected the mental health as well as the productivity of women working in an atmosphere that offered few services to them. Discrimination against women was evident in the inequality of their wages compared with men doing the same work and in the fact that jobs were offered to men rather than women, especially in the private sector. Besides this there are differences in training opportunities, vocational/study leaves, opportunities for promotion, and incentives and additional wages, even in the public sector.

(b) Research sample

The research sample was chosen from among the workers in ESCO Co. for Textiles and Spinning and Kaha Co. for Preserved Food. These companies were chosen for the following reasons:

- (a) They represent the food-processing and textile industries;
- (b) They are public sector companies;
- (c) The majority of workers are women;
- (d) All workers are working on the production line.

The sample covered 300 persons who represent about 3 per cent of the total workforce of both companies; 52 worked at Kaha (5 per cent of the total workers) and 248 in ESCO (3 per cent of the total employees). The number of women represented was more than that of men since the study was concerned with the conditions of working women. The sample consisted of 187 women and 113 men, 62 per cent females and 38 per cent males. Several age groups from each company were taken into consideration. The analysis depended on the worker unit in both companies. A comparison was made according to sex, because the only important differences between the two companies were in the area of overtime work, health services, and the way the company treated workers.

2. *Social, economic and demographic characteristics of the sample*

(a) Demographic characteristics

(i) Age

The sample included a large proportion of workers between 15 and 24 years of age for women (44.9 per cent of female workers) and 35 and 44 years of age for men

(41.1 per cent of the sample of male workers). Most of the women retired after marriage while the men continued to work.

(ii) Mobility (emigration)

The movement from villages to towns was an important indicator of the nature of the labour market, as this increased work choices as well as job opportunities.

As for place of birth, it was apparent that most female workers were born in urban centres—50.3 per cent in Greater Cairo, 32.1 per cent in other urban centres—while 17.6 per cent were born in villages. With regard to males, male workers born in villages made up 51.3 per cent of the sample, and 11.5 per cent were born in Cairo. About one third of male and female workers (34 per cent) were born in urban centres outside Greater Cairo.

In the survey sample, 47.1 per cent of female workers were residing in Greater Cairo and 45.5 per cent in other urban centres. About 52.7 per cent of the male workers lived in cities, while the rest lived in Greater Cairo (27.7 per cent) or in the village (19.6 per cent). A total of 92.6 per cent of the female workers as opposed to 80.4 per cent of the male workers lived in Cairo or urban centres. The female workers moved from villages and Greater Cairo to urban centres. This explained the location of ESCO in one of the urban centres. The problem of transport was the main reason for female workers choosing to live close to their work.

(iii) Marital status

Married female workers accounted for only 34.8 per cent of female workers. This was due to the fact that most females stopped working after marriage, with all its responsibilities. They would start working very young and stop working after marrying and having children. Unmarried female workers made up 47.6 per cent of the sample of females and those whose marriages had ended for whatever reason accounted for 11.8 per cent. The proportion of married male workers was 91.2 per cent; 5.3 per cent of male workers were unmarried.

Several studies indicated several social changes in the marital status of female workers in the last few years, with more married female workers continuing to work after marriage. But the study sample revealed that the typical female factory worker was poor, young, and unmarried, with a limited education. Furthermore, most factories preferred employing unmarried women.

(b) Social and economic characteristics of the sample

(i) The standard of education

The 1986 census showed an illiteracy rate of 62 per cent for females and 38 per cent for males. Males who had finished primary level accounted for 7 per cent of the Syrian population and females for 5 per cent. The percentage of male university graduates was 5 per cent; female graduates made up 1 per cent of the population.

The research sample approximated these national statistics. The illiteracy rate among females was 48.7 per cent and 22.1 per cent among males. The proportion of females who had finished preparatory classes was relatively high—17.1 per cent—while for males it reached only 9.7 per cent. This was due to the tendency of unmarried female workers to continue to improve their level of education. But this did not change the final situation, which was a higher standard of education among males than among females. It was also noted that the illiteracy rate among female workers in the sample was lower than the national rate. This was due to the literacy classes provided by the public sector factories. About 78.4 per cent of female workers attended these classes as opposed to only 21.7 per cent of male workers (out of a sample of 105 persons). The percentage of female workers who could read and write reached 7.5 per cent and stood at 29.2 per cent for male workers. The percentage of those who had finished primary level reached 21.9 per cent for females and 30.1 per cent for males. Those having finished secondary school, or some other kind of secondary institution, accounted for 4.8 per cent of female workers and 8.8 per cent of male workers.

(ii) Family stability

Family stability can be relevant to a woman's job. For instance, a woman may obtain a job after ending her marriage. At the same time, divorce can be caused by problems associated with the job. The percentage of divorced female workers in the sample was 6.4 per cent, but only 1 per cent among male workers. The percentage of second marriages among females was 93 per cent of the same percentage among males; it should be noted that a man can marry several times and that a woman usually does not marry more than twice.

(iii) Home ownership and number of rooms

Home ownership was a major indicator of economic status. The study results showed disparities. About 25 per cent of females were from families that owned their own homes, while this percentage was 50 per cent among males. This difference

showed the variance in economic status between the two sexes and revealed that financial need may be the main motivation of uneducated women to seek employment.

There were few disparities in the number of rooms in the homes of male and female workers. The average number of rooms was 2.9 for females and 3.3 for male workers.

(c) Characteristics of families of both male and female workers

Most workers came from nuclear families; the percentages were 75 per cent for females and 71 per cent for males. The average number of family members was 6 for the male workers and 5 for the females. The average number of children was 2 for married females with children.

About 89 per cent of the male workers were responsible for supporting their families while 18 per cent of the female workers supported one or more persons in the family. This was due to the high percentage of married male workers who were from nuclear families.

A picture emerged of the female worker: a young woman, poorly educated, from a poor family, and generally unmarried, although there was a considerable percentage of married workers with small numbers of children. The female worker's life was unstable because of the manifold burdens for which she was responsible.

3. *Work and productivity*

(a) Experience

(i) Actual service years

A large proportion of the male workers in the sample (25.2 per cent) had worked for 25-29 years, while 37.8 per cent of the female workers had worked for 5-9 years. This was due to age differences between the sexes in the sample. The average number of working years for male workers was 24, as opposed to 9 among females, which confirmed the analysis about females starting to work young and resigning from their jobs after marriage.

(ii) Past experience and additional jobs

The survey revealed that 68 per cent of females had not worked before, whereas 65 per cent of the males had had previous practical experience. This means that males

were more able to emigrate, and were older. It was also noted that 4 per cent of the female workers undertook additional jobs in their homes (sewing, spinning, weaving) while 14 per cent of males had extra jobs. This result should be interpreted with caution because workers rarely admitted that they had other jobs.

(iii) Desire to change jobs

About 38 per cent of the total workers in the sample indicated that they wished to change their jobs, but different reasons were given by males and females. The most important reason mentioned by males (70 per cent) was low wages, while the main reason mentioned by females (58.7 per cent) was the difficulty of the work. These results showed that men gave first priority to income because they were responsible for supporting their families, while the dual roles of women and the related complications constituted women's main concern after marriage. Alternatives preferred by female workers who wanted to change their jobs included working inside the home (38 per cent) and continuing to work in the public sector, but in another company (26 per cent); male workers indicated a preference for work in the private sector (35 per cent). It was noted that the type of change desired by the female workers was related to the services provided by the public sector that the private sector did not offer; in addition, working in the public sector was less tiring.

(b) Productivity

(i) The degree of complexity in the production process and the kind of machinery used

Most male workers were involved in production processes that required the use of mechanical tools, while female workers were usually engaged in simple manual jobs or using simple machines.

The jobs were classified into three categories according to the degree of complexity: complex jobs, jobs with some degree of complexity, and simple jobs. This classification was based on the instruments used in the job, which were manually operated tools and instruments, mechanical tools and automated machinery. In Kaha there were two categories of work: female workers undertook simple manual jobs, and male workers performed jobs that needed physical strength and mental capability. This classification was decided upon by the division chiefs on the factory floor and in management. The classification was accepted by the female workers in the sample, which reinforced the status quo for women's participation in production, and their low wages. Nevertheless, the distribution of male and female workers according to tools used indicated that 83.4 per cent of female workers used simple mechanical and automated machines and that 76.1 per cent of males worked on similar machines.

(ii) Official working hours

About 67 per cent of the females worked one shift systematically, while 33 per cent of them worked alternating shifts. About 68 per cent of males worked on an alternating shifts system and often took the night shifts. Men could freely choose their shifts.

(iii) Overtime

About 49 per cent of the female workers worked overtime as opposed to only 29 per cent of the males, because the unmarried females had spare time; males were usually busy at outside jobs which they did not admit to having.

The average number of overtime hours for females was 28 hours per month and for males 40 hours. Although the percentage of males working overtime was less than that of females, the males worked more overtime hours on average.

(iv) Absenteeism

Female workers were absent on average about 35 days a year and males were absent about 13 days. The percentage of females who were irregular in work attendance and absent without an excuse was 15 per cent (whereas the rate for males was 4 per cent). This was due to household and family burdens; absenteeism led to deductions from the workers' wages, which they could ill afford since they were from poor families.

The system of leaves was the same for both sexes, but it differed in the type of leave. Women took more sick leaves, while men took more annual and personal leaves.

Few females benefited from maternity leaves, as they were either unmarried or unaware of their legal rights and thus did not insist on getting them. At any rate the married women in the sample had few children, and often could not afford to forfeit any income they earned.

A review of the working conditions for females indicated that they were less expert and more junior. The women indicated a preference for undertaking economic activity at home. As a result of the way jobs were assigned, women gained certain skills and used certain technologies, and preferred to work systematic shifts. They were sometimes obliged to work overtime, yet they were frequently absent without permission because of family burdens.

4. Issues and deterrents: types of discrimination between male and female workers in wages, training, and services

(a) Wages

According to some studies, the difference between male and female workers' wages was about 3 per cent in Egypt. This percentage was less in the public sector, where women preferred to work.

Despite this, the survey showed some disparities in the pay in public sector enterprises, after excluding those who did piece-work, who made up a relatively small percentage of the sample—6.7 per cent.

All workers received the same base pay salaries. With regard to overtime, incentives and bonuses, some workers, and more women than men, said that they did not receive them. Very few female workers stated that they did not get any allowances at all. However, all males benefited from perquisites.

Preliminary results of the study indicated the existence of disparities in the main monthly wages, in favour of males. To eliminate bias, a hypothetical model was designed that embraced separate variables affecting the wage distribution system. Four elements included seniority, complexity of the production process, education level and gender. An analysis of these variables was made to determine the impact of gender on wage distribution among the workers in the sample. The results demonstrated that the monthly wage for a female worker was LE 18 less than for her male co-worker. Nevertheless it should be noted that the previous categorization of gender as a determinant for the difference in wages between the sexes required further study.

(b) Training

Interviews with some of the managers in both factories revealed their belief that some jobs did not suit women; hence training courses were usually targeted at men. Kaha's chairman of the board of directors said that missions outside the country were confined to male engineers and workers. Female workers were excluded from training courses organized by foreign experts. Management officials in ESCO noted that workers chosen for training courses were selected individually. Workers in the sample who had received training made up about 10 per cent of the total factory labour force.

(c) Services

Both factories provided transportation services, nutrition allowances, nurseries and health care. The Kaha factory provided more health services. The following points were noted:

(a) The percentage of those not benefiting from health services in the two factories was 19 per cent for the following reasons: low standard of services provided (39.7 per cent), difficulty in benefiting from the services (50 per cent), and other reasons such as instructions not to supply those services, mental disorders, or ability to manage without health services (10.3 per cent). Among the female workers, 81 per cent benefited from these services as opposed to 71.6 per cent of the males. The services had a positive effect on 29.4 per cent of the females and 36.1 per cent of males, as regarded their staying in their jobs;

(b) Transportation represented the most important service offered to the female workers. About 84.8 per cent of females benefited from this service, as opposed to 95.9 per cent of males. This factor was important in allowing workers to continue in their jobs. Its positive effect reached 28.4 per cent for males and 33.7 per cent for females;

(c) Nutrition allowances had special importance for males (87.4 per cent) and for females (66.7 per cent). Females preferred the morning shift so that they could have lunch with their families, but male working shifts differed, and they therefore needed nutrition allowances;

(d) A housing service was not considered essential, and it was discontinued in ESCO; it was currently confined to senior workers and their families;

(e) A nursery service was not of primary importance because of the limited number of mothers, the majority of whom left their children with their families.

The survey concluded that discrimination against female workers was not always recognized as such by those workers.

Some workers who did perceive discrimination were kept out of the most important posts, which represented the most significant type of discrimination in their view. There was less awareness about actual discrimination in wages, training and benefits such as services. The awareness in this case was not statistically verified, but the study did show real discrimination against females with regard to wages, besides the discrimination with regard to training and the provision of services.

5. Issues and obstacles: women's status at work and their attitudes towards work

(a) Women's attitudes towards work

(i) Degree of satisfaction with work

The percentage of satisfied and dissatisfied females (33.7 per cent and 31 per cent, respectively) was almost the same.

For males the percentage was 43.4 per cent for those who were content in their work. The total proportion of dissatisfied workers in the sample was 32 per cent, a high percentage.

Low pay was the greatest cause of worker dissatisfaction, followed by exhaustion from work. The order of reasons for dissatisfaction was different for men and women because men were primarily responsible for supporting their families. As for women, mistreatment by their bosses was the top concern and was apparent in the interviews undertaken in the field survey. The researchers also noticed the nature of relations between female workers, on the one hand, and directors, division chiefs, and supervisors on the other hand. Previous studies had indicated the importance of improving these relationships.

(ii) Bias towards the hiring of males

It was noted that women's beliefs about men's and women's performance levels were affected by traditional ideas confining women to certain jobs, and were biased completely towards hiring men, who were considered more accurate in their work. About 69.6 per cent of female workers said that they preferred "male" jobs, and 97.6 per cent of male workers said the same thing.

The main motivation for the women to work was to supplement the family income; this was the case for 48.1 per cent of female respondents in general and for about 55 per cent of those who were married. The second motivation for women to work was to prepare for marriage (16.6 per cent); this was followed by self-actualization (12.3 per cent); to help their families (10.7 per cent), that is, providing the sole support; and finally to earn personal income and do something with spare time (4.3 per cent).

(iii) Working part time

The percentage of female workers who wanted to work part time was around 21 per cent of the total number of female workers, while the majority (79 per cent) preferred to work full time—and receive full pay—to contribute to supporting their families.

(iv) Working at home

About 59 per cent of female workers preferred to work at home; no differences between married and unmarried workers were observed on this point. This idea was completely unacceptable to the factory management, which was sceptical that women could work at home without supervision.

(b) The special situation of female workers at work

There were many obstacles and problems facing female workers, some related to their status as women, while others were problems faced by both men and women at work.

(i) Difficulties at work

The most important problem facing women was maltreatment at work (50 per cent), while the poor quality of tools and machinery was the greatest obstacle for men workers (19.6 per cent), followed by maltreatment (13 per cent) and health hazards (12.7 per cent). This latter problem affected only 3.3 per cent of female workers.

(ii) Problems related to procedure and to legal processes

The percentage of those who said they faced such problems was 63.7 per cent of male workers and 74.3 per cent of female workers. As for females they were more likely to suffer from sanctionative measures such as deduction of wages (33.8 per cent), followed by problems related to leave-taking (25.1 per cent). Promotion and pay problems faced 22.2 per cent of male workers, and 19.4 per cent reported that they had run into problems with the sanctions system.

(iii) Morality problems

Although female workers did not readily admit the existence of such problems at work, 11 per cent of respondents said that they had been harassed by their colleagues. The field research team noted these problems and reported that 62 per cent

of women workers suffering from such problems had refrained from taking the recourse measures available.

(iv) Female workers' awareness of their rights

The results showed that 74.4 per cent of female workers had no idea about the level of their posts, as opposed to only 10.1 per cent of male workers. This means, of course, that only about one fourth of the female workers knew the level of their posts, an indication of the extent to which they would be able to defend their rights.

There was a considerable percentage of female workers who had no idea about the breakdown of their pay; they did not know whether an item was an allowance or bonus. For example 11.5 per cent of female workers did not know what their base salary was, 28.4 per cent were uninformed about the amount of additional pay, 32.4 per cent had no idea about their allowances and 14 per cent did not know the precise amounts of their bonuses and incentives; 13.7 per cent were ignorant of profits distributed to workers.

As for awareness of the services available, the results showed the ignorance of a percentage of female workers—both married and unmarried—of the existence of health services; it was a higher percentage than for the male workers.

(v) Participation at the community level

The survey showed a low level of participation for all persons in the sample, especially for female workers, for whom participation was virtually nil in political parties.

Participation in the labour union was 43.1 per cent for males and 45.8 per cent for females, or 44.1 per cent of all workers in the sample.

(vi) Participation at the institutional level

The proportion of workers participating in decisions of the company divisions reached 36.3 per cent for males and 19.3 per cent for females. Lack of awareness and opportunities accounted for this low participation rate.

(vii) Participation at the family level

(a) *Contribution to the household budget:* About 37.3 per cent of unmarried female workers and 63 per cent of married females contributed 50 per cent or more

of the household income; about 44.1 per cent of unmarried female workers and 28.3 per cent of married workers contributed less than half of the family income. This means that the proportion of the family income earned by women represented a major part of this income;

(b) *Shouldering household burdens*: Married women carried more burdens than their unmarried counterparts, with percentages of 71 per cent and 29 per cent, respectively, being responsible for cleaning the house, washing clothes and cooking, in addition to other responsibilities.

Fatigue affected women inside and outside the home. This had an impact on their participation in the community in general. Women's energy was consumed in family and home responsibilities, which resulted in a vicious circle. They were not able to participate at the community level, and their absence from participating in policy-making had a negative impact on their social status. This same status was the major deterrent to their effective participation in developing the society of which they were a part.

The results of the study were contrary to what was expected, considering that the research sample focused on female workers in the public sector. It was hoped that the above-mentioned problems would have lessened in these public sector places of employment, where women were assumed to be protected. It was apparent that such protection did not exist. The results of the study confirmed that there were three main problems confronting working women in most third world countries: occupational segregation, discrimination and role conflict. This was represented in the distribution of jobs inside the institutions under survey. As a result of this distribution, women were subject to undeclared occupational segregation and confined to certain low-tech jobs. Many female workers undertook only manual jobs, using no tools or machines. Discrimination was also obvious in the training opportunities, wages and treatment by supervisors and colleagues. The effect of role conflict was apparent in the responsibility of most females in the survey: besides taking care of everything at home, they were helping to meet the material needs of their families, which put a double burden on them. This undoubtedly affected the overall efficiency of women.

6. Recommendations

The study made several recommendations, some related to perceptions that govern working women, others concerned with policies leading to social and administrative reforms that would increase working women's productivity. The most important of these recommendations were the following:

(a) In-depth studies should be undertaken to analyse the reasons for variances in the pay of male and female workers and the relation between family stability and women's work.

(b) Efforts should be made to raise women's awareness of their rights at work and at home and to enlist more participation from other family members in shouldering household burdens, which would alleviate some of the conflict between the roles women must play.

(c) Support should be extended to all services for working women, such as nurseries, ready meals and laundromats; working women should be made aware of the services available, and the standards of these services should be raised.

(d) Studies should be made on solutions related to women's working from their homes, holding part-time jobs, or to the application of flexible working hours that suit their circumstances to avoid occupational segregation.

(e) The literacy services offered to working women should be strengthened and training courses should be made more widely available within the employing institutions.

(f) Legal procedures should be established to protect women from maltreatment and harassment at work.

(g) The standards of pay for females should be improved and the implementation of regulations to eliminate discrimination between both the sexes should be monitored.

B. PARTICIPATION OF WOMEN IN THE PHARMACEUTICAL INDUSTRIES IN EGYPT

Introduction

1. Objectives of the study

This study was undertaken to evaluate the participation of Egyptian women in the context of the variables in Egyptian society, as women's issues reflect the quality of the political, cultural, social, and economic changes that affect the society. This is a descriptive analytical study of women workers in the pharmaceutical industry, and also a comparative study on the circumstances of men and women working in the same company. The study evaluates the results of the experience of Egyptian women

workers in the pharmaceutical industry in all its dimensions; it also reveals the nature of the challenges confronting women, then proposes a plan for women's participation in this industry.

2. Scope of the study

(a) Human scope

The percentage of women who had worked more than six years all over the country was 7.7 per cent, and the percentage of women who had worked in the urban sector reached 12.5 per cent: 150 persons were selected for study out of those working in the Chemical Industries Development Co. (CID)(50 male workers and 100 female workers). The female labour force differed from one industry to another according to the activity and work requirements. Jobs that needed physical effort were assigned to men. The majority of women in CID worked in the packing divisions.

(b) Physical dimension

CID is considered the biggest among the public sector companies (public enterprise sector now).

(c) Time dimension

The study was carried out during the period September 1992-June 1993.

3. Methodology of the study

(a) Description of method

The study is a descriptive analytical one, which depends on the survey sample and the comparison between men and women's positions in the pharmaceutical industry. The study depended on a systematic random method. All workers were classified in two lists: 2,195 men and 1,914 women; then 50 persons were selected from the list of men and 100 persons from the list of women.

(b) Tools of the study

The questionnaire contained a section for all the workers, males and females, and a second section for female workers only. Interviews were undertaken with officials in the Company, to learn about the administrative structure, production and workers'

situations, the training system, research, regulations and procedures, and the prospective expectations for development.

The third tool used was direct observations to obtain information about the system of work, the nature of the female workers' jobs, the services offered by the company, and the relations between the workers and their supervisors.

4. Resources of the study

Documents and information available in the Company were used, in addition to reports of the Specialized National Councils, data from the Central Agency for Public Mobilization and Statistics, Law No. 203 for the year 1991, and a report on the pharmaceutical industry in Egypt.

5. Obstacles encountered during the study

Among the most significant problems was that the study was undertaken during a transitional period in which the workers were fearful of the privatization measures being undertaken. In the beginning, it was proposed that the questionnaire be carried out in two companies: the Nile Company for Medicines, and CID, but the Nile Company refused to cooperate or permit the study team to enter the Company. They suggested that they be given the questionnaire and that they fill it out on their own. For this reason, it was decided to undertake the study in CID only. It took more than three months to obtain permission to conduct the study.

6. An abridged summary of the pharmaceutical industry and CID

(a) The pharmaceutical industry in Egypt

The start and development of the pharmaceutical industry in Egypt differed from the same industry in the rest of the world. In the nineteenth century and the beginning of the twentieth century. Egyptian pharmaceutical products were confined to chemical, botanical and animal products that had been used for 10 centuries. These products included camphor, cinchona, volatile oil, camomile and black cummin. Arab pioneer physicians and chemists (Al Tabary, Al Razi, Avicenna, Ibn Al Baytar and Daoud) used such remedies in the period between the ninth and nineteenth centuries. In 1933 the first laboratory was established by Hegazy.

Hence the pharmaceutical sector in Egypt went through three stages: the first stage in 1934-1961, which was the stage of private companies. In 1939 Misr Bank

established Misr Company for Medical Products, then several companies were inaugurated, such as Memphis, CID and some small laboratories. The Government role was confined then to providing licences and carrying out some control activities. The Minister of Health was responsible for the vaccine and serum laboratories, and the General Administration of Pharmaceutics, which supervised small laboratories, stock companies, importers, agents and scientific offices. In 1953 the Council of Production and Services was founded, then the Ministry of Industry in 1956. A committee was formed to compile previous studies related to the problems of medicine; it recommended that a unified government agency should be established. In 1957, the Supreme Agency for Medicine was founded to compute the consumption of medicines, and record their distribution as well as to organize imports. In 1960, a government resolution was issued to confine the import of medicines to the Supreme Agency for Medicine, after which the General Egyptian Company for Medicine Trade and Distribution was established. Laws were issued in 1961 according to which the Government supervised 95 per cent of the local production of medicine. At that time the volume of the production served 30 per cent of local needs.

The second stage lasted till 1975, when the small laboratories were abolished and the medium-size companies unified. The General Egyptian Institute for Medicine became responsible for providing the raw material needed by the companies. At the end of this stage the national industry covered 84 per cent of the local requirements. In 1975 the number of products, which was only 200 in 1960, reached 1,350. The value of the consumption of local products increased many times over, from 4.3 million Egyptian pounds (LE) in 1960 to LE 74.3 million in 1975. In 1975 the value of drug exports reached about LE 1.9 million.

The third stage started in 1976 and lasted until the beginning of the 1990s. The Institution was abolished to give more freedom to companies in the atmosphere of the new economic open door policy. In the beginning of the 1980s, many companies were founded, among which were 13 companies in accordance with Law 43 for Arab and Foreign Investment. Nowadays there are 32 public, private and joint companies for producing and distributing medicine. In 1991 Law 203 for the Public Enterprise Sector was issued. Holding companies replaced public agencies and affiliated companies. The Holding Company undertook by itself or through its companies the investment of its funds and managed its budget in the framework of the economic reform policy.

(b) Abridged summary of CID Company

CID is now regulated by Law 203. It was established in 1947, and has a factory in Assiut and three sales branches. The Company consists of four administrative and

technical units with a big restaurant that can serve 1,000 persons at a time. In addition to the main Company building there is a farm and an animal shed for experiments. Work in the Company is performed in morning shifts only, except for the security sector. The number of workers in the Company reached 4,109, with 750 in the Assiut factory and 300 in the branches. The percentage of female workers was 46.58 per cent, which was considered a relatively high percentage compared with the whole industry sector in which the percentage did not exceed 7.8 per cent of the total labour force in this activity.

The Company started in 1947 with a capital that did not exceed LE 100,000, which increased to LE 3 million in 1975 and to LE 20 million in 1993.

The Company is striving to replace the imported medicines with local products and to increase its production for export. It also endeavours to produce medicinal by-products, conduct pharmaceutical research to produce raw materials and new products, as well as to prepare training courses to develop the skills of the workers. There are several private, public and joint companies that compete with CID in producing and circulating medicines.

The production of the company covers 75 per cent of the local consumption of antibiotics. Of the products the company produces, 98 per cent are from its own innovations and 2 per cent are patent medicines such as penicillin, medicine for bilharzia and drugs for stomach problems. The objective of producing such foreign kinds of medicine is to acquire expertise.

In 1952 the production of the Company reached LE 17,000; in 1976 this figure had increased to LE 12.9 million, and in 1992 it reached LE 119 million, with 285 sorts of products.

The main problem facing the Company is sales of its products in relation to the volume of its production; this is because of competition from other companies. The result is a big volume of commodity stocks in the stores.

7. Demographic, social and economic characteristics

(a) Demographic characteristics

These characteristics are considered an essential factor of the qualitative significance of women's economic and social roles.

(i) Age

No significant variances were observed between both sexes as the data recorded 40.62 years for the average male workers' age, and 37.36 for the females. Forty-two women were between 40-50 years of age and 35 were in the age group 20-30; 19 were between 30-40 years of age.

(ii) Social status

Most female workers were married, and the majority of those between 40-50 years were either married, divorced or widowed except for two unmarried females. In the age group 20-30, there were 10 unmarried females.

(iii) Mobility

There were no variances between the sexes in place of birth, or in current or previous places of residence.

(b) Economic and social characteristics

(i) Household families and dependants

The average number of household family members was 5.52 persons for the male worker, and 4.82 persons for the female worker. The average number of dependants reached 4.24 persons for each male worker, and 3.61 persons for the female worker. The number of household family members was between 4-8 persons for most males and females. About 76 per cent of the females participated in the family budget by 50 per cent or more; 16 per cent shared by less than 50 per cent, while eight females did not participate. Most of those who participated were married. This participation enabled them to share in family decisions.

(ii) Education level

The percentage of those who finished preparatory and secondary classes was 28 per cent and 38 per cent respectively of the total female workers. This percentage reached only 10 per cent and 22 per cent among the males, while those who could barely read and write were 32 per cent of the males and 6 per cent of the females in the Company. Most of the females who had completed primary, preparatory and secondary classes were between 20-30, and 30-40 years of age. Most males who could only read and write and who had completed primary classes were in the age group 40-50. Thus there were variances in the education level in favour of females, perhaps

for the following reasons: underestimation of their qualifications, reluctance of men to take such jobs, emigration of males to other Arab countries, or because women were satisfied with their jobs.

(iii) Houses

Of the male workers, 42 per cent owned their own houses and 58 per cent lived in rented houses, while 25 per cent of females owned their own houses and 73 per cent lived in rented houses.

8. *Work and production conditions*

(a) Working conditions

(i) Previous jobs

About 92 per cent of the females and 46 per cent of the males had not held previous jobs: 22 per cent of the males had worked in the private sector and 12 per cent in the public sector, while eight females had worked as teachers. Of those who had no previous jobs, 39.1 per cent of the males and 8.7 per cent of the females could barely read and write or were illiterate; 91.3 per cent of the females and 60.9 per cent of the males had intermediate-level certificates; 9.7 per cent of the females and 17.4 per cent of the males had looked from one to five years for jobs.

(ii) Years of service

The actual years of service of 25.3 per cent of the males and females ranged between 5 and 10 years. The average number of service years was 16.72 for males and 16.1 years for females.

(iii) Performance level

A total of 82 per cent of the females and 44 per cent of the males worked in the production departments, and 14 per cent of the females in the Company worked in the administrative divisions. A total of 79 per cent of the females in the Company and 64 per cent of the males depended on the manual system of work; most of the females had intermediate-level certificates, while most of the males could barely read and write. A total of 51 per cent of the females worked in operating and 24 per cent in control and revision activities.

(iv) Incentives

The majority of male and female workers stated that the most important incentives were supervisors' appreciation and wage increases.

(v) Supervision

A total of 94 per cent of females did not have any supervisory responsibilities, while 86 per cent of males carried out this activity.

(b) Working conditions and production

(i) Working hours

Any work after 4 p.m. was considered overtime. Females who worked additional hours did not exceed 27 per cent of the total of female workers in the Company, while the percentage of males was 40 per cent. The average of additional working hours during the month previous to the study was 22.76 hours for males and 9.98 hours for females. Most of the additional working hours were in the production, engineering and services divisions.

(ii) Leave

No differences were apparent between men and women in the number of leave days. Most workers did not take the leave due to them in order to increase their income, and no female worker took maternity leave.

(iii) Training

A total of 54 per cent of the females and 24 per cent of the males attended local training courses. Concerning the courses abroad, the percentage was 18 per cent of the males and only 6 per cent of the females.

(iv) Wages

There were no disparities in the salaries. As regards overtime, the percentage was 26 per cent of the males and 25 per cent of the females, with differences in the average in favour of the female workers. The percentage of those who received financial incentives was 50 per cent of the females; no males received financial incentives. Taking into consideration seniority, job, education level, and age, no

differences between the sexes were noted. The workers' monthly incomes were related to the sales, the company economies, and the production level.

(v) Additional jobs

Only one of the female workers had another job outside the Company, and 20 per cent of the male workers had outside activities to increase their income.

(vi) Contentment with income

About 61 per cent of the females and 50 per cent of the males were satisfied with their wages, but they were ready to leave the Company if they found another better paying job.

(vii) Work hazards

The workers were exposed to gases, vapour, noise and hormones. The Company observed industrial safety procedures to protect workers from risks. A total of 50 per cent of the total number of females and 40 per cent of the total number of males did not face any risks at work, while 34 per cent of the males and 26 per cent of the females were exposed to the effect of chemical compounds, hormones, fire and radiation. A total of 14 per cent of the males and 20 per cent of the females were affected by the surrounding environmental risks. The percentage of those who had suffered work-related casualties was 26 per cent of the females and 46 per cent of the males. Most of the casualties were fractures, wounds and cartilage degeneration.

(viii) Services

The Company had a clinic and a pharmacy that provided medicine free of charge. The Company paid the hospital expenses of its employees. The Company also offered financial assistance of LE 50 in surgical cases and LE 25 for the third child of an employee. The Company also paid the costs of some prosthetic devices.

(ix) Participation

A total of 89 per cent of the females and 80 per cent of the males did not participate in party or union activities. A total of 96.6 per cent of the female workers who felt discriminated against complained to their supervisors: 28 per cent complained to the unions, and one woman complained to the Party. Concerning decisions 36 per cent shared in the division decisions, and only 26 per cent of the males participated. The higher level of education accounted for this higher percentage of participation.

9. *Issues and obstacles*

(a) Trends for working women

(i) Reasons for women working

A total of 82 per cent of the females admitted that they worked to have an income, 75 per cent to share in the family budget, 21 per cent for social prestige, 12 per cent to prepare for marriage; five women mentioned that they worked because they had educational certificates.

(ii) Working part time or at home

A total of 70 per cent answered that they preferred to work at home and 40 per cent expressed a desire to work part time.

(iii) Impact of work on social status

Most women stated that they had sole responsibility for taking care of the house, of the children, of the older members of the family and for doing the shopping. Only one woman stated that her husband assisted her in those duties. A total of 75 per cent of the unmarried females believed that marriage had no effect on work; three answered that it had a positive effect, and one said that work had a negative impact on marriage.

(b) Performance level and promotion

(i) Performance level

A total of 46 per cent of the male workers estimated that their work was better than that of the women; 34 per cent found no difference in the performance level, while 41 per cent of the female workers considered their performance better than that of the men and 41 per cent believed that there were no variances in performance between the sexes.

(ii) Promotions

A total of 75 per cent of the females and 60 per cent of the males said there were no disparities in promotion opportunities because the regulations in the public sector companies prevented gender-based discrimination.

(c) Obstacles to women's participation in work

(i) Satisfaction with work

The data disclosed that women were more ready than men to change their work, because of the conflict between their roles inside and outside the home. A total of 65 per cent of the women who desired to change jobs preferred to work in the same company but in a location closer to their houses. A total of 44.5 per cent of the men who wished to change jobs preferred to start another career: approximately one third of them expressed their wish to work in the private sector.

(ii) Obstacles facing women at work

A total of 41 per cent of the women stated that the essential obstacle was taking care of their babies; 39 per cent said that working conditions were the biggest obstacle. A total of 34 per cent said that they could barely cope with their commitments inside and outside the home, and 33 per cent enumerated other difficulties such as unsuitability of work to their circumstances, sickness or old age.

(iii) Work-related difficulties

A total of 56 per cent said they had no difficulties at work; the rest mentioned some difficulties such as work hazards, boredom, mistreatment, difficulty of work and transport problems.

(iv) Discrimination

Most female workers had no feeling of being discriminated against in training, incentives, promotions or opportunities for travel abroad. This feeling contradicted the statistical results, which confirmed that men were favoured in training-abroad opportunities and the nature of work.

10. Results and recommendations

(a) Results

In spite of the Government's concern about issuing laws that supported the role of Egyptian women in the production process, according them equal rights with men, experience proved that change depending upon legislation alone did not modify the cultural and social attitudes of persons nor did it make women aware of the changes. Therefore, a gap existed between the social rights given by law, and the reality with

its challenges. Women could not exercise their rights at work without exercising their civil rights. A confusion in roles occurred: women had to work according to the new legal criteria, while inside the home they performed the same duties according to the old prevailing traditions, as none of the other family members were willing to relinquish or change their old traditional roles.

The study came to the following conclusions:

(i) Demographic characteristics

It was noted that the average number of female workers increased with the ages of the workers as the women's roles as mothers took up less of their time. The male workers' ages increased gradually, then decreased before the age of retirement, while the average differed for the females according to maternal responsibilities.

(ii) Women's productivity

The study showed a low productivity of female workers compared with the males for the following reasons:

Insufficient training courses;
Inability of women to work additional hours;
Underestimation of women's qualifications.

Another very important reason was the belief that taking care of children impeded work and affected productivity; therefore, the women only took jobs to contribute to the family budget.

(iii) Challenges

The production sector had been governed by socialist policies, then open-door policies, and finally a market economy. In the current transitional stage, several shortcomings were apparent that required modification and adjustment. A lack of awareness of environment prevailed in this sector: protection measures were confined to negative procedures; moreover there were shortages in services and the wages were low.

(b) Recommendations

As a result of the social upbringing of children that formed the current disparities between the sexes, women had become less ambitious than men in regard to

participating in development. The study offered some practical proposals to develop women's skills.

(i) Research

Serious research should be undertaken on the conflict between women's roles in order to analyse all the contributing factors and propose a model of social policies and manner of implementing them.

(ii) Developing women's skills

Full benefit should be obtained from the skills that women are distinguished by, such as manual skills, perception, and the capability to use mechanical instruments.

(iii) Social services

Social services should be developed to meet the needs of working women.

(iv) Training and education

A plan for developing the labour force should be considered by the Company. Training should be expanded throughout the different stages.

(v) Facing the challenges of industry

Wages should be raised. Serious attention must be paid to protecting the environment. More concern should be directed towards protecting workers from work-related hazards. At last, support has to be given to women in their relatively new role in society and more scientific efforts must be made to improve their social and cultural situation in society.

C. PARTICIPATION OF WOMEN IN THE ELECTRONICS INDUSTRIES IN EGYPT

Introduction

The electronics industries started in Egypt in the 1960s with four companies for producing lamps and assembling radios and television sets. These companies were under the public sector and are currently in a transitional period according to Law 203 for the year 1991 (Public Enterprise Sector Law). There are also several private sector companies in Egypt that are working in this field.

Nevertheless, production in these industries depends upon assembly processes and quality control, although integrated industrial production of electronic sets requires designing products, producing prototypes and manufacturing components. The electronics industry is undergoing a decrease in productive capacity compared with the design capacity of the factories, owing to the shortage in production requirements that are imported from abroad, and are the cause of the high cost of assembly which affects the price of the sets.

(a) Objective of the study

This study was conducted to evaluate Egyptian women's participation in the electronic industries in all its dimensions, to identify this participation and to propose a plan.

(b) Time and place of the study

The study was undertaken during the period September 1992-June 1993 in two factories: Nasr Company for Television and Electronics, which is the oldest and biggest company in this field, employing 169 male workers and 1,971 females (for assembly of television sets). The second factory in the study was the Metal Forging Factory, which prepares the local components of television sets. No females work in this factory.

(c) Subjects of the study

A total of 150 subjects were selected from Nasr Company for television and electronics (50 males and 100 females).

(d) Tools of the study

The questionnaire used in the study consisted of two parts, one concerning all the workers, the other female workers only.

Interviews were conducted with officials and heads of divisions in the company to collect data related to production, administrative structure, workers' circumstances, laws and procedures, training and research systems, major problems and future expectations of development.

Direct observations were used in the survey to familiarize the researchers with the work system, the fields in which females were employed, services, and the relations between workers and their supervisors.

(e) Resources of the study

The study depended upon the documents available in the company, the reports of the specialized national councils, the data of the Central Agency for Public Mobilization and Statistics, and Law No. 203 for the year 1991.

(f) Problems of the study

The research was performed in a transitional period, between public and private sector systems, when workers were worried about being fired. The main difficulty faced in the study was the delay in receiving the necessary permission to undertake the research.

(g) Abridged summary of the company

The Nasr Company for Electronics and Television includes several workshops that feed two main factories: Toshiba and Sharp. The posts in the company are classified into two categories: technicians and administrators. The company started production in January 1961, and in 1964 the T.V. Screens Factory was founded. Starting in 1965 the raw materials and spare parts were imported and the assembly process was executed in Egypt. After 1966 the machines of the Electronic Assembling Factory were imported, then transistors, receivers, antennas, transistor sets and recorders were manufactured. In the Metal Forging Factory, several metallic parts were manufactured. In the beginning of the 1970s, there were local components in the black and white television sets; however, because the factories were not modernized to produce colour televisions, the local component did not exceed 17 per cent. The factory produces now 90,000 sets annually.

The training in the company was confined to the industrial apprenticeship school, the training courses held for technicians working on the production lines, and training when the company contracted for a new product. Owing to the lack of resources, there were few training courses abroad. Concerning research and development, it did not exceed guaranteeing the quality of the products or reviewing the imported components to be sure that they fit the specifications. If the company overcomes its financial problems, it could produce wires, transformers and parts.

1. Demographic and social characteristics

(a) Demographic characteristics

Age: 40 per cent of the females were between 30-40 years of age, against 44 per cent of the males. Ten per cent of the females and 24 per cent of the males were over 50 years of age. The average age of the female workers was 39.59 years, and of the male workers 43.94. About 19.1 per cent of the females started working between the ages of 20-30, 40.5 per cent between the ages of 30-40, 31.9 per cent between the ages of 40-50, and 8.5 per cent between the ages of 50-60.

Marital status: The percentage of married females amounted to 81 per cent of the total females in the sample, against 88 per cent of the males. Thirty-six per cent of the married females were between 30-40 years of age.

Mobility: The majority of females and males in the sample were born, lived and were still living in urban centres.

(b) Social characteristics

Household families: The average number of household family members amounted to 5.62 persons for the male worker and 4.82 for the female worker. The number of household family members was between 4 and 8 persons. The reason for the relatively small size of the families was attributed to the two prevailing types of household families: the nuclear and the extended.

Members of the family supported: The average number of family members supported was 3.54 for the male and 1.40 persons for the female.

Education level: The percentage of females who had completed secondary school was 64 per cent and the percentage who had completed preparatory classes was 33 per cent of the total number of females in the sample, against 50 per cent and 10 per cent respectively of the males. As for illiterate workers and those who could barely read and write, there was only one illiterate female against 12 per cent illiterate males, and 22 per cent of the males could barely read and write. Most of the females who had finished primary and preparatory classes were between 30-40 and 40-50 years of age. The majority of males who could barely read and write were 50-60 years old. The differences in the education level were in favour of the females.

Dwelling: 78 per cent of the females lived in rented houses, while 20 per cent lived in their own houses, against 30 per cent of the male workers.

2. Work and production conditions

(a) **Employment:** 94 per cent of the females did not have any jobs before working in the company, against 68 per cent of the males. Those who had held previous jobs worked as salespersons, teachers or telephone operators. Out of those who were appointed for the first time, 98.3 per cent completed preparatory and secondary classes, against 70.6 per cent of the males. Actual service years ranged between 25-30 for 32 per cent of the males, and 20-25 years for 28 per cent of the females.

(b) **Working hours:** Work was 8 a.m. until 4 p.m.

(c) **Overtime:** Female workers did not work any additional hours, while 8 per cent of the males recorded between 2-42 hours.

(d) **Leave:** There were no gender-related variances in the number of days off. No females exercised their right to maternity leave because they feared a decrease in income.

(e) **Training:** The percentage of local training courses was higher for the females. The outside courses were confined to male workers.

(f) **Work quality:** 82 per cent of the females worked in the production divisions against 50 per cent of the males, 7 per cent in the production services divisions against 38 per cent of the males, and 10 per cent in the control and test divisions against 6 per cent of the males. Work in the repair divisions was confined to male workers. The percentage of female workers who used their hands and manual instruments in their work was 95 per cent against 70 per cent of the males.

(g) **Wages:** Both sexes obtained the same basic salaries according to the labour law. Concerning the percentage of additional wages, it reached 6 per cent for males and 4 per cent for females; 90 per cent of both sexes received incentives. Taking into account years of service, quality of work, education level and age factors, both sexes got the same income.

(h) **Satisfaction with wages:** 77 per cent of females and less than one third of males said that they were satisfied with their wages.

(i) **Stability in work:** Data revealed that females were less inclined to change jobs than males.

(j) **Performance level:** 74 per cent of the males said that their performance was better than that of females, while 70 per cent of the females said that their performance was better than that of males. A total of 76 per cent of the males and 56 per cent of the females stated that the main incentive for improving their performance was to obtain an increase in wages; 70 per cent of the males and 54 per cent of the females said that the appreciation of their supervisors was essential, and 32 per cent of the males and 55 per cent of the females said that the most important incentive was their obligation towards their work.

(k) **Supervision:** Most supervisory jobs were assigned to male workers: 96 per cent of the female workers and 72 per cent of the males did not carry out such assignments. Twenty per cent of the males who undertook these tasks supervised less than 10 workers while 3 per cent supervised 10 or more workers, and 2 per cent supervised 30 or more workers.

(l) **Promotion:** Most females occupied posts inappropriate to their educational level, while males were in charge of the main posts, and were very keen to be promoted. All workers in the sample believed that there was no discrimination in promotion opportunities according to the law.

(m) **Services:** Services in the company covered medical care, social services and transport. The company had established a medical centre with all specializations; it was affiliated with an operating theatre, laboratory and electrocardiograph unit. The company offered meal subsidies of LE 12 monthly, besides supplying workers in some divisions with a daily meal. The company provided free transport to the workers; those who did not use this service were given LE 2.5 monthly.

(n) **Impact of services:** 74 per cent of the females and 60 per cent of the males noted that the main reason for their continuing to work in the company was the above-mentioned services.

(o) **Health hazards:** 57 per cent of the females and 50 per cent of the males were vulnerable to work casualties from burns and radiation; 28 per cent of the males and only one female had been affected by burning and fracture accidents. A total of 63 per cent of the females and 12 per cent of the males were subject to environmental risks. Most affected females were working in the productive divisions (18 per cent), and 3 per cent worked in the services divisions.

(p) **Participation:** The majority of the females participated in the family decisions related to their children's education, budget expenditure, buying and selling properties, and the marriage of their sons and daughters; 99 per cent of the females

and 90 per cent of the males were not members of the parties, and 89 per cent of the females and 68 per cent of the males did not participate in the unions.

3. Issues and problems

(a) **Reasons for women working:** 70 per cent of the females noted that their primary reason for working was to earn an income and 66 per cent said they worked to contribute to the family income. Out of the total number of females in the sample, 16 per cent answered that their main goal was social prestige, while 15 per cent indicated that they intended to save for marriage costs; only one woman referred to making use of her certificate.

(b) **Contributing to the family income:** 90 per cent of the total of females in the sample contributed half or more of the family income, 8 per cent shared less than half, and two females did not contribute.

(c) **Family burdens:** The majority of the females indicated that they were responsible for shopping, housework and looking after children and older members of the family.

(d) **Impact of work on marriage:** Married females tended to deny any negative impact of work on marriage, while the single females' answers ranged between negative, positive or "no impact at all". The financial difficulties of the family and the need for the woman's income accounted for these answers.

(e) **Difficulties at work:** 59 per cent of the females said that they faced no problems at work. Of the rest, 37 per cent enumerated several troubles, such as work hazards and the unsuitability of the place of work while 26 per cent said that the main problem was maltreatment.

(f) **Obstacles that affected women's work:** 30 per cent of the female workers said that taking care of their children was the major hindrance, while 19 per cent cited working conditions. Eleven females said that they could not cope with work inside and outside the home. Various other difficulties were cited, including transport, old age, sickness, working hours, accidents at work and exhaustion. A total of 57 per cent of the female workers stated that they preferred to work part time because of the difficulty in handling both tasks, while 64 per cent expressed their desire to work at home.

(g) **Discrimination:** Female workers had no feeling of discrimination in training, incentives, work quality or promotion opportunities.

(h) **Impact of unions and parties:** 70.6 per cent of the total number of females in the sample went to their supervisors in case of trouble, 61.8 per cent complained to the unions and 4.4 per cent protested to the parties.

4. Findings and recommendations

(a) Findings

The following were noted:

(a) Government concern to issue laws that supported Egyptian working women, and guaranteed them the same rights given to men;

(b) Duplication of the roles of the working women as a result of lack of redistribution of the family members' roles to fit the new requirements and challenges of society;

(c) Increase of the percentage of older working women as their roles as mothers declined;

(d) Confining training courses abroad to men;

(e) Incapability of females to work overtime;

(f) Assigning supervisory responsibilities mostly to males;

(g) Women's occupation of posts that did not suit their qualifications;

(h) Tendency of females to work to support the family budget and not to participate in the labour market;

(i) Belief of the majority of female workers that looking after their children was the main obstacle affecting their work performance and lessening their productivity;

(j) Confining certain jobs to male workers;

(k) Weak awareness of the need for environmental preservation, with precautions confined to negative measures and excluding positive procedures that could protect human beings and industry;

- (l) Lack of services that could assist workers in satisfying their basic needs;
 - (m) Low average wages which prevented female workers from taking maternity leave.
- (b) Recommendations
- (a) Research should be undertaken on women's multiple roles, and a model of social policies and programmes should be projected.
 - (b) Full use should be made of women's skills such as accuracy, acuteness and the capability of using their hands and handling machines and instruments.
 - (c) Social services should be developed to face the challenges of social life and satisfy the real needs of working women.
 - (d) A plan should be prepared for developing the labour force. All agencies responsible for training, education and industry should participate in this plan.
 - (e) A plan should be drafted with several levels of skills and qualifications required for the factory.
 - (f) Training should be expanded during the different stages of education.
 - (g) Average wages should be re-evaluated.
 - (h) Workers should be made more aware of environmental conditions.

D. PARTICIPATION OF WOMEN IN THE TEXTILE AND FOOD-PROCESSING INDUSTRIES IN THE SYRIAN ARAB REPUBLIC

Introduction

Women's participation in the labour force in the Syrian Arab Republic was estimated by the censuses of 1970 and 1981 and by a labour force sample in 1984, to be 10.8 per cent, 8.6 per cent and 13.4 per cent, respectively, of total workers. According to the 1981 census, women's participation in industry reached 19.1 per cent and in manufacturing industries 18.6 per cent of the total female labour force in the Syrian Arab Republic. Women's participation in the labour force for manufacturing industries reached 10.7 per cent and in textile industries 27.1 per cent according to the 1981 census. This means that the female labour force in textiles represented at that

time 13.1 per cent of the total labour force of women in the Syrian Arab Republic, 70.6 per cent of the labour force of women in the manufacturing industries and 68.7 per cent of the total labour force of women in the industrial sector. The textile industry included the garment industry. The study of the situation of women in the textile industries gave a complete idea about the circumstances of the majority of female workers in the manufacturing industries and in industry in general.

Women's participation reached 2.7 per cent in the food industries. It was noted that although the 1981 census revealed a higher percentage than the 1970 census with regard to female workers in the food industries compared with the total number of female workers in the Syrian Arab Republic, female workers' relative importance in the industrial sector and the manufacturing industries declined during the period 1970-1981. The average of their participation in the labour force in food industries also decreased from 12.2 per cent to 10.9 per cent during that period. The percentage of female workers in the public sector food industries in 1970 reached 87.3 per cent and only 12.6 per cent in the private sector. The opposite was the case in textiles, where 80 per cent worked in the private sector. It is worth noting in this introduction the laws regulating working conditions for women in the Syrian Arab Republic as several laws have been enacted in this regard: Law No. 279 for the year 1946; Law 91 for the year 1959; and the principal labour law for the year 1985. The text of the latter included the following:

1. Determining jobs in which women are forbidden to work such as in mines and quarries, or with mineral furnaces, explosives and fertilizers.
2. Prohibition against employing pregnant and breast-feeding women in jobs that might affect the foetus or the baby (chemicals, radioactive elements).
3. Prohibition against women carrying, pulling or pushing weights more than those fixed by law.
4. Preventing the employment of women at night (10 p.m. to 7 a.m.) except for artists, actresses, hostesses, doctors, nurses, workers in restaurants, post and telegraph offices and those who work in the media.
5. Undertaking of periodic medical check-ups for workers, especially pregnant women and breast-feeding mothers.
6. With the exception of the above, all rules were applied to both sexes without discrimination (promotions, employment qualifications, training, compensation, bonuses, incentives, wages, services and all types of leave).

7. Granting female workers maternity leave of 75 days with full pay and an additional month's leave with 80 per cent pay and another month of unpaid leave. Female workers who are breast-feeding infants are granted one hour daily to nurse their babies until the babies are one year old.

The present study on the participation of women in the food and textile industries was carried out during July-September 1989. The research team selected two institutions that represented both industries. The first was the General Institution for Textiles (the United Industrial Commercial Company). The second was the General Institution for Food Industries (Arab Company for Milk and affiliates). The purpose of the study was to learn about Syrian female workers in the textile and food-processing industries, their circumstances, and any deterrents that blocked the development and maximization of women's participation in both industries. The team divided the research into two parts, one for each industry. The research unit was the selected sample of female and male workers in each institution. The results were compared by dividing the sample into males and females.

1. Women's participation in textile industries

General Institution for Textile Industries

United Industrial Commercial Company for Spinning and Weaving

The General Institution for Textile Industries was established in 1975, replacing the Union of Industries that had been established in 1967. The institution was concerned with supervising the work process in the affiliated companies, developing those companies technologically, erecting new projects and maximizing their operation. The Institution supervised 24 companies for spinning and weaving, employing 25,096 workers among whom were 4,201 females. One of those companies was the United Industrial Commercial Company which was chosen for the study.

The Company was established in 1946 and nationalized in 1961 with a capital that reached 56 million Syrian pounds (LS) in 1974. The Company produced spun yarn, cotton textiles, medical cotton and gauze.

The Company was chosen for the research and the field study because it was the oldest in this industry, and the biggest, employing the largest number of workers in the textile industrial field. The location of the company in Damascus facilitated communication and research.

The structure of the Company included three divisions: administrative divisions, production lines, and production services, supervised by the Director General of the Company. The production lines consisted of departments for spinning, weaving, dyeing and printing.

ARAB WOMEN IN THE MANUFACTURING INDUSTRIES

The number of workers in the Company totalled 2,605 in 1989, distributed as follows:

95	Administrative staff among whom were 22 females
1,978	Production workers among whom were 121 females
532	Production service workers among whom were 32 females

Work in the Company was performed in three shifts: 7 a.m.-3 p.m., 3 p.m.-11 p.m. and 11 p.m.-7 a.m.).

Participation of women in Company activities

Female workers made up 6.7 per cent of the total labour force; this percentage, which was moderate, was due to the nature of the work, which was hard and exhausting for females, especially in the weaving departments.

(a) Females made up 23.2 per cent of the total number of workers in administrative activities.

(b) In production activities the percentage was 6.1 per cent in all departments (weaving and dyeing had no female workers).

(c) The participation of females in the service activities reached 6 per cent of workers in that department.

It was noted that the participation of females in the Company was less by 17 per cent than the average of participation in the Government textile industries in 1989.

Survey sample

The female sample was chosen from those working only in the production departments, because female workers' conditions and work in the administrative departments were approximately the same as other government activities. The number of persons in the female sample was 122.

The sample of males was selected according to the regular sample system, depending upon lists of workers in every production department. The number of persons in the sample was 122. The results were calculated manually since no computer was available, or else it would have been possible to use more statistical analyses and intersectional tables.

(a) Economic, social and demographic characteristics of the sample

All workers in the company were Syrians, except for one Palestinian in the female sample, and six Palestinians, Lebanese, and Algerians in the male sample who had lived in the Syrian Arab Republic a long time.

(i) Demographic characteristics

a. Age

The percentage of females who were under 30 years of age in the sample was 70 per cent, and the percentage of females under 40 was 87 per cent, compared with 39 per cent and 61 per cent respectively for males. Hence the female labour force was concentrated in the age group 20-39 because the number of workers in the age group 10-14 had changed since 1981 as a result of the increased education of women and the introduction of compulsory education. The category of females over 40 decreased because of marriage and children; this was contrary to the case of males, where the labour force increased gradually and slowly as it became older, which reflected more stabilization in work.

b. Mobility in relocating to other work sites

The results indicated that 50 per cent of the female sample and 66 per cent of the male sample came from villages. The percentage of females originally from Damascus was 21 per cent and the percentage of males 13 per cent. About 38 per cent of the female sample and 19 per cent of the male sample came from other towns; thus the majority of females were of urban origin, while most males were of rural origin.

Concerning current residences, 58 per cent of the female sample and 36 per cent of the males lived in the villages near Damascus, while 7 per cent of females and 21 per cent of males lived on the outskirts of Damascus. These results reflect the greater facility for men to move to their work location even if it was far away.

c. Marital status

Of the total sample, 50.8 per cent of females and 29.7 per cent of males were unmarried. With regard to those married, married females were 41 per cent of the sample and married males 79.5 per cent. Widows were 4.9 per cent of females, and those divorced 3.3 per cent of females and 8 per cent of males. The high percentage of unmarried females and married males confirmed the distribution of age groups and the males continuing to work after marriage.

(ii) Economic and social characteristics

a. Family members in households and dependants

The results showed that 16 per cent of females and 6 per cent of males lived with families of one or two members. Of the males, 24 per cent lived with families comprising 3-5 members, while the families of 33 per cent of the females and 36 per cent of the males consisted of 6-8 persons: 9 per cent of the females and 33 per cent of the males belonged to families comprising more than nine persons. The percentage of males living with large families was higher.

Concerning dependants, 44 per cent of the females and 12 per cent of the males supported one or two persons: 25 per cent of females and 39 per cent of males supported 3-5 persons, while 12 per cent of females and 58 per cent of males supported more than six persons. These results conformed to a great extent to the size of families.

b. Housing

About 62 per cent of the females lived in private houses, 33 per cent which of which were owned and 66 per cent rented, while 85 per cent of males lived in private houses, 77 per cent of which were owned and 23 per cent rented. About 38 per cent of the females lived in shared housing (where more than one family lived together in the same quarters), 13 per cent of which were owned and 87 per cent rented. Of the percentage of males who lived in shared housing, 66 per cent of them owned and 34 per cent rented their houses.

c. Education

The results of the analysis did not reflect the actual status of education for all workers. Administrative staff (all educated) were excluded from the sample, and 113 of the male sample worked in the spinning division, eight in weaving, and one in the garment department. As for females, out of a total of 175 female workers in the company, 120 worked in the spinning division.

The distribution of the sample according to educational level showed that 21.3 per cent of females and 27 per cent of males were illiterate. Those who could read and write represented 26.2 per cent of females and 20.3 per cent of males (the total of both categories for men and women was almost the same). The percentage of those who had completed primary classes was 39.3 per cent of females and 43.4 per cent of males and the percentage of those who had completed preparatory classes 7.4 per cent

of females and 4.9 per cent of males. Females who had finished secondary classes reached 5.7 per cent against 2.4 per cent of males. The education level of females approached that of males except in secondary and preparatory classes in which the percentage of females was higher; furthermore, the percentage of illiterate females was lower than the percentage of illiterate males.

Because that sample was chosen from production workers, it was difficult to compare the education level of its members with the education level of workers in the textile industries in general.

With regard to female workers' participation in literacy programmes, 8 illiterate female workers and 8 female workers who could barely read and write attended the programmes. Of the male workers, 14 illiterate workers and 1 who could barely read and write participated. In order to be more effective, the programmes needed to be repeated, and more attention needed to be given to them.

(b) Working and production conditions

This section covers the results of the variables covering the relation between the worker and the company, and the working conditions and levels of production.

(i) Actual years of service

The years of service for males exceeded those of females. The average number of years of service for males reached 15-23 years, whereas it were only 5.73 years for females. These results conformed to the age structure of both sexes, and to the fact that females stopped working after marriage.

(ii) Income

In June 1989, the average monthly income for the female worker reached LS 2,034, including wages, overtime, incentives and production bonuses, and in-kind compensation. Additional wages represented 27.1 per cent of the total income.

The average monthly income for the male worker reached LS 2,965, more than 46 per cent of the average monthly income for female workers. This difference was ascribed to the following:

a. Overtime

Only 8 females workers worked overtime, whereas 71 male workers recorded additional work hours in the month before the study.

b. Production incentives

This depended upon working hours; men worked more hours and received more incentives.

c. Actual years of service

The number of years of service was a determinant factor in income, as the workers received allowances every two years. The average length of service of females was 5.73 years and of males 15.23.

If overtime, production incentives and in-kind compensations were excluded from the monthly income, the difference between the income of female and male workers would be 28 per cent instead of 46 per cent, the net income being LS 1,482 for the female workers and LS 1,896 for the male workers. The remaining disparities were imputed to the difference in actual years of service.

The distribution of persons in the sample according to income category was as follows: the workers in the sample were distributed into six monthly income categories starting from LS 1,500 and less, and LS 1,800 and less. Fifty-three per cent of the females in the sample and 5.7 per cent of the males earned less than LS 2,100. A percentage of 31.1 per cent of females and 13.1 per cent of males earned between LS 2,100 and less than LS 2,400. In the highest category of income (LS 2,700) were 63.1 per cent of males and 1.6 per cent of females.

This distribution conformed to the employment pattern in the company in which females were juniors with less seniority and lower incomes.

Relationship between income and years of service: The relation was apparent between the increase in monthly income and increase in service years for both sexes. For example, the average monthly income of female workers who had been employed for 10-15 years was higher by 9.8 per cent than the income of those who had been employed 5-10 years: the income of the latter was higher by 4 per cent than the income of those who had been employed 1-5 years.

The average greater income of male workers compared with female workers in all categories of service was due to disparities in educational levels and additional wages. These variances reached from 20-45 per cent.

Relation between income and educational level: According to Syrian laws and procedures, the income of the worker increases with educational level. The minimum

wages and salaries were determined by given stipulations among which was education level.

It was noted that the relation between workers' income and educational level in the company was not directly proportional. The income of illiterate females or those who could barely read and write was higher than those who had completed preparatory classes by 4 per cent and 5 per cent respectively, and for males by 23 per cent and 14 per cent respectively. As for workers who had finished secondary level, they received a higher income than the rest of the workers; this category included 8 per cent of the females and 5 per cent of the males.

It was unexpected to find that disparities in overtime or production incentives for females accounted for the absence of a directly proportional relation between income and education; this was because eight females only recorded additional working hours. among whom two were illiterate, one could barely read and write, four had completed primary level and one had finished preparatory school. Hence, actual service was the determinant factor in income. The correlation between years of service and educational level was indirectly proportional for both males and females. The lower the educational level was, the more the years of service. This result was due to the enforcement of compulsory education only in the last few years; hence those who were affected were the younger workers.

Correlation between income and age: Perhaps there was no relation between income and age *per se*; however, the ageing of workers meant regular increases in income or a promotion accompanied by an increase in salary. Statistical analysis of the relation between age and income increase proved the existence of a directly proportional relation for both sexes. Definitely the variance in ages reflected disparity in the years of service which was the determinant factor in income.

(iii) Contentment with income

About 56.6 per cent of females and 62.3 per cent of males stated that they were contented with their incomes, while 43.4 per cent of females and 37.7 per cent of males were discontented.

Undoubtedly this high percentage of discontented workers had a negative effect on the productivity of workers. Responsible directors should attach importance to this result, particularly if it is an indicator of the state of the Syrian textile industry in general. For this reason it was important to examine each category of workers with regard to their attitudes towards income.

a. Income and marital status

The results revealed that 67.7 per cent of unmarried females and 54.2 per cent of males were contented with their incomes, as were 45 per cent of married females and 64.3 per cent of married males. The percentage of discontented workers reached 32.3 per cent of unmarried females and 45.8 per cent of unmarried males, and 55 per cent of married females and 35.7 per cent of married males.

The reason for dissatisfaction among married females was the increase of financial burdens after marriage. The reason for dissatisfaction among unmarried males was their desire to get higher incomes to meet family requirements.

b. Income and education level

The percentage of females contented with their incomes reached 58 per cent of illiterate female workers, those who could barely read and write and those who had completed primary level. This percentage included 44 per cent of those who had finished preparatory classes or more.

The percentage of males contented with their incomes reached 70 per cent of those who could barely read and write, and 11 per cent of those who had completed preparatory classes or more. This expressed the disappointment of those who had completed preparatory schooling or more and had expected to get better job opportunities with higher wages.

c. Income and actual years of service

The relation between income and years of service years was the same for both males and females. Those who had worked five years or less were contented with their incomes by a percentage of 49 per cent of females and 52 per cent of males. The percentage of those who had worked 5-10 years was 64 per cent of females and 69 per cent of males, while for those who had worked more than 10 years the percentage was 58 per cent of the females and 63 per cent of the males.

The low percentage of contented females out of those who had worked more than 10 years was due to the company policy to assign the senior female workers to jobs not directly linked with production that were not as well paid as jobs directly linked with production, although the average of those senior workers' years of service was higher than the rest.

d. Income and age

Given facts did not reveal any relation between the above two factors. About 56 per cent of females under 30 years of age said they were satisfied with their incomes, as did 50 per cent of those aged 30-39 years and 69 per cent of those over 40 years of age.

As for males the percentage decreased with age, reaching 85 per cent for those under 30, 65 per cent for those aged 30-39, and 58 per cent for males over 40 years of age.

(iv) Production skills

The percentage of skilled workers was 82 per cent of the females and 99.2 per cent of the males. Unskilled females were 18 per cent and unskilled males 8 per cent of all workers. Skills, according to the company definition, were needed for jobs requiring certain expertise and craftsmanship not possessed by junior workers. The work in the company which was performed mechanically and automatically was considered skilled employment.

(v) Training opportunities

Regular training courses were not available inside or outside the country. The survey demonstrated that 2 per cent of the female workers had attended two local training courses, one for a month, the other lasting two months. Only one male worker had attended one local training course for one month.

Junior workers were trained on the job by the seniors. The seniors were not entitled to any kind of regular training to raise their productive efficiency and decrease their vulnerability to risk, although they complained about repeated on-the-job accidents.

(vi) Promotion opportunities

Although the survey covered production workers only, it was noted that all production division chiefs were males, and most of those working on automatic machines, which was considered a promotion, were males. The company administration justified those observations with unconvincing reasons that reflected undervaluation of female workers. The reasons were as follows:

(a) Irregularity, and numerous leaves because of illness, pregnancy, childbirth or family reasons;

(b) The difficulty of depending upon women in certain jobs, in particular night jobs (prohibited by law);

(c) Women leaving work after marriage and having children;

(d) Incapability of women to be responsible and make decisions, or follow up on implementation.

(vii) Discrimination in promotions

The majority of workers (85.3 per cent of females and 69.7 per cent of males) stated that there were no significant variances, most probably because of unawareness of the meaning of discrimination. About 7.3 per cent of males and 8 per cent of females said that females were more lucky in promotion opportunities; 13.9 per cent of females and 23 per cent of males stated that males were more lucky.

(viii) Social services

a. Transport

All female workers and 90.9 per cent of males used transport provided by the company. The rest of the workers lived near the company. This service saved approximately 9 per cent of the total monthly income of the female workers.

b. Health care

The company provided free medical care to all workers and their families through a polyclinic or a specialist inside the company or through hospitals. The workers paid for medicine except when they were treated in the clinic or the hospital. About 85 per cent of female workers and 78 per cent of male workers benefited from this service.

c. Child care

There was a nursery in the company for children of female workers and care was provided at low cost. Of the 30 female workers who had children under four years of age, 26 benefited from the nursery.

d. Other services

There was a main restaurant in the company that offered limited kinds of food at low prices. The restaurant could also be used by those who brought their food with them.

The company had a sports club for the workers and their children, and a cooperative for consumer goods subsidized by the Government.

(ix) Impact of services on the continuity of work

About 59 per cent of females and 48 per cent of males said that the services provided by the company had a positive effect on the continuity of work, while 41 per cent of females and 52 per cent of males believed that it had no impact.

It was noted that the provision of services affected the continuity of females' work under circumstances involving an increase in medical and transport costs and depending on stability of income or decrease in income.

(x) Participation

This includes female participation at all levels.

a. Female participation in work decisions

Three female workers contributed to decision-making in their divisions (2.4 per cent of the female sample), as did two males (1.6 per cent of the male sample). This result demonstrated the low percentage of participation in general. The decisions concerning salaries, wages, incentives, product prices and training were determined by the Minister of Industry or the concerned authorities through central planning for all Syrian industries; hence no company could take such decisions on its own.

b. Contribution of female workers in labour unions and political activities

All workers in the government and public sector institutions were members of a union. The seven-member union committee inside the company included only one woman.

Of the total number of workers, 24.5 per cent of females and 36 per cent of males joined a political party (the Arab Baath Socialist Party), which has been the

leading party in the Syrian Arab Republic since 1963. There are other parties in the country.

c. Contribution of females in the social activities in districts

Such participation is not customary in the Syrian Arab Republic. Because of their responsibilities at work and at home, females had no time to share in social activities such as excursions, visits, and sports only one female worker participated in such activities.

(c) Main issues and obstacles facing working women

The female workers undertook double responsibilities at home and in the factory. The result was a conflict of roles that affected both the women's life and work and prevented them from participating in any extra activity.

(i) Responsibilities at home

Work at home was at the top of all responsibilities, as 67 per cent of the female workers did most of the work at home. They cooked, cleaned, washed clothes, baked, made cheese and nursed their children, and 34 per cent did the shopping: 27 per cent took care of their children, the latter percentage being low because most of the females in the sample were unmarried, and 31 per cent of females shared home responsibilities with other members of the family.

(ii) Problems in coping with multiple roles

The survey revealed that 67.2 per cent of the female workers could barely cope with their responsibilities at home and work: 68.3 per cent of this percentage were married, divorced or widowed. Most of those who said they could cope with their all responsibilities were unmarried (92.3 per cent).

The average number of persons in the households of those unmarried workers who said they could hardly keep up with all their responsibilities was 4.3 persons; and the average number of dependants for each female worker reached 3.2 persons. The majority had to support several persons in the family.

(iii) Work-related and family problems

The first problem was the difficult working conditions, meaning: fatigue from work, lack of cleanliness of the workplace; mistreatment; noise; dust; lack of ventilation; and having to stand for many hours.

The second problem was handling both work at home and in the factory (68 per cent).

The third problem was caring for children under four years of age (18.9 per cent).

Finally, the fourth problem covered family troubles and other problems.

(iv) Deterrents hindering an increase of female workers' participation in production

The deterrents were listed in the following order: uncleanliness of workplace (26.2 per cent); boredom with work (17.2 per cent); work hazards (17.2 per cent); mistreatment (14.8 per cent); behavioural difficulties (5.7 per cent); and night shifts (1.6 per cent).

The following results were noted.

With regard to working at home and working part time (40 per cent preferred to work at home, 47.5 per cent preferred part time), 26 per cent of unmarried workers preferred to work at home and 40 per cent preferred to work part time; 55 per cent of the married preferred to work at home and part time.

With regard to education level and working at home or part time, the results showed that 38.5 per cent of the illiterate female workers preferred to work at home; 34.6 per cent preferred to work part time; 56.3 per cent of those who could barely read and write preferred to work at home and 53.1 per cent of them preferred to work part time; of those who had finished primary-level classes, 33.3 per cent wanted to work at home and 45.8 per cent preferred to work part time. As for females who had completed preparatory classes or higher, 31.3 per cent preferred to work at home and 62.5 per cent chose to work part time.

Although those who preferred to work at home and part time were not the majority, except among the married females, other percentages were considered high by all measures, especially if compared with education level, which made it difficult

for Syrian women to increase their participation in the textile industries and in the industrial sector in general.

2. Participation of Syrian women in food industries

THE GENERAL INSTITUTION FOR FOOD INDUSTRY, THE SYRIAN
ARAB COMPANY FOR MILK AND DAIRY PRODUCTS

The General Institution for Food Industries is the supervisory authority over public sector companies for food industries (22 companies). Since its establishment in 1975, the company decided to develop production in quality and quantity, adding modern nutrition technology to food production automatically and providing healthy food with high standards to strict specifications. About 4,789 workers, among whom were 872 females, worked in the companies affiliated to the Institution. One of these companies, the Syrian Arab Company for Milk and Dairy Products, specialized in producing milk and eight dairy products.

This company was selected because it was located in Damascus and operated all year round, which facilitated the process of data collection.

The structural organization of the company included a general director responsible for administrative divisions, production lines and production services. The total number of workers in the company was 174, distributed as follows:

- 60 administrative staff among whom were 20 females;
- 85 production workers, among whom were 28 females;
- 29 production services workers: 25 males and 4 females.

(a) Participation of women in the company labour force

The percentage of female workers was 30 per cent (52 persons) and of male workers 70 per cent (122 persons); the percentage of female workers in the government food industries reached 18.2 per cent and in the food industries in general 10.9 per cent.

The percentage of female workers in the company was 6 per cent of the total female labour force in the government food industries. Women participated in the administrative activities of the company with a percentage of 33.3 per cent and in the productive activities with a percentage of 32.9 per cent and in the services area with a percentage of 13.8 per cent.

The work in the company was performed by one shift from 7 a.m. to 3. p.m. The milk was received from suppliers and stored in the evening.

Sample choice: Because of the small number of females working on the production lines in the company, it was inevitable that other females would be selected to work in the planning and finance divisions, as well as the commercial and services divisions in the company; hence the sample classification was as follows:

Females: 27 production workers + 13 from the financial and administrative divisions + 3 from the production services.

Males: 37 production workers + 2 service workers.

(b) Economic, social and demographic characteristics of the sample

(i) Demographic characteristics

a. Age

Seven per cent of females and 5 per cent of males were under 20 years of age; 77 per cent of females and 31 per cent of males were 20-29; 14 per cent of females and 23 per cent of males were between the ages of 30-39; 2 per cent of females and 20.5 per cent of males were in the age group 40-49; and 20.5 per cent of males were over 50 years of age.

The female sample was characterized by a large number of young women (77 per cent in the age group 20-29), but the male sample included most age groups.

b. Mobility

Forty-three per cent of the females and 32 per cent of the males were born in Damascus; 26 per cent of the females and 8 per cent of the males were born in other cities; and 32 per cent of the females and 60 per cent of the males were born in the village.

c. Marital status

The female sample in the food industries was characterized by a high percentage of unmarried workers (79 per cent of females and 23 per cent of males); 19 per cent were married, and the percentage of male married workers was 77 per cent; one female was widowed.

(ii) Economic and social characteristics

a. Family members in households and dependants

Thirty per cent of females and 36 per cent of males lived with families of less than five members each; 47 per cent of females and 33 per cent of males with families comprising 6-8 persons; 23 per cent of females and 31 per cent of males with families of more than 9 persons.

Concerning dependants, 47 per cent of females and 13 per cent of males supported one or two persons; 25 per cent of females and 33 per cent of males supported 3-5 persons; 23 per cent of females and 54 per cent of males supported more than six persons.

b. Housing

About 79 per cent of females lived in private houses, of which 79 per cent were owned and 21 per cent rented. As for males, 82 per cent had private houses, of which 84 per cent were owned and 16 per cent rented; 21 per cent of females lived in shared houses, 33 per cent of them owned and 67 per cent rented; 18 per cent of males lived in shared houses, 78 per cent of which were owned.

c. Educational status

The results indicated that 7 per cent of females and 20 per cent of males were illiterate; 20.9 per cent of females and 20.5 per cent of males could barely read and write; 27.9 per cent of females and 43.6 per cent of males had completed primary classes; those who had finished preparatory schools were 16.3 per cent of the females and 7.7 per cent of the males; and the percentage who had completed secondary classes and higher was 27.9 per cent of females and 7.7 per cent of males.

These results should be viewed with caution, with regard to the differences in the nature of both samples when comparing the two. Among those characteristics was educational level. The percentage of females working in the administrative and finance division was 30 per cent in the female sample, representing 65 per cent of the total females working in the company. The male sample included no worker from that division.

The percentage of female illiteracy was low compared with males. If female workers in the administrative division were excluded, the educational structure of the sample would be as follows:

Illiterate: 10 per cent females and 20 per cent males
Read and write: 30 per cent females and 43.6 per cent males
Primary classes: 40 per cent females and 43.6 per cent males
Preparatory classes: 13.3 per cent females and 7.7 per cent males
Secondary classes and higher: 6.7 per cent females and 7.7 per cent males.

(c) Characteristics and situation of work and production

(i) Actual years of service

As was observed in the textile industries, the years of service of males exceeded those of females: 49 per cent of females had worked less than five years as opposed to 18 per cent of males; 46.5 per cent of females had worked 5-9 years while the percentage of males in this category was 23 per cent.

As for those who had worked more than 10 years, they were approximately 59 per cent of males and no females.

The average number of years of service of female workers in the company reached 4.84 years as opposed to 13.21 years for males.

(ii) Income

The total income included: net salary, overtime bonuses, production incentives, in-kind compensation per month.

a. Total income in the month preceding the survey

The average total monthly income for females reached LS 1,944 and for males LS 2,465; the difference in the income of the male and female workers was 26.8 per cent.

The average monthly net salary for females was LS 1,530, or 78.7 per cent of their total income; the average monthly net salary for males was LS 1,867, or 75.7 per cent of their total income. The difference in the net salaries of the two groups was 22 per cent.

The perquisites in income for females amounted to LS 414 per month, or 21.3 per cent of their total monthly income; the amount for males was LS 598, or 24.2 per cent of their total monthly income; the difference between the two groups was 44 per cent.

b. Resources of income; variances by gender in the company

Overtime. Seven female workers recorded additional working hours per month for LS 44 per worker, while 20 male workers received, for additional working hours recorded, LS 150.

Production incentives were distributed in correlation with production, i.e. working more hours resulted in receiving more bonuses and incentives.

The average monthly share of female workers in these incentives reached LS 310; for the males, it reached LS 351.

Actual years of service had an essential impact on the workers' incomes because of the regular allowances every two years (7.5 per cent-9 per cent). The average number of years of service for female workers in the company was 4.84 years and for male workers 13.21 years. The difference represented a major factor in the variance of incomes.

Marital status. A marriage allowance of LS 25 was paid per month to married male and female workers, in addition to an allowance of LS 25 every month for every child without a limit on the number of children for which the allowance could be paid.

The percentage of unmarried female workers was 79 per cent in comparison with only 23 per cent of male workers.

c. Distribution of the labour force according to income categories

Of the total labour force, 29.7 per cent of females and 5.1 per cent of males were in the first category of income (LS 1,500-LS 1,800); 46.5 per cent of females and 25.6 per cent of males earned LS 1,800-LS 2,100; 23.3 per cent of females and 18 per cent of males earned LS 2,100-2,400; 20.5 per cent of males earned LS 2,400-LS 2,700; and 2.3 per cent of females and 30.8 per cent of males earned LS 2,700 or more.

These results indicated a concentration of female workers' incomes in the lower categories; 76.2 per cent earned less than LS 2,100 a month, while 51.3 per cent of the males earned over LS 2,400.

d. Income and years of service

Of the female workers who had worked less than five years, 48.5 per cent earned LS 1,865 a month compared with 17.9 per cent of the male workers who were in this category and earned LS 2,071; females who had worked 5-9 years were 46.5 per cent of the total, with an average income of LS 1,995 compared with 23.1 per cent of the males who were in this category and earned LS 2,275. Those who had worked 15 years and more were 2.3 per cent of the females (one worker) and her income was LS 2,160; males with the same number of years of service were 48.7 per cent and earned LS 2,758. Most females had worked either less than five years or from five to nine years; almost all the females in the sample were young and unmarried; males' years of service covered all categories and, as noted above, the number of workers who had worked more than 15 years totalled 19 males and only one female. The average income increased, in general, with the number of years of service.

e. Income and educational level

About 7 per cent of illiterate female workers earned LS 2,430 and 20.5 per cent of illiterate males earned LS 2,563. Twenty per cent of the females who could barely read and write had an income of LS 1,759 per month, and 20.5 per cent of the males who could barely read and write had an income of LS 2,569. The females who had completed primary classes (27.9 per cent) earned LS 1,873 and the males in this category (43.6 per cent) earned LS 2,288. As for those who had finished secondary classes or higher, 27.9 per cent of females earned an income of LS 2,068 and 7.7 per cent of males an income of LS 2,700.

The small number of cases made it impossible to trace a constant pattern concerning the relation between education and income. The long years of service of illiterate female workers (7 per cent) gave them the right to receive a higher income than other educated females. Concerning males, those who had completed preparatory classes earned higher incomes than others, while illiterate males earned higher incomes than those who had completed primary classes. Hence, the relation between education and income should be considered cautiously, because the difference in years of service affected this correlation.

f. Education and years of service

The average number of years of service for illiterate workers was 7 years for females and 17.65 years for males. The average number of years of service for females who had completed primary classes was 4.75 years and for males 11.31 years.

As for females who had completed preparatory classes, the average number of years of service was 4.14 years and for males 14.67 years, while the figure was 3.67 years for females who had finished secondary classes or higher, and for males 4 years.

g. Income and age

About 75 per cent of the female workers were in the age group 20-29 and only one female (2.3 per cent) was in the group 40-45 years of age, while males were in all age groups. The average income increased permanently with age of the worker.

h. Contentment with income

The percentage of females contented with their income was 72.1 per cent; the percentage of males contented with their income was 7.7 per cent. The three contented males were married: one was illiterate, the second could barely read and write, and the third had completed secondary school. Two of the males had worked more than 15 years and received LS 3,000 per month; the third had worked less than 10 years and received LS 2,000 per month.

The discontented females (27.9 per cent) included 12 workers: 8 were unmarried, 3 were married and one was widowed. As for their educational levels, 5 had completed secondary school, 3 preparatory, 2 primary and two could barely read and write—they did not have a long period of seniority. Seven of them had worked less than seven years, 4 had worked between 5-9 years and one had worked 15 years. Concerning distribution of monthly income, 4 received less than LS 1,800, 6 received between LS 1,800-LS 2,100 and 2 earned between LS 2,100-LS 2,400; hence they belonged to the relatively low income categories.

i. Production skills

There were three categories of female workers:

1. The number of workers in administrative, financial, commercial planning divisions and other services totalled 13, of whom 3 had completed preparatory school and 10 secondary school.

2. The number of workers in the indirect production divisions who worked in cleaning the containers and pouring the milk manually, totalled 5 unskilled workers.

3. Fifteen skilled workers worked in the direct production divisions and production control. Their work needed skills and knowledge; they used manual instruments, mechanical and automatic machines.

There were three categories of male workers:

1. Six head of divisions and their assistants;
2. Four indirect production workers;
3. Twenty-eight skilled direct production workers who used mechanical and automatic machines.

j. Training opportunities

There was no regular training in the company, neither local nor outside. Only one worker had attended a training course for a month.

The junior workers, males and females, were trained by the seniors on the job.

k. Promotion opportunities

With regard to female workers, 95.4 per cent said that there were no disparities between females and males in promotions, while 4.6 per cent said promotion opportunities for females were greater than for males.

With regard to males, 72 per cent said that men were luckier than women in promotions, and 28 per cent said there was no difference in promotions with regard to gender.

The difference in the opinions of the men and women about promotions indicated the following:

1. Misunderstanding the question;
2. Non-existence of apparent promotion opportunities in the company;
3. The real feeling of the workers in the company: although there were some female workers who could be considered to have experienced discrimination in promotions, they did not state that they felt discriminated against, which meant they had no feeling of being unfairly treated.

l. Social services

Transport was provided to all workers free of charge except for one worker who lived near the company headquarters.

Health care: no clinic existed in the company owing to the limited number of workers. The company had contracts with specialists to treat sick workers and their families and provided medicine free of charge. A total of 67 per cent of the female workers and 77 per cent of the male workers had benefited from the medical service in the previous year.

Child care: there was no nursery in the company because the number of married females did not total 30 per cent of all female workers.

Other services: there was a consumer cooperative to provide food (including rice, sugar and tea) at subsidized prices.

The effect of these services on the work: 30.2 per cent of females and 7.7 per cent of males believed that such services affected work continuity in the company, while 69.8 per cent of females and 92.3 per cent of males said they had no impact. The number of females who mentioned the effectiveness of these services was 13, of whom 10 were unmarried and three married.

m. Participation

Women's participation in the decisions of the company: only two females working in the financial division stated that they participated in decisions related to their division. None of the female production workers participated in production decisions.

In regard to males, the sample included three division heads, two assistants, and the official responsible for services in the company, all of whom participated, by virtue of their posts.

Female participation in unions and political activities: all workers in the government companies were members of unions. One female worker and two male heads of divisions were members of the five-member union committee of the company.

Two female workers and 17 male workers were members of a political party (most probably the Arab Baath Socialist Party).

(d) Major issues and deterrents facing working women

Data indicated a conflict of roles and the negative impact on the lives and work of the female workers.

(i) Family burdens

The number of responsibilities undertaken by the unmarried female workers was less than for the married female workers. Of the females in the sample, 53.5 per cent had other members of the family who assisted them in cooking, child care, shopping, cleaning and washing, while 70 per cent stated that they had no problem in handling responsibilities at home and outside. In addition, 46.5 per cent enumerated the following tasks they performed without help: 39.5 per cent cooking and cleaning; 25.6 per cent shopping; 14 per cent child care; and 7.1 per cent taking care of older members of the family.

(ii) Difficulties confronting working women

A total of 46.5 per cent said that they were discontented with their working conditions (20 workers, of whom 8 worked in the administrative and financial division and 12 in the production division). Of the 20 discontented workers, 18 were unmarried and 2 married. Thirteen workers were contented with their incomes and 7 were dissatisfied. Seven workers were vulnerable to work-related health problems: allergy (7 workers) backaches (5), hearing loss due to noise of machines (2), and injuries from broken glass (2).

With regard to the difficulty of handling tasks both inside and outside the home, 30.2 per cent of female workers answered that they could hardly cope: of these, 7 were married, 5 unmarried and one widowed, while 69.8 per cent stated that they could easily handle both kinds of work.

The difficulties were as follows: taking care of babies, the great distance between home and work (three workers for each case).

(iii) Deterrents preventing increased participation in production

One worker in the milk division and two in the administrative and financial division answered that boredom with work was the main deterrent.

(e) Main recommendations for increasing economic participation of women

1. Regular statistical surveys should be carried out on women in the labour force. The sample should be enlarged to allow for extraction of the required classifications for the labour force and its characteristics. These surveys should include a question to distinguish between those who have an economic activity inside or outside the home, and those who have no activity, by using the criterion of how much time is spent on work to determine the number of hours worked by women and workers. The distinction between services of economic value registered in the national income account, and services performed in the family and not included in the national income account, should not be confined to economic statistical concepts and national accounts systems.
2. Local and outside training courses should be provided to increase the efficiency of workers and their administrative capabilities and to qualify female executives to participate in the decision-making and work system in the company.
3. Support should be given to services for women, if any, and if there are no services, they should be provided in order to alleviate the double burden on female workers.
4. The work system should be regulated in order to decrease worker fatigue, and medical regulations and vocational safety measures should be observed, through training courses directed to female supervisors to be trained in such matters.

**E. PARTICIPATION OF WOMEN IN THE PHARMACEUTICAL
INDUSTRIES IN THE SYRIAN ARAB REPUBLIC**

Introduction

According to the population censuses of 1970 and 1981 and the labour force sample in 1984, the total number of female workers reached 195,000, 175,000 and 300,000 respectively, the corresponding percentages being 10.8 per cent, 8.6 per cent and 13.4 per cent of the total labour force. These percentages were low in comparison with other countries. It was expected that this number would increase because of the high educational level among females and because of economic pressures.

In 1981 the number of female workers in the industrial sector amounted to 33,500 and in the manufacturing industries 32,600, percentages of 19.1 per cent and 18.6 per cent of the total labour force in the Syrian Arab Republic. Those figures are

no longer current because several changes have occurred since then with regard to the pharmaceutical industries. The number of workers in this area reached 2,000 in 1992, among whom were 1,000 females. Female workers in the pharmaceutical industries were relatively highly educated. An administrative survey of 10 pharmaceutical companies in the Syrian Arab Republic resulted in the following information:

(a) Female labour force: the first pharmaceutical company, Kanawaty Private Company, was established by a Syrian family in 1923. It produced a limited number of drugs. In 1947 Shohaba'a Laboratories was founded in Halab. The first big company was established in 1956, the Arab Medical Company TAMECO, with a total capital of LS 110 million. This Company was the largest in the Syrian Arab Republic as it provided 900 job opportunities for both sexes, i.e., half the labour force in the pharmaceutical industries. TAMECO is a public sector company and produces nutritional products for children. Another government company, DIMAS, was established and affiliated to the Ministry of Defence. The labour force in three other companies amounted to 100 workers, with less than 50 workers in the remaining 30 medicine production units. Five companies of those surveyed were established recently with a total investment that did not exceed \$200 million.

The Government supervises the administration of the pharmaceutical industries in the Syrian Arab Republic through the Ministry of Industry and technically through the Ministry of Health. According to the data provided by the Ministry of Health, there were 12 companies in Damascus, 7 companies in Homs and 14 companies in Aleppo, producing medicine. All the pharmaceutical companies were private sector except TAMECO and DIMAS.

The number of drugs produced by the companies surveyed ranged between 10-114. Seven companies produced medicines with special patents, nine companies produced drugs that did not require medical specifications to be marketed, and half the companies produced drugs that were not under patent. The administration of nine companies stated that they used more progressive technology than many developing countries while seven companies possessed modern machines. From 2 to 42 specialists in scientific research worked in eight companies. Ten main companies were selected to fill out the administration's questionnaire; the results indicated that the labour force totalled 1,618 workers in 1992. In the other companies it reached 300-400 workers, or 20 per cent of the total labour force in pharmaceuticals.

The workers' answers to the administration's questionnaire shed some light upon the status of the labour force in this industry:

(a) Quality structure of the labour force in the pharmaceutical industry

According to the results of the administration's questionnaire in 10 companies, the number of male workers reached 791 and the number of female workers 827; thus 51 per cent of the labour force were female. The female workers were distributed in the 10 companies by career paths as follows: 83.9 per cent in production, 10.7 per cent in services, and 5.4 per cent in administration. The number of female workers exceeded that of males in production; it was the same in the services divisions and was less than half the number of males in the administrative divisions.

(b) Educational level

The workers in the pharmaceutical companies were divided into four educational levels: (a) illiterates and those who could barely read and write; (b) workers who had completed primary or preparatory classes; (c) workers who had finished secondary level; and (d) university graduates. The percentage of males who had completed secondary level or more was 49 per cent and the percentage of females 53 per cent.

(c) Subsidiary services

Nine companies provided health services, eight companies supplied transport, five companies offered meals, and four companies bought uniforms for the workers. In two companies there were consumer stores, in TAMECO there was a nursery and one private company gave its workers discounts on its products.

(d) Training

Five companies provided training courses inside the country; three companies provided on-the-job training and four companies sent some workers outside for training.

(e) Participation

Workers in five companies participated in decisions organizing company affairs; there was no worker participation in four companies, and in one company workers participated occasionally in decision-making.

(f) Performance level

The administration of six companies stated that the performance of the females was better than that of the males; the other companies said there was no difference.

1. **Time and place of study:** The study was undertaken in July 1992 in the TAMECO and OBRI companies.

2. **Subjects of the study:** TAMECO was selected as the only civil public sector company producing medicine. OBRI was the biggest private sector company. A questionnaire for workers was distributed among the sample selected from the workers in both companies in 1992. A total of 1,146 workers were employed by these two companies, representing 57.3 per cent of the total labour force of the pharmaceutical industries in the country. The size of the sample was equal between females and males and almost the same for both companies, as the labour force in TAMECO was equal to the labour force in all private sector companies. In TAMECO 100 questionnaires were filled out by 50 males and 50 females, while in OBRI 45 questionnaires were distributed to males and 45 to females.

3. **Study method:** The questionnaire designed by ESCWA in 1989 for a study of women in the textile and food-processing industries was used (see annex).

4. **Fieldwork:** Three female researchers and one male researcher specialized in statistics participated in the fieldwork. The answers were revised on the spot after interviews with the workers. For that reason the results of the questionnaire were more realistic, particularly for the females.

5. **Study tools and data resources:** The questionnaire designed by ESCWA and the questionnaire of the administration were the major tools of the study in addition to the published information about the Syrian industries.

6. **Study obstacles:** The most important obstacle was the lack of updating of the information derived from the 1981 census data. At that time the number of female workers employed in the pharmaceutical industries reached 500 or 0.5 per cent of the labour force of the manufacturing industries, and less than 0.2 per cent of the total labour force in the Syrian Arab Republic. For this reason it was impossible to rely on surveying the labour force by sampling, as it would have covered only a small number of females in this industry, and thus prevented classification according to different characteristics. Hence, it was important to carry out a special survey.

1. Summary of both companies

(a) TAMECO Company

The TAMECO Company was established in 1956 in Damascus. It is the oldest medical institution in the Syrian Arab Republic. TAMECO is the sole public sector

company that produces medicine and nutritional products for children. About half the labour force in pharmaceuticals worked in this company. The Government fixed the wages and salaries in TAMECO. During the survey 911 workers were employed in the Company, among whom were 364 females. The labour force was distributed in the Company by profession as follows: 79 in the administrative division (32 females); 709 in production (284 females); and 123 in the services division (48 females). Concerning the educational levels, there were no illiterates. The percentage of those who could read and write was 9.6 per cent for both females and males. The percentages of those who had completed primary school were 48.5 per cent of the males and 48.4 per cent of the females. The percentage of males who had finished secondary level was 30.3 per cent and the percentage of females 30.2 per cent, while the percentages of university graduates were 11.7 per cent of males and 11.8 per cent of females, which were almost equal percentages that decreased the disparities in salaries.

In the Company there were 42 specialists in scientific research. TAMECO was considered the biggest in terms of services offered to workers, and was the only Company that had established a nursery, a consumer store and provided entertainment services. The Company also supplied free meals and uniforms as well as transport and health services. Training courses were available inside and outside, and the workers were given the right to participate in the decisions of the Company. The administration of the Company considered the performance of both sexes the same.

(b) OBRI

OBRI was founded in 1991 in Aleppo as a private sector company. It was considered the second biggest company in the Syrian Arab Republic for pharmaceuticals. About 70.2 per cent of the labour force working in the Company were females (a total of 235 workers of whom 165 were females). The labour force was distributed as follows: four males and four female workers in the administrative divisions, 66 males and 146 females in the production department and 15 females in service activities. The educational standard was relatively high among workers and equal for both sexes.

2. Demographic, social and economic characteristics of the sample

(a) Demographic characteristics

(i) Age

The highest percentage of females was 40 years of age (51 per cent); the lowest percentage (5 per cent) was less than 20 years of age. The rest of the female workers were between 20-29 and 30-39 (16 per cent and 19 per cent respectively). The majority of males were between 20-29 and 30-39 years of age. The females in OBRI were younger. The percentage of females under 30 years of age was 46 per cent in TAMECO and 90 per cent in OBRI. Concerning males the percentage of those who were under 30 years of age was 62 per cent in OBRI and 30 per cent in TAMECO.

(ii) Mobility and housing

The majority of workers were born in Damascus and Aleppo and lived there. A total of 94 per cent of the males and 70 per cent of the females lived in their own houses and the rest lived in rented houses.

(iii) Marital status

The data showed that 42 per cent of the males and 57 per cent of the females of the sample were unmarried. Eight female workers were widowed or divorced; two males were in that category.

(b) Economic and social characteristics

(i) Education

The educational standard in both companies was relatively high. A total of 70 per cent of the females had completed secondary level as opposed to 63 per cent of males. The percentage of females who had finished primary and preparatory classes was 27 per cent and 32 per cent for males. The illiterate females and those who could barely read and write were 3 per cent and 5 per cent of males. In OBRI 80 per cent of females had completed secondary classes. There was an indirect relation between education and age.

(ii) The number of family members and dependants

Males lived with larger families compared with females. The average number of people supported by each male worker was 3.5 persons and by each female 2.3 persons owing to the high percentage of married males who were responsible for supporting their families.

(iii) Actual years of service

A total of 60 per cent of the females and 53 per cent of males served less than five years. In TAMECO 24 per cent of the females and 10 per cent of the males had served less than five years. Fifty-seven males and 24 females had held other jobs before working in the Company. Regarding the unemployment period it was less than one year for 80 males and 79 females; the rest searched longer for jobs. Three females and 22 males had extra jobs outside the Company.

3. Working and production conditions

(a) Additional work

Twenty-five per cent of females and 45 per cent of males worked overtime hours. A total of 70.5 per cent of females preferred to work part time.

(b) Supervision and nature of work

In TAMECO eight female workers supervised other workers. In OBRI there were no females in principal posts. Concerning the nature of work in TAMECO, 24 per cent of females worked in production as opposed to 40 per cent of males. In OBRI 29 per cent of the female workers were employed in the packing divisions as opposed to 4 per cent of the males.

(c) Training

Nine males and 11 females attended at least one training course inside the country. One male and two females were sent abroad for training, all of whom worked in TAMECO, except one who worked in OBRI. From the point of view of the female workers, training opportunities were more available for men.

(d) Work tools and production skills

All jobs performed by females in both companies required a certain competency; hence workers in the pharmaceutical companies should be skilled and competent, with higher levels of education and training.

(e) Wages

The net salary of the female worker was LS 3,008 and for the male worker the net salary was LS 3,102. The nature of the work accounted for this difference. There were disparities in the perks received: the females received LS 1,281 and the males received LS 1,807, a difference of 41 per cent. This disparity is due to incentives, bonuses and overtime. Concerning the average net salary, it was equal for both sexes in the production and administrative divisions: females who worked in the services divisions received net salaries which were 9 per cent less than those of males. There were great differences in the net salaries paid by the two companies. In OBRI 44 females and 39 males received equal net salaries, while the average salary of the six other workers was LS 3,758; for the remaining female workers, it was LS 6,000. All workers in the Company benefited from the provision of uniforms and meals which saved LS 550 per month. Regarding monthly bonuses, 12 females and 14 males earned LS 1,000; six females and 16 males received LS 2,000; one male worker received LS 5,000; and four workers earned LS 3,000.

In TAMECO more than one third of the female workers received less than LS 3,000; 18 per cent of the male workers earned more than LS 3,500 as opposed to 10 per cent of females who earned the same income. As for the relation between education and income, the income of males increased about 11 per cent more than that of females who completed secondary classes. This difference is due to the disparity in actual years of service, which reached 6.7 for females and 8.3 for males.

(f) Satisfaction with work and income

Forty-seven males and 65 females were content with their work; of those who were discontented, 17 males and 6 females stated that they were looking for a job with a higher income. Most of the dissatisfied workers were employed in TAMECO (80 per cent males) and (46 per cent females). In OBRI the percentage was 18 per cent males and 16 per cent females. Seven workers in TAMECO wanted to work in a private sector company. The answers indicated that 70 per cent of the females who had completed secondary school were satisfied with their income, as opposed to 66 per cent of those who did not complete secondary level.

(g) Promotions

In TAMECO the Director and the Head of the Production Department were women; in addition, six female workers were heads of divisions and two were head assistants. In OBRI no women occupied principal posts. A total of 85 per cent of the females and 84 per cent of the males stated that there were no disparities in promotion between the sexes, while 10 per cent of the males said that females were more lucky and 5 per cent of the females and 4 per cent of the males indicated that males were more lucky in promotions.

(h) Services

Transport service was offered in TAMECO free of charge, with an average saving of LS 370 per month for the workers. Health services were also provided in the Company. OBRI made available a doctor and in emergency cases the workers were sent to the hospital at their own expense. In some cases medicines were supplied to patients if the medicines were Company products. A total of 66 males and 69 females had benefited from health services, which saved LS 513 for males and LS 562 for females. In TAMECO there was a nursery operated at very low cost for employees and seven female workers had benefited from it. Both companies supplied a free daily meal and free annual uniforms. A total of 43 per cent of females and 6 per cent of males said they believed that such services affected their continuing in their work; most of those were in TAMECO.

(i) Participation

All workers in TAMECO were members of the union by virtue of the law. Four males and two females were members of the union committee. Concerning participation in decisions of the divisions, 28 males and 21 females participated. Regarding Company decisions, the number of workers participating reached 26 for males and 19 for females, most of whom were workers in the administrative divisions. There was no worker participation in the private sector companies. Concerning membership in political parties, 17 males and 38 females were members of parties. Women workers did not participate in social activities outside of work because they had no time for such activities. This was apparent in counting those who worked overtime hours: they numbered only 24 females as opposed to 43 males. A total of 67 female workers preferred to work part time and only three females had extra jobs outside of their work in the companies.

*4. Major issues and deterrents confronting women
in the pharmaceutical companies*

Working women undertook several duties; in the first place family responsibilities (66 per cent); then shopping (38 per cent); and then care of children (32 per cent). Thirty-five females faced difficulties in handling all burdens, while 60 female workers, especially the unmarried workers, found no difficulty in handling all their responsibilities. Because of the multiple roles undertaken by female workers, in particular after marriage and having children, women had no time for other activities. Thirty-four females stated that working conditions were hard for them, while the rest enumerated other difficulties.

(a) Obstacles to increasing the participation of women in the pharmaceutical industries

Fifty workers stated that they faced problems at work, while 19 said that the difficulty of the work induced them to change jobs. Eight workers stated that their jobs did not correspond to their educational level. Concerning health hazards, 20 workers had been injured once at work and seven had been injured twice or more. The majority of the injured workers were among those working on the production line, and the percentage exceeded that of men. Sixty-seven female workers took an average of 16 days sick leave during the year preceding the survey. Among males, 46 males took seven days of sick leave. About 58 per cent of the females preferred to work at home and 70.5 per cent wanted to work part time because of exhaustion and boredom with work. Of the unmarried females, 53 per cent preferred to work at home and 61 per cent of those who preferred to work part time.

(b) Role conflict

More than one third of the females said it was difficult to cope with all their responsibilities. The unmarried were better able to shoulder their burdens inside and outside the home.

(c) Laws regulating women's work in industry

In 1959 Law No. 91 was issued and is still applied in the private sector. The principal law for workers in government and public sector companies was applied in 1986. This law included all provisions for employing women, the most important of which were the following: (a) prohibiting women from working in places such as quarries, mines slaughterhouses, glass furnaces, and in jobs that involved working with lead, fertilizers and asphalt. The law prohibited the employment of pregnant women

and nursing mothers in jobs that involved chemical products or radioactive materials, or that required carrying and pulling heavy weights. The law also prohibited women from working night shifts except in jobs such as hostess, artist or nurse. In the remaining jobs, all stipulations were applied to both sexes as regarded employment, promotion, training, incentives, leaves and services. The female worker could obtain maternity leave for 75 days and additional leave for a month at 80 per cent of base salary and another month unpaid. Nursing mothers were given one hour a day until their babies reached the age of one year.

5. Results and recommendations

(a) Results

1. From the field survey in 10 companies the following information was collected:

(a) In 1992 the labour force in the biggest 10 pharmaceutical companies totalled 91 males and 827 females, a number that exceeded the female labour force in general;

(b) The participation of females was equal to that of males in the services departments. The percentage of females who worked in the administrative divisions was 5.4 per cent as opposed to 12 per cent of males;

(c) The educational level of both sexes was high and the percentage of males who had completed secondary level was 49 per cent; the percentage of females who had completed secondary level was 53 per cent;

(d) Most companies provided transport, meals and a health service; some supplied uniforms and one provided a nursery;

(e) All companies provided training courses, most of which were inside the country. Outside training opportunities were rare and less available for females;

(f) The workers participated in decisions regulating company affairs in more than half the factories;

(g) Six administrations in six companies said that the performance of the female workers was better.

From the sample survey the following data were compiled:

- (a) In both companies 1,146 workers were employed, i.e., 57.3 per cent of the total labour force in the pharmaceutical industry;
- (b) The sample reflected the real status of workers in industry in general;
- (c) Of the 190 questionnaires, half of them were filled out by females, most of them Syrians who had been born and lived in cities;
- (d) The female workers were younger than the males, the percentage of the unmarried higher;
- (e) Most male workers lived with larger families than did female workers, and the percentage of dependants was higher for males;
- (f) A larger number of males worked overtime hours;
- (g) The standard of education was higher for female workers in the companies;
- (h) The salaries were equal for both sexes in the public sector. There were disparities in the additional wages. The male workers received 14 per cent more than the females due to the difference in years of service. The average of overtime hours for male workers was 41 per cent more than for the females;
- (i) Of the female workers, 29 per cent worked in the packing division as opposed to 4 per cent of males and 24 per cent of the females worked on the production line as opposed to 40 per cent of the males;
- (j) The training opportunities inside and outside the country were still better for males, as were promotion opportunities;
- (k) The percentage of those contented with their work and income was higher among females;
- (l) In TAMECO there was a nursery, the services of which were used by 7 of the 12 married female workers;
- (m) All workers in TAMECO were members of the union. In every public sector company there was a board of directors as well as technical committees. Most workers participated in administrative activities, with equal participation by females

and males. The majority of the private sector companies did not allow any participation in decision-making by their workers;

(n) The number of male workers who participated in the political parties was more than double the number of females;

(o) The female workers had neither the energy nor the time to participate in social activities.

(b) Recommendations

(a) The information on the labour force in the industry should be updated.

(b) Labour laws should be applied in line with technological industrial development.

(c) The private sector companies should be obliged to permit the workers to participate in the trade unions.

(d) Subsidiary services should be provided to working women so that they can cope with all their responsibilities.

(e) Shorter workdays with fewer hours should be set for married females to enable them to continue working after marriage.

(f) Working conditions and treatment of female workers inside the factories should be improved.

**F. PARTICIPATION OF WOMEN IN THE ELECTRONICS INDUSTRIES
IN THE SYRIAN ARAB REPUBLIC**

Introduction

This field study highlights the electronic industry in the Syrian Arab Republic (public and private sectors), and the participation of women in this field. Data were compiled from agencies working in this domain, and a survey of the principal company working in the electronics field was conducted. On the basis of the information obtained, it was noted that these industries had been started in the Syrian Arab Republic in 1960, when a company for import and maintenance of television sets was established. This company was developed and a laboratory for assembling television

sets and manufacturing their components was founded. In the 1990s a joint Syrian-French company was established to manufacture telecommunication equipment.

Television sets, telephones and equipment for electronic exchanges are now produced in the Syrian Arab Republic with the collaboration of several foreign companies and experts. Some ministries are affiliated with workshops to produce control sets or electronic dials to their specifications.

There are now offices for programming and private companies that prepare programmes for broadcasting. There are electronic sets, for which the required licences were obtained, similar to those produced by international companies. Completed factories were imported with all their requirements. Microwave ovens, washing machines and microprocessors were also produced. The private sector manufactures different sorts of dials, changes and updates old apparatuses and replaces the sets of moulding plastics that depend on electronic circuits. Data on the public sector are still insufficient.

Although three decades have passed since its founding, this industry is still confined to assembling and partial manufacturing, which means subordination to the foreign patentees. This industry requires education, research work, development, marketing and complementary industries to keep up with development. However, for the time being, it is carrying out its role in providing substitutes for imported parts for television and telephone sets. The industry is also involved in standardizing products, which simplifies repair and maintenance and makes it possible to supply spare parts at reasonable prices.

Women work's in this industry is considered more complicated than in many other jobs, as it requires specialization in using developed apparatuses. The number of female workers in the Syrian Arab Republic increased from 174,925 in 1981 to 539,635 in 1991. In the manufacturing industry-which involves electronics-about 35,000 female workers were employed in the public, private and cooperative sectors.

(a) Place and time of the study

The field survey was undertaken in the Electronic Industries Company in Damascus during November and December 1992.

(b) Society covered by the study

The sample embraced 145 subjects among whom were 80 females, but only 135 forms were filled out (73 females). The sample was designed to represent all workers

and divisions. The number of females and males was almost the same. The company administration selected the persons for the sample.

(c) Tools of the study

- (a) The questionnaire was prepared by ESCWA.
- (b) Field visits were made to all companies and agencies working in the same field.
- (c) Published official data were used as a source.

(d) Problems of the study

- (a) Detailed data concerning female workers in the electronics industries were unavailable.
- (b) The numerous questions in the questionnaire hindered the classification of results because the sample was relatively small.
- (c) There was a shortage of data about the private sector in the electronics industries.

(e) Summary of the company under survey

The Arab Company for Electronics Industries was established in 1960. The Company distributed and maintained television sets (black and white) until 1965, when it started to assemble the sets and manufacture the wooden cabinets for them. In the beginning of the 1970s, the Company started to manufacture the plastic and metallic parts, insulating materials, transformers and coils. Production in the working shift reached 350 sets. The Company then started to manufacture telephone sets and manual and semi-automatic exchanges. In 1976 the company started producing colour televisions, then sets with remote control devices, and various telephone sets. The company undertook all maintenance processes of the products it sold, through 17 affiliated maintenance and repair centres.

About 939 engineers, technicians and administrators were working in the company: 18 per cent in the administrative department, 65 per cent in the production and services divisions and 17 per cent in the maintenance centres. The number of female workers amounted to 341, or 36.3 per cent of the total number of workers.

1. Demographic, social and economic characteristics

(a) Demographic characteristics

The sample represented 21 per cent of the working females in the company. All workers in the sample were Syrian except for three Palestinian females.

Age: The percentage of workers under 34 years of age was 47.4 per cent; about 5 per cent were over 50.

Mobility: 64.4 per cent of the females and 53.2 per cent of the males were born and lived in big cities, while 11 per cent of the females and 8.1 per cent of the males were born in small towns. Those who were born and lived in urban areas were 24.6 per cent of the females against 38.7 per cent of the males. All workers in the sample were living in Damascus at the time of the survey.

Marital status: The percentage of married female workers amounted to 46.6 per cent and the percentage of unmarried females 49.3 per cent; the rest were divorcees and widows. Concerning males, the percentage of married workers was 69.4 per cent and the percentage of unmarried workers was 30.6 per cent. Those workers who had less than three children were 38.5 per cent of the total number of workers; 13.3 per cent had between 4-6 children, four workers had from 7-9 children, and three had no children.

(b) Social and economic characteristics

Educational level: There were no illiterate workers or workers who could barely read and write in the company. The percentage of female workers who had completed primary, preparatory, and secondary or university level were 24.7 per cent, 43.8 per cent and 31.5 per cent respectively, against 14.5 per cent, 14.5 per cent and 71 per cent of males. This means that more than 50 per cent of the total number of workers in the company were either university graduates or had completed secondary levels.

Dependants: 47 per cent of the total number of workers in the company supported less than 4 persons, while 8.3 per cent did not support anyone else.

Other income resources: About 26 per cent of the total number of workers in the sample were engaged in other activities after working hours. There were three female workers who also worked as dressmakers, two who worked as hairdressers, and one who worked as a nurse.

2. Work and production conditions

- (a) **Working hours:** The company workday was from 8 a.m. till 3.30 p.m.
- (b) **Overtime:** A total of 20 per cent of the employees worked additional hours; only five female workers worked overtime. No females worked during official holidays.
- (c) **Jobs of the workers in the sample:** The majority of the workers chosen were working in the divisions for telephone sets and exchanges (40 per cent); 27.5 per cent worked on the sets production and 6 per cent were preparing studies and prototypes. Most of the female workers worked in the telephone and exchange sets divisions (53.4 per cent) and 35.6 per cent in the administrative divisions and 2.7 per cent were preparing studies. No females worked in the commercial division. The highest percentage of male workers were employed in the manufacture of colour television sets (46.8 per cent).
- (d) **Supervision:** 9 per cent of the male workers supervised less than 20 workers, 4 per cent supervised between 21-40 workers and 85 per cent did not have any supervisory responsibilities. Two female workers hired five workers and one female worker supervised four workers.
- (e) **Training:** There was a directly proportional relation between training and level of the workers' education. A total of 20 per cent of those who finished primary schools, and 30 per cent of those who completed preparatory classes, and 50 per cent who had secondary certificates or were graduates attended courses of from one month to a year in duration. A total of 59 per cent did not participate in any courses. Of the female workers, only 24 were trained inside the country.
- (f) **Work with machines:** 14 per cent of the workers used manually operated and automatic machines; 29 per cent worked with their hands. A total of 59.5 per cent of the females used automatic machines against 49.5 per cent of the males. A total of 15 per cent of the males and females used manually operated machines or worked with their hands.
- (g) **Wages:** The lowest wages were LS 1,500. 51.9 per cent of the workers with primary certificates received from LS 1,550-LS 2,500 while 48.1 per cent of the preparatory certificate holders received from LS 2,550-LS 3,500. The graduates (45.6 per cent) received more than LS 3,550; the average wage per worker per month amounted to LS 2,975. 73 per cent of the female workers earned between LS 2,550-LS

3,500. The wages depended upon the quality of the job, the incentives and the overtime.

(h) **Contentment with wages and work:** 84.7 per cent of the male workers and 95.9 per cent of the females were dissatisfied with their wages. 50 per cent of the males and 31.5 per cent of the females wanted to change jobs.

(i) **Risks:** 56 per cent of the persons in the sample were not exposed to any hazards, while 16 per cent were subject to electrical hazards, 10.5 per cent were affected by the odour of tin, and 2.7 per cent were vulnerable to the danger of radiation. About 38.5 per cent of the workers who were using manually operated machines had suffered hand injuries.

(j) **Participation:** 50.7 per cent of the total number of females shared in the decisions on their children's education, 34.2 per cent in their children's marriages, 93 per cent in the family budget, and 49 per cent in buying and selling properties. In connection with union membership, 11 per cent participated in the decisions related to the union committee. As for the contribution of females in the party, about 17 per cent shared in its activities.

3. Major issues and obstacles facing female workers in the industry

(a) **Reasons for women working:** 48.5 per cent of the married female workers said that they worked to support the family budget while 2 per cent of the unmarried workers indicated that the main reason for their working was to obtain an income. Other reasons stated by half the female workers ranged from assisting the family, meeting house instalment payments or fees for educating their children abroad. Making use of their certificates or attaining social prestige were only secondary factors that stimulated women to work.

(b) **Contribution to the family income:** 80.8 per cent shared in half or more of the budget while 17.8 per cent contributed less than half of the family income. About 1.4 per cent did not contribute at all.

(c) **Family burdens:** 42.5 per cent of the female workers did all their housework without assistance, while 21.2 per cent were responsible for looking after the children, 20 per cent did the shopping and 88 per cent of the total number of female workers left their children in nurseries.

(d) **Coping with work inside and outside the house:** 63 per cent of the female workers could hardly cope with all their responsibilities; 28.8 per cent could

cope easily (90 per cent of this group were unmarried or had no children). About 8.2 per cent could not handle their responsibilities and faced many difficulties.

(e) **Major problems that affected work:** 33 per cent answered that the main difficulty was coping with work inside and outside the house; 26 per cent mentioned that the working conditions were the major problem, while 23.5 per cent stated taking care of the children and family misunderstandings were the major problems.

(f) **Impact of work on having children:** 71 per cent of the married female workers mentioned that owing to their job commitments they tended to have fewer children. Those who used contraceptives amounted to 76.5 per cent; in the Emigration Research carried out in 1988, this figure did not exceed 38 per cent in the urban centres.

(g) **Work difficulties:** 43.5 per cent of the females said they had no trouble of any kind at work, while 12 workers mentioned several sorts of problems they encountered: behavioural problems (6 per cent), work-related hazards (13 per cent), maltreatment (14 per cent), and boredom (22 per cent).

(h) **Discrimination:** About one third of the female workers felt there that the administration was biased towards men for many reasons: promotion opportunities, nature of the work, training and incentives. The highest percentage of discrimination cited (34 per cent) was in assignment of posts, the lowest (23.3 per cent) in incentives. A total of 76.7 per cent of the female workers in the sample complained to the union in cases of discrimination, while 34.2 per cent turned to the party and 78 per cent referred the issue to their bosses.

4. Results and recommendations

(a) **Results**

(i) **For all the persons in the sample**

1. The research covered 145 persons (80 females). Only 135 forms were filled out.
2. Of the persons in the sample, 31 per cent were born and were living in rural areas and 9.7 per cent in small towns. All the persons in the sample were currently living in Damascus.
3. The percentage of workers under 34 years of age reached 47.4 per cent; only 50 per cent were over 50 years of age.

TEXTILES, FOOD-PROCESSING, PHARMACEUTICALS AND ELECTRONICS

4. The percentage of married workers in the sample was 57 per cent and the percentage of unmarried workers 40.7 per cent; 39 per cent of those married had less than three children.
5. No illiterate or barely literate workers were employed in the company; 50 per cent of the workers had completed secondary school or were graduates, 30 per cent had preparatory certificates and 20 per cent primary certificates.
6. The percentage of those who worked on the telephone and exchange sets reached 40 per cent; 27.5 per cent were working in the colour television sets division.
7. Twenty-nine per cent of the workers depended upon their hands in their work.
8. Thirty-five per cent of the workers in the sample had attended training courses that lasted from one month to a year. There was a directly proportional relation between the trainees and their educational level.
9. The lowest wages were LS 1,500. The level of wages increased to LS 3,550 according to educational level.
10. The percentage of those who performed secondary activities or worked overtime amounted to 20 per cent. The official working hours amounted to 7.5 hours daily.
11. A total of 56 per cent of the workers in the sample were not vulnerable to any work accidents, while the rest were affected by the odour of tin, electricity or radiation dangers; 38.5 per cent of those who used manually operated instruments had suffered injuries.

(ii) The results concerning females only

1. The average age of the female workers in this industry was 32.
2. The education level of the female workers was less than the males. More than two thirds of the male workers had secondary certificates or were graduates, against one third of the females.
3. The highest percentage of female workers were employed in the telephone and exchange sets division, against 46.8 per cent of males who worked in the colour television sets division.
4. The highest percentage of female workers was employed in assembly, then the administrative divisions, and the lowest percentage worked on preparing studies.

5. The percentage of male workers who tended to change jobs was 50 per cent against 31.5 per cent of the females.
6. A total of 63 per cent of the females could not cope with their responsibilities inside and outside the home. Those who answered that they could cope easily were mostly unmarried or had no children.
7. Supporting the family budget and obtaining a suitable income were the most important stimuli for women to work.
8. Females carried the majority of family burdens; 42.5 per cent did all their housework without assistance and 21.2 per cent took care of the children.
9. The females who put their infants in nurseries were 88 per cent of the total of females in the company.
10. A total of 71 per cent of the married workers mentioned that work affected the number of children they had per family; 29 per cent said it had no effect. 76.5 per cent of the workers used contraceptives (this percentage was only 38 per cent in the Emigration Research).
11. About 50.7 per cent of the total number of females participated in family decisions, such as the marriage of sons and daughters, expenditure from the family budget, and buying and selling properties. About 11 per cent shared in the decisions related to the union.
12. About 12 female workers enumerated several difficulties that they faced at work, while 43.5 per cent said they had no difficulties.
13. About one third of the female workers felt that the administration was biased towards men in posts, training and incentives. About 76.7 per cent of the female workers complained to the union, and 34.2 per cent turned to the party in cases of discrimination.

(b) Recommendations

This study could serve as a reference to those in charge of the industrial institutions and employment policies, acquainting them with the situation of the labour force in general, and the circumstances of the female workers in particular. This could facilitate dealing with existing problems and consequently finding solutions based on accurate scientific data and indicators.

G. PARTICIPATION OF WOMEN IN THE TEXTILE AND FOOD-PROCESSING INDUSTRIES IN IRAQ

Introduction

The study was undertaken in two enterprises. The first was the General Institution for Cotton Industries. The factory for spinning and weaving, specialized in producing yarn and textile cotton and located in the Kazimyah area of Baghdad, was chosen for the field study, as it was the biggest of its kind as far as the quantity of production and the number of workers. The workers for the sample were selected from two divisions: spinning and weaving, where female workers were concentrated.

The second enterprise selected was the General Institution for Dairy Products in Abou Ghareeb, Baghdad, as an example of the food industries sector. The main objective of the study was to familiarize the researchers with the female workers' situation and their role in the production process compared with that of male workers.

The field study was carried out during the period 24 July—5 August 1989, and was completed by interviews with the administration of the two enterprises to obtain the required information about production, factory divisions, percentage of female workers, laws and procedures applied. Interviews also covered trends in the company administrations with regard to female workers.

The fieldwork team was divided into groups monitored by a field supervisor.

The researcher was confronted with several problems when monitoring the fieldwork alone: this entailed monitoring, revision and verification processes. It was also difficult to interview workers more than once, or take more time in the interviews than allotted by the work supervisor (25 minutes for each female worker).

The engineer or the supervisor determined the duration of the interview. They could not offer more cooperation because of the decrease in the number of workers and the effect of the interviews on the work process.

Male workers were not cooperative with the researcher. Some workers refused to be interviewed but were persuaded to answer questions on an anonymous basis. The researcher was obliged to follow this approach because there was no other possibility and because the contracts of the expatriate (Egyptian) workers had been terminated, which had led to a shortage of workers.

The field survey studied each enterprise separately. The comparison between the sexes was carried separately for each enterprise. No comparison was made between the two sets of results.

GENERAL INSTITUTION FOR COTTON INDUSTRIES

1. Women's participation in spinning and weaving

The General Institution for Cotton Industries is considered one of the biggest and the oldest industrial enterprises working in this field. Four big factories are affiliated to this enterprise in Iraq. Established in 1945 as a private sector company, it was nationalized in 1964 and became a public sector company affiliated to the General Institution for Spinning and Weaving Industries. After the administrative reform in 1987, the Institution was divided into four factories. The Spinning and Weaving Factory in Baghdad was selected for this sample since it was the biggest and most labour-intensive in Baghdad. The Factory comprises seven units: Spinning, Weaving, Engineering, Finishing, Administration, Commercial Affairs and the Medical Unit.

There was a total of 2,267 workers, 30 per cent of whom were Egyptians and foreigners. The percentage of female workers was 22.5 per cent. This was higher than the general participation of female workers in the spinning and weaving industry, which amounted to 20 per cent, and higher than their percentage of participation in other manufacturing industries except the garment industry in which the percentage of females reached 63.8 per cent and in the machines and electric appliances industry, in which it reached 26.2 per cent.

The company depends upon the permanent appointment of Iraqi adults, the temporary appointment of youths, and contracts with Arabs and non-Arab foreigners. This is based on the 1987 Civil Service Law which covered the wage system, degrees, job risks, allowances, bonuses and other perquisites linked to achievement. Wage increases were blocked. Overtime was confined to off days and compensated by time off. Bonuses and profits were cut off as a result of absenteeism and lack of achievement.

Work was performed in three shifts alternately as fixed by the administration, according to production requirements. The factory administration believed that gender-based discrimination in work was confined to two areas: not employing female workers in physically demanding jobs, and not assigning female workers to night shifts (from 11.30 p.m till 7.30.a.m.)

The administration considered that the productivity of the female workers was less than that of the male workers. The administration regarded the female workers as unreliable and unable to replace male workers. The high percentage of female workers was due to the decline in the number of males. The administration believed that allowing women to work at home was not feasible owing to the nature of the production process which required several machines that could not be used at home. The administration also believed that work could be more relevant to women if work technology was transferred from a mechanical to an automatic basis. However, there was no training centre in the factory. Training was carried out by senior workers in the factory because of staff shortages.

Survey sample

The sample included 72 workers, both men and women, chosen at random from Spinning and Weaving. The number of female workers totalled 41 in the sample, or 57 per cent of the total; all were Iraqi. The number of male workers in the sample was 31, or 42 per cent, among whom were six Egyptians working on temporary contracts. This had a negative effect on responses.

2. Economic, social and demographic characteristics of the sample

(a) Demographic characteristics

(i) Age

The workers in the sample were between 15 and 57 years old. Those who were under 20 years old represented 24 per cent of the sample. The percentage of females in the age group 20-29 was higher than for males. The percentage of workers in the age category 30-34 was 22 per cent of the females and 6.4 per cent of the males, while the percentage in the age group 40-44 totalled 13 per cent of the males and 7.3 per cent of the females. There were no female workers over 50 years of age. The high percentage of males in the first age group, which was contrary to the other countries surveyed, could be attributed to the war between the Islamic Republic of Iran and Iraq which had resulted in the loss of adult male workers.

(ii) Marital status and family stability

The percentage of married workers in the sample amounted to 48.4 per cent of the males and 19.5 per cent of the females. The percentage of divorced workers was 3.2 per cent of the males and 14.6 per cent of the females. Unmarried women made up 63.4 per cent of the female workers in the sample, while unmarried males made up only 48.4 per cent of the male workers in the sample. The percentage of unmarried

and divorced female workers was 78 per cent. About 80 per cent of unmarried men were in the age group 15-19 and only 19 per cent of the women were in the same group. The rest of the unmarried women were older, which meant that the percentage of unmarried females among females of marriageable age was high. About 12 per cent of the unmarried females mentioned that work had a negative effect on marriage opportunities.

(b) Economic and social characteristics

(i) Educational status

The percentage of illiterate female workers and females who barely knew how to read and write was 60.9 per cent, and only 25.5 per cent for males. Of the females, 26.8 per cent had completed primary classes, as had 48.4 per cent of the males. The percentage was higher for males who had finished intermediate, secondary and university education. Most of the illiterate female workers were over 40 and only one was 30 years of age. Most of the illiterate male workers were over 50. This result showed that most young workers had benefited from education.

(ii) Contributing to the family budget

About 53.6 per cent of the female workers lived with fathers who supported the family; 19.5 per cent lived in families supported by a brother as head of the household; one female worker lived alone; and two female workers lived with their brothers and sisters-in-law. As for married female workers, most lived with their husbands; two lived with their families as their husbands were abroad. Three divorced female workers lived with their fathers, the heads of the household.

The average number of family members was higher for the unmarried, both males and females. The unmarried females (except for three of them) contributed to the family budget. Some wives were responsible for supporting their families because their husbands were absent; the same was true of divorced female workers living alone, who made up 19.5 per cent of the sample.

The survey revealed that all female workers in the sample contributed to the family budget; about 32 per cent shared responsibility for more than half the budget; 19.5 per cent shared responsibility for half the budget; and 49 per cent shared responsibility for less than half the budget.

(iii) Home ownership

Out of the sample, 64 per cent of the workers lived in their own houses; 56 per cent of these were female and 58 per cent male. In addition, 22 per cent of the workers lived in shared housing or rented houses (14.9 per cent of the females and 16 per cent of the males). The indicator of house ownership reflected the comfortable situation of the workers. The percentage of those who owned factory houses out of the total number of house-owners was 32.6 per cent of the females and 10 per cent of the males and 24 per cent of the total number of the workers in the sample.

3. *Working conditions and productivity*

The female workers were employed under permanent contracts while male workers were divided into two categories: the first worked on a permanent basis, the second under temporary contracts; this group included 58.2 per cent of the male workers, among whom 66 per cent were Iraqis between the ages of 14-17. They could obtain permanent contracts on completion of their military service.

(a) Actual years of service

About 43 per cent of the workers in the survey sample had worked less than one year: of these, 32 per cent were female and 58 per cent male.

(b) Other and previous jobs

No workers in the sample had any other income-generating jobs. The percentage of those who had held previous jobs was 29 per cent for females and 25.8 per cent for males. About 50 per cent of the females who had held previous jobs had worked in jobs similar to their current jobs; the same was true for the male workers.

(c) Work stability

The answers of the male and female workers differed; 6.5 per cent of the males and 48.7 per cent of the females said that they wished to change jobs. The reasons mentioned by females were as follows: 25 per cent because of work hardships; 15 per cent because of transport hardships; 5 per cent because of family circumstances; 5 per cent because of working conditions; and 50 per cent for other reasons. Of that percentage, 45 per cent expressed their desire to change to another factory; 15 per cent said that they wanted to work abroad; 5 per cent said they wished to work in the private sector; and 35 per cent mentioned other reasons. Concerning the relation between educational and marital status and the desire to change jobs, it was noted that

60 per cent of those who disclosed their desire to change jobs were unmarried, 30 per cent married and 10 per cent divorced. About 35 per cent could barely read and write, 20 per cent had finished primary level, 5 per cent intermediate level, and 10 per cent secondary level.

(d) Working hours

There were no disparities in working hours between the sexes in the day shifts; no females worked night shifts. About 12 per cent of the females worked two weekly shifts alternately, the morning shift from 7.30 a.m till 3.30 p.m, the afternoon shift from 3.30 p.m. till 11 p.m. Working hours were not flexible; they depended upon production requirements and needs, as did overtime. The percentage of workers on morning shifts was 88 per cent of the females and 87 per cent of the males.

(e) Leave

The workers had the right to paid sick leave and seven days of paid annual leave: more than that would be deducted from their wages. In cases of a death in the worker's family, marriage of the worker, or childbirth, six months paid leave and six months leave at half pay would be available to the worker. The percentage of those who took sick leave was 16 per cent for males and 46 per cent for females; the percentage of those who took annual leave was 42 per cent for males and 63 per cent for females. The females in the sample took 79 per cent of the sick leaves and 66.1 per cent of the annual leaves.

Although the leave system was the same for both sexes, the reasons for the disparity were not disclosed.

(f) Work-related injuries

Work-related injuries in the sample affected 25 per cent of the workers, of whom 18 per cent were female and 7 per cent male; all the injuries were minor. About 9.7 per cent of the females said there was a risk of contracting bronchitis caused by cotton dust; other females saw no risks. The male workers cited some health problems caused by work, such as bronchitis, deafness, visual impairment, or nervous tension. The administration stated that all injuries had been minor for both sexes and said that no illnesses had been contracted that were work-related.

(g) Production process characteristics

There were very few differences in the division of labour between the sexes. No jobs were earmarked for females or males, nor were there any distinctions in the technical level of the male and female workers. However, it was noted that the percentage of females working in the first two production processes was high, perhaps because of the simplicity of these processes. In the third production process, which was mechanical, the percentage of male participation reached 25.8 per cent and only 5 per cent of females. In the other processes the percentages were almost the same. Females did not participate in two processes which the males described as too difficult.

(h) Supervision

Supervision was usually carried out by senior workers. The percentage of female supervisors was 12.2 per cent and the percentage of male supervisors was 26 per cent. The number of workers supervised by a female did not exceed 13 while the number of those supervised by a male was between 4 and 60 workers.

With regard to the female workers, there was no relation between supervisory assignments and actual years of service, or education or age; however, with regard to the male workers, the relation was apparent between actual years of service and supervisory assignments; hence the male workers undertook most of these assignments.

(i) Training

Most of the training courses were provided inside the factory in view of the difficulty of managing without the workers if they were absent for training. It was noted that the percentage of participation in training courses was low in general and did not exceed 13.9 per cent of the workers, of whom 19.1 per cent were male and 9.7 per cent female. The training courses for males were of longer duration than those organized for females.

(j) Income (wages)

Income levels of income were divided into three categories. The first category was from 50-69 Iraqi dinars (ID), the second from ID 70-99, and the third more than ID 100, over and above annual profits ranging between ID 10-40 per month.

Half of the females and only one fourth of the males in the sample were in the first category. The percentage of those who were in the highest wage category was 43.75 per cent of the males and 2.43 per cent of the females. There were no differences in wages between males and females except for actual years of service and

educational level above preparatory classes. About 40.4 per cent of females and only 3.1 per cent of males earned annual profits. These profits were connected with the division in which the worker was employed. The percentage of males receiving profits should be viewed with caution, because the males refrained from revealing their actual incomes and refused to give any details.

The distribution of bonuses, monthly incentives, and annual profits was linked to adherence to working hours, minimum number of leaves, and absence of disciplinary sanctions. The workers were not satisfied with these procedures.

(k) Service and social subsidies

These services were allocated within the subsidies determined by the Government. The following services were provided by the factory:

(a) **Transport** was utilized by 58 per cent of the female workers and 74 per cent of the male workers. This service motivated workers to choose the job. The non-existence of transport services induced workers to change jobs. The percentage of savings in return for this service reached between ID 3-5 per day.

(b) **Meals:** The meal service offered to the workers was not optional, and every worker paid ID 3.75 for the meals. The workers were not allowed to bring any food with them.

(c) **Factory products:** There were no provisions for donating any products to workers or providing them as a portion of the workers' wages or as incentives.

(d) **Health care:** This service was provided only during working hours because health services were provided in public hospitals at any time. Most workers were satisfied with this service.

(e) **Nurseries:** Factories did not provide such services, owing to the low percentage of female workers with young children in the sample.

(f) **Compensation:** Workers' injuries were not compensated because the Civil Service Law of 1987, and not the Labour Law, was applied. Workers were considered production employees and not workers.

(g) **Housing:** The factory provided this service. Workers could eventually own the houses that they rented. The percentage of beneficiaries included 22 per cent of the female workers and 6.4 per cent of the male workers.

4. Trends affecting women in their work

This section covers trends for female workers' attitudes, their perceptions of working conditions, and types of discrimination.

(a) Dissatisfaction with income

There was great variance between the male and female workers in their answers to this question. The percentage of discontented females was 32 per cent and the percentage of males only 13 per cent in spite of the non-existence of discrimination in wages between males and females according to the law. The high percentage of discontented females was due to the effect of their additional responsibilities at home. Though participation in the family budget was considered an essential motivation for working, the income the women received did not suffice for them to contribute to the family budget and have a personal income, especially for the unmarried workers who represented 62 per cent of the female workers.

(b) Dissatisfaction with work

The percentage of females satisfied with their work reached 29 per cent and the percentage of males 87 per cent. The percentage of dissatisfied females reached 22 per cent against only 3.2 per cent of males. The percentage of females who were satisfied to some extent was 29 per cent and the percentage of males in this category was 9.6 per cent.

(c) Performance

The majority of males (77 per cent) and females (63 per cent) said there were no gender-related variances in work performance. About 26 per cent of the male workers believed that the performance of the males was better; 34 per cent of the female workers said there was a difference between men and women in performance. The majority of this percentage (29.6 per cent) said that the performance of the male workers was better. This result expressed the women's feelings of helplessness and socio-economic inferiority.

(d) Performance incentives

Performance incentives were more important for male workers than for female workers. A good reputation came first for females, then wage increases, and lastly their supervisors' appreciation, which was also less important for males.

(e) Promotion opportunities

About 74 per cent of male workers and 85.4 per cent of female workers said that promotion opportunities were equal for both sexes. The rest of the workers agreed that the opportunities were greater for males. These results reflected more the opinions of the workers than what was actually taking place. The agreement in these responses may be attributed to the limited opportunities for promotion in this kind of work.

(f) Females' motives for working

The most important reason for working was to contribute to the family budget. About 17 per cent of the female workers in the sample completely supported their families; contributing to the family budget was a common motivation for all female workers; then came acquiring personal income, being useful to society, benefiting from one's education, and occupying free time.

5. Issues and obstacles facing working women

This section deals with certain issues and obstacles facing women and negatively affecting their work, family, and their lives in general.

(a) Problems of combining several roles

(i) Family burdens

Children did not represent a work-related problem in the sample owing to the high percentage of unmarried workers. All females workers bore most of the domestic responsibilities. About 71 per cent of the females could manage all their work and household responsibilities, 24.5 per cent could cope with difficulty, and 4.5 per cent could not cope. In this context there was no relation between marriage and inability to manage work and household responsibilities. The percentage of those who could not manage was 20 per cent of divorced and 60 per cent of married female workers.

(ii) Effect of work on marital status

There was no relation between work and marriage, or work and having children. About 25 per cent of married workers said that work had an impact on having children. The majority (75 per cent) said that work had no adverse effect on having children. The majority of unmarried females believed that marriage did not affect their work, while 15 per cent of them were of the opinion that work had an effect on marriage opportunities.

(iii) Problems affecting work

About 78 per cent of female workers had no idea of any problems, or they did not fully comprehend the question, or they faced no problems. About 22 per cent of female workers cited some problems such as difficulty of work, working hours, or income. The personal problems were less significant: most of them were family clashes. Those results should not be taken for granted, and the low percentage of female participation in industry should not be attributed to such reasons. A comparative analysis method is required.

(b) Work-related problems

About 73 per cent said that they faced no problems at work, while 24 per cent concentrated on some problems such as maltreatment, work hazards and uncleanliness of the workplace. About 17 per cent mentioned that they faced some behavioural problems with males. Most female workers complained to the administration. There was no correlation between reactions and the age or marital status of females.

(c) Laws governing employment of women

Employment of women and men was governed by the same laws and had been regulated by the Civil Service Law since 1987. It was not evident that the female workers were aware of these laws. They concentrated in their answers on the direct procedures and organizing directives applied, such as supervisors' rules, increased workloads, penalties and warnings. The percentage of those who answered this question was 46.3 per cent of the sample.

(d) Problems confronting female workers

Discrimination: This feeling plays a negative role in the participation of females in the production process. About 33 per cent of female workers perceived discrimination in the following: quality of work, filling of principal posts, promotions, incentives, travel and employment. In spite of that, this percentage should not be considered as having an impact on the choice of work because equality in wages was the most important factor; there was no relation between educational status and the perception of discrimination.

As to whether those factors affected trends towards changing the manner of work, such as working part time or working at home, the results indicated the following:

Working at home and working part time: About 51 per cent of the female workers expressed a desire to work at home, and 44 per cent preferred to work part time on condition that they received the same wages, incentives and annual profits. About 62 per cent of those who wanted to work at home were unmarried, 22.2 per cent married and 16.6 per cent divorced. Concerning those who wished to work part time, 61.1 per cent were unmarried, 22.2 per cent married and 16.6 per cent divorced.

The high percentage of those requesting to work at home and part time may justify consideration of such alternative modes of work. However, such a system is not related to this institution alone; it is the common prevailing system, which keeps women away from their homes for long hours without taking into consideration their family responsibilities.

6. Participation of female workers in the spinning and weaving factory

(a) Participation on the factory level

The results indicated no participation of females in decision-making on the division level and on the factory level in general. About 3.2 per cent of males participated in decisions on the division level; there was no participation on the factory level.

(b) Participation in the unions and in society

Since the replacement of the Labour Law by the Civil Service Law, the Labour Union was disbanded and confined to the private sector.

Concerning social activities, the percentage of participation of the workers in the sample was very low: 2.4 per cent of the females in the sample. One worker was a member of the General Union of Iraqi Women. The participation rate for males was 3.2 per cent; one worker was a member of a youth centre to play sports. There was no participation in the Parliament, and the members in the Party were few.

(c) Participation in family decisions

About 9.22 per cent of the females in the survey participated in all family decisions; 23.56 per cent participated in some decisions and 9.22 per cent did not participate at all. A relation existed between participation in decisions and marital status, educational level and sharing in the family budget. Concerning marital status, 55.5 per cent of those who participated in decisions were divorced, 22.2 per cent

married, and the rest unmarried. With regard to the educational level of those who participated in all decisions, about 66.6 per cent could read and write, 22.2 per cent were illiterate and 11 per cent had completed primary classes.

The relation between participation in family decisions and marital status and participation in the family budget was positive. About 88.8 per cent of those who did not participate were unmarried, 55.5 per cent shared less than half the family budget and 33.3 per cent shared half the budget.

GENERAL INSTITUTION FOR DAIRY PRODUCTS

1. Participation of women in the food industries

Food industries had witnessed a great change over the past few years when the majority were transferred to the mixed sector. Some of the divisions of the General Institution for Dairy Products were sold to the private sector. The remaining divisions were developed for export.

The Institution achieved a considerable increase in its production, reaching in 1988 a percentage higher than was planned in all divisions. It produced processed cheese, yellow cheese, cream, butter, yoghurt and pasteurized milk. The Institution employed all the experts required for those divisions.

(a) Mode of work in the Institution

- ▶ The work is performed in three shifts: morning, afternoon and night shifts.
- ▶ The total number of workers was 400, most of whom worked on the morning shifts and changed shifts weekly. Night shifts were confined to men.
- ▶ The Institution depended on machines and mechanical instruments to ensure health and cleanliness.
- ▶ The Institution was responsible for providing work overalls to all workers free of charge.

- ▶ Production was marketed through studied plans to guarantee reaching several regions equally, and refrigeration ensured the maintenance of product quality in transport.

(b) The sample

- ▶ The sample was chosen at random from the administration lists.
- ▶ The sample included all females who had worked more than six months (50 workers) representing 55 per cent of the total sample. The males selected (41 workers) represented 45 per cent.
- ▶ The percentage of female workers reached 12.5 per cent of the total number of permanent workers in the Institution.
- ▶ The percentage of male workers was 87.5 per cent of the total number of production workers in the Institution.
- ▶ Five workers, 12 per cent of the workers in the sample, worked under contract and 36 workers, 88 per cent, worked without contracts.
- ▶ Eleven female workers, 22 per cent of the total number of female workers in the sample, worked under contract, while 39 workers, 78 per cent of the total of female workers in the sample, worked without contracts.

*2. Social, demographic and economic characteristics
of the workers in the sample*

(a) Marital status

The percentage of unmarried female workers was 54 per cent against 20 per cent of unmarried males. The percentage of married workers was higher among males, 78 per cent, while only 26 per cent of the female workers were married. An additional 16 per cent of the female workers were widowed and 4 per cent divorced. Widows and divorced females worked to support themselves and their children.

(b) Mobility

The Institution is located on the outskirts of Baghdad, which resulted in a more equal distribution between those workers who lived in the capital and those who lived

in the nearby villages. The percentage of workers born in the village was 48 per cent of females and 44 per cent of males, and 34 per cent of both the male and the female workers were born in the capital. Regarding current residence, 46 per cent of males and females lived in the capital and 49 per cent of males and 50 per cent of females lived in the village. Concerning previous residence, 44 per cent of males and females used to live in the capital, 41 per cent of males and 50 per cent of females used to live in the village; thus there was no relation between urban or rural origin and working in the Institution.

(c) Educational level

Information pointed out the decline of the educational level of female and male workers in general, with a preparatory certificate being the highest level of educational achievement. About 46 per cent of males and 50 per cent of females left school after obtaining a primary certificate; their reasons were financial need and an unwillingness to study. They worked in the Institution for the income they earned.

The percentage of illiterate females was 18 per cent and the percentage of illiterate males 15 per cent. The parity of this percentage indicates the ineffectiveness of the literacy campaign. Those who had attended literacy classes were 40 per cent of the males and 21 per cent of the females. This situation was unlikely to change, for no literacy classes were currently being given.

3. Work and production conditions

(a) Previous jobs and additional work

The majority of females had not held any previous jobs before joining the Institution (9 per cent); only 8 per cent of the females had held other jobs, against 39 per cent of the males.

With regard to additional jobs, 4 per cent of the females and 10 per cent of the males had other jobs outside the Institution because of their need for more money. The majority had no time or energy for another job.

(b) Leave

The percentage of leaves taken by female workers was double that of male workers: the percentage was 48 per cent of females and 24 per cent of males. Leaves taken by female workers were as follows: 65 per cent paid annual leaves; 8 per cent maternity leaves for one year, half of which were paid at 50 per cent of full salary to

encourage people to have more children and to help mothers care for their babies in the first year.

(c) Income and wages

Female and male workers' wages were categorized as follows:

- (a) Nominal wage which depends upon educational level and qualifications;
- (b) Risk allowance: fixed for all workers at ID 7.5;
- (c) Incentives were given according to monthly production of the division, and were deducted for absence of a worker without previous permission. Incentives were paid in cases of sick, annual, marriage and maternity leaves for which previous permission had been obtained.

Income was classified into four categories: less than ID 100; ID 100-150; ID 150-200; and more than ID 200.

Results indicated that more than 20 per cent of the workers in the sample received between ID 150-200: this category included 68 per cent of the female workers and 56 per cent of the male workers. This income was sufficient for a person to maintain a satisfactory standard of living. The percentage of female workers receiving more than ID 200 was 6 per cent against 29 per cent of males. The incomes did not include any product of the Institution. The products were sold in a centre close to the factory.

(d) Production skills

Distribution of work for female and male workers in the divisions was the same. Most production processes were performed by mechanical instruments that did not require a long period of training for workers to learn to how to handle them. A system of exchanging jobs in the production lines was practised on an intra-division and inter-division level for workers who had been in the same job for a long time. This was done to maximize the benefits of all the labour force.

(e) Supervision

Supervisory responsibilities in the Institution were limited to males: 24 per cent of the males in the sample undertook supervisory assignments in addition to their regular work in the production line. Female workers were not willing to take on such

assignments as they believed that they needed certain qualifications. This reflects a traditional lack of self-confidence.

(f) Training

Training opportunities were very few in general. About 83 per cent of males and 78 per cent of females had had no training courses. This indicated that training opportunities for female workers were fewer. The majority of the workers said that the courses they had attended were related to their specializations. Most of the courses lasted two weeks.

(g) Services and subsidies

Transport: This is provided by the Institution without charge. The workers believed that this service saved time and effort.

Meals: The Institution supplied meals for a low price (ID 3 per month) which did not cover the real cost. All those working in the Institution, including chiefs and members of the Board of Directors, took their meals in the company restaurant and also took tea there during the tea break. The standard of food offered was good and clean.

Housing: Housing was provided in the blocks built near the Institution. The houses were distributed according to seniority and only if the worker did not own another house. This service was a great incentive for the female workers to continue working. Female workers who owned such houses were 48 per cent against 12 per cent of male workers, because most male workers owned other houses. The houses were first rented to workers and then sold to them for low prices and long-term instalment plans.

Health service: The health centre played a great role, particularly when workers were injured at work. The nature of the work in the Institution exposed workers to many risks (burning chemical materials, boiling steam, or injuries from broken glass).

All health services were provided in the centre free of charge.

(h) Work accidents and compensation

Although work risks were expected in the Institution (for 76 per cent of all workers), most workers (59 per cent of males and 52 per cent of females) had faced no accidents in all their years of service. The Institution did not pay any compensation to workers because they were considered production employees and not production

workers. This was the situation in the public sector since the application of the Civil Service Law in 1987. Owing to the special nature of work in the food industries in general and milk industries in particular, where workers were susceptible to humidity and chemicals, the health centre played a major role in monitoring the impact of such elements on workers' health; all workers underwent periodic check-ups for any symptoms of illness and to start treatment. This concern increased the workers' efficiency, their enthusiasm for work and their confidence in the administration.

4. Women and work

(a) Satisfaction with work and income

About 51 per cent of male workers expressed a desire to change jobs: of these, 42 per cent wanted to work outside the Institution and 85 per cent cited exhaustion from the work as their reason for wishing to change.

A total of 22 per cent of females wished to change jobs: of these, 64 per cent preferred to leave the Institution and 73 per cent cited exhaustion from work. There was no apparent relation between marital status and contentment with work.

Those who expressed their satisfaction with work were 48 per cent of the married workers and 56 per cent of the unmarried workers. The percentage of those discontented was 12 per cent for married women and unmarried women. With regard to the male workers, 51.6 per cent of the married workers and 25 per cent of the unmarried workers were satisfied with their work. The ambition to improve their work and the possibility of finding another job with higher wages accounted for the high percentage of dissatisfied unmarried workers (50 per cent). The percentage of those satisfied with their income reached 68 per cent of the male workers and 80 per cent of the female workers.

(b) Performance level

Of the male workers, 56 per cent mentioned that the men's performance was better, and 20 per cent of the female workers said the women's performance was better. Only 5 per cent of the male workers said that the women's performance was better, while 28 per cent of the female workers considered the men's performance better. Those who negated any disparity between the sexes were 62 per cent of the females and 36 per cent of the males.

Although these answers were personal opinions, it was noted that the women's answers could be more significant. The administration acknowledged women's superiority in performance, specifically in jobs that required cleanliness. The physically exhausting jobs in the Institution assigned to men did not exceed 25 per cent of all jobs; hence the administration tended to increase the percentage of female workers up to 75 per cent of the labour force. The assignment of the most exhausting jobs to men might account for their greater desire to change jobs.

(c) Promotion opportunities

It was noted through personal observations and the answers to the questionnaire that no distinctions existed between the sexes in promotions. Three female agronomists were in charge of three divisions in the Institution.

(d) Work incentives

There were several incentives stimulating workers to work harder. The motive that was attributed the highest percentage was an internal feeling of obligation; then came increases in wages, and a good reputation. No male workers answered that self-realization was a sufficient motive, although 4 per cent of females considered it an important stimulus. All incentives listed in the questionnaire were related to wages except the feeling of obligation and self-realization.

*5. Participation of female workers in the General
Institution for Dairy Products*

(a) Participation on the enterprise level

There was no decision-making role for any female and male workers in the Institution, even on the division level. Many workers were of the opinion that they should have a say in their assignment and transfer between production divisions.

(b) Participation of working women in family decisions

The percentages differed depending on the quality of decisions. Daily family expenditure recorded the highest percentage of women's participation (74 per cent), then general expenditure (70 per cent), buying and selling properties (70 per cent), education of the children (62 per cent), and marriage of sons (58 per cent). There was a relation between participation of women in the family budget and decision-making. About 28 per cent were completely responsible for decision-making, and 72 per cent partially. Concerning the relation between marital status and decision-making, married

workers had a lesser role because husbands had the upper hand. There was a relation between the capability of decision-making and independence and the educational level.

(c) Political, societal and labour union participation

The Institution had had no relation with the labour union since it started applying the Civil Service Law in 1987, when all workers became production employees. A total of 18 per cent of females and 49 per cent of males were members of the leading party. Females justified their non-participation by citing a lack of time and commitment to work and home responsibilities.

Concerning social contributions, they reached 100 per cent for both sexes when figures were provided, but figures were unavailable in most districts; hence the actual participation rate amounted to only 7 per cent of males and 22 per cent of females.

6. Problems and obstacles confronting working women

Problems of handling multiple responsibilities

The work in the Institution presented no problems for female workers and did not hinder the carrying out of all their household duties. Female workers mentioned that their duties were less than when they were completely engaged in housework, because other family members shared in housework when women worked outside the home.

All female workers were of the opinion that the only area neglected was towards their own persons as a result of their absorption in work and duties at home. This affected their morale and determined their desire to have a sound social life. Undoubtedly such a situation would have its impact on the women as human beings and as workers in the long run. The Iraqi Women's Union might play a major role in this context.

The results indicated that 56 per cent of female workers said they were capable of handling both work and family responsibilities, 38 per cent said they could hardly cope, and 6 per cent said they were incapable and admitted problems in taking care of their families and houses. Nevertheless there was a relation between marital status and preference for working in the Institution. Female workers continued to want to work even if their family's income improved, because they were accustomed to work as well as carry out their family and household duties.

7. Recommendations

1. The future opportunities for increasing the integration of female workers in the manufacturing branches of the textile, garment and food-processing industries in Iraq appear to be promising, but they are also highly dependent on the employment policies of the Iraqi Government and the local forces of supply and demand.
2. The reasons for encouraging, increasing the number of, and integrating women in the manufacturing industries are based on the following two facts:
 - (a) The manufacturing industry is a high growth sector and has a high employment demand factor, with high income occupations, and provides highly needed productive technical skills.
 - (b) The percentage of participation and contribution of female workers in this industry is not more than 0.004 per cent of the total female population of working age.
3. More opportunities are available owing to the increase in vocational training systems in Iraq and the greater percentage of female enrolment in these training courses. However, the technological changes within these manufacturing branches might affect female employment probabilities.
4. There is also a trend to enlarge other branches of manufacturing industries such as the electronics and electric manufacturing sectors, especially with the transfer from traditional to modern manufacturing industries. Therefore, an in-depth study must be undertaken in each manufacturing branch to assess the market demand for females and the availability of technical skills to support increasing female employment.
5. The differences in performance between male and female workers are higher in the textile and garment branches than in food-processing owing to the unavailability of opportunities for training and upgrading of skills. The workers' performance in these traditional industries is more dependent on training capabilities than on the general educational system. Factory administrations have not made an effort to benefit from the industrial training centres, owing to their reluctance to give time off for female workers to attend training courses.
6. In this case, it is important that female workers or job-seekers be offered the opportunity to enrol in the different industrial training centres in coordination with the private sector training institutions and universities that provide such training courses, as part of the continued education system and also, in the long run, as part of the connection between the skill requirements of the industries with the product of the

vocational and technical training. A system providing for alternate work and study opportunities for female workers should be introduced as soon as possible.

7. The increasing number of young entrants (female and male) in the employment market, gives incentives for Government to increase the training and upgrading of skills of female workers, through technical training facilities outside the formal working system, owing to the limitations in the structure of industry in general and the socio-cultural limitations that restrict female employment in particular.

8. There is a need for the administrations of manufacturing companies to encourage and develop training opportunities and skill upgrading within the requirements of each production process and manufacturing branch. This responsibility lies mainly with the official authorities and would include the training and research centres in the fields of employment and higher education. One of the measures to make training more successful is to provide monetary and promotion incentives.

9. Since the income incentive is one of the major motivations of job-seekers, and owing to the important contribution of female workers to the family income and budget, an increase in monetary incentives to female workers will promote and increase their participation and performance in the productive manufacturing sectors.

10. Non-monetary incentives, such as supervisors' appreciation and having the reputation of being hard-working, have a strong effect on women's work performance. Such incentives, if given priority and recognition by company administrations, can play a major role in encouraging continued employment, higher self-esteem among female workers and better work performance.

11. Some associated practices in this area, such as assignment of supervisory and leading roles to women workers and taking into account their opinions in the decisions of the Unit, section or production line where they work, would remove all discriminatory feelings or attitudes of not belonging.

12. Assigning the right person for the job is one of the areas that administrations do not give full attention to in the case of female workers. This has a negative effect on their work competence and performance. It is important to establish a job classification system that takes into consideration the qualifications and work aspirations of female workers.

13. Promoting good human relations between administration at its different levels and female workers can increase performance and encourage employment.

14. Establishing a unit for social work within large enterprises to resolve female workers' problems in cooperation with the administration will improve the morale of female workers.
15. Establishing committees for promoting a sense of solidarity and friendship between workers, supervisors and middle management, by organizing job-sharing tasks, on-the-job training by fellow workers, and recreation programmes will increase team spirit and the feeling of belonging.
16. Company administrations should demonstrate their interest in female workers' performance and careers by promoting procedures that enhance the female workers' success. Administrations should offer continued education, give workers leave for tests and exams, and provide advanced training courses for upgrading skills.
17. Health-care facilities should be increased and extended to cover workers outside working hours. Studies and reports should be prepared on health risks and work-related accidents that contribute to deterioration in the health of female workers because of their long working hours or owing to unsafe use of industrial chemicals and machines and unsafe conditions in the workplace.
18. Nurseries and kindergartens should be provided for female workers' children, and technical training scholarships should be provided for workers' children of high school age; this will increase the feeling of belonging to the enterprise and the team spirit found in many women, who prefer to work in a familial and cooperative environment.
19. Social services should be provided to workers, including housing facilities, transportation, health care and child care, food and recreation facilities, and should cover all workers, male or female, since these services will encourage the interrelation between the enterprise and the female workers' performance at work and their continued commitment to their jobs, the work ethic and tradition.
20. No importance seems to be given to the provision of part-time jobs, owing to the importance of income-generating occupations. Economic analysis connects the greater preference for working part time of the higher professional levels to the income level of their families. Therefore, the less the workers' income, the longer the working hours: the higher the workers' income, the shorter the working hours. For this reason, no recommendations can be made for flexible hours at the factory workers' level, though most female workers expressed dissatisfaction with the long working hours.

21. No recommendations can be made with regard to working at home, since the majority of female workers do not prefer to work from their homes, especially those in food-processing, although half of the female workers in the textile factory accepted the idea of working at home. The explanation for this difference of opinion, though it is related to the multiple roles assigned to women workers, is found in the females' psychological attitudes; there is an incentive for females to leave the home and to be liberated from familial control. This incentive is preferred only by the female worker with an independent nuclear family and with children of less than 4 years of age.

22. The female workers acquiring of higher-level skills can provide them with higher income. The additional income could lead to part-time work in other income-generating occupations, which could mean fewer working hours and a compromise between work and household responsibilities.

23. The provision of nurseries and kindergartens is not the only contribution that society could provide for the working mother; an increase in school hours to accommodate or to coincide with company working hours could be studied with regard to the benefits of lengthening the school day and recreation time of children at school.

24. Certain affirmative action procedures and provisions can lessen the burdens of working mothers and encourage them to seek employment in industry, which has a difficult working environment. These are:

(a) Prohibiting the employment of women during official holidays and weekends and not assigning any additional work after working hours without their consent;

(b) Increasing the daily work breaks to the maximum level provided by law;

(c) Decreasing working hours of women by one hour compared with males in line with the total work requirements;

(d) Increasing the weekly amount of work breaks;

(e) Providing for affirmative action in annual leave.

H. PARTICIPATION OF WOMEN IN THE TEXTILE AND FOOD-PROCESSING INDUSTRIES IN JORDAN

Introduction

The last two decades in Jordan witnessed social and economic progress and development in all fields. Jordanian women during this period played a very important role in the development process and in their contributions to family budgets. The percentage of women in the labour force reached 14-18 per cent in 1984. With regard to the different sectors, women's participation was estimated at around 33 per cent in the banking sector, 30 per cent in the government sector, 30 per cent in the commercial sector and 4 per cent in the industrial sector. However, the ensuing economic recession had a negative impact on women's participation in the labour force; hence the percentage declined to 6.62 per cent in the year 1988.

Concerning women's participation in the textile and food-processing industries, the percentage was 10.7 per cent in 1987 in the food-processing industries and 18.4 per cent in the textile industries. If female workers in the food-processing industries were distributed over all the 40 institutions, the rate would become 1.6 workers for each factory, while in textiles (11 institutions) the rate would become 9.4 workers for each factory.

(a) Objective of the study

The study focused on the situation of working women and their participation in the textile and food-processing industries by utilizing economic, social and demographic indicators for both male and female workers, in addition to dealing with the indicators related to the situation of working women.

(b) Scope of the study

The study covered the following:

(a) The social scope, which covered the study of the society and its size, sex distribution, persons, ages and dependants;

(b) The educational scope, which dealt with the educational level of the workers, the percentage of illiteracy and the training level;

(c) The economic scope, which included the different kinds of crafts, house locations, and other income resources;

(d) The services scope, which enumerated the kinds of services available to workers, i.e., transport, health care, housing, nurseries, and social insurance;

(e) Family trends with regard to working women including opinions of families on several issues such as family planning, participation of women in decision-making and in contributing to social activities, conditions of job training for women and the skills acquired.

(c) Place and duration of the study

The study was initiated with the collection of data from the beginning of June to the end of September 1989, in the Jordanian Agwakh Company Limited, representing textile industries, and the Jordanian Dairy Company Limited, representing food-processing industries. The two companies are among the biggest in those industries and are located in the city of Ruseifa, 40 kilometres (km) from Amman. Both are private sector companies.

(d) Social context of the study

(a) Female workers: Data were collected on all female workers working in the production line in both factories; there were 12 workers in the Dairy Company and 13 in the Agwakh Company.

(b) Male workers: A random sample was chosen representing 50 per cent of the workers in the production line in both factories. The total number of workers employed in the production line in the Dairy Company was 30, and in the Agwakh Company the number was 50.

(e) Method of the study

The questionnaire was used in a random sample that represented 10 per cent males and 16 per cent females. Then it was modified to suit the situation in Jordan. The questionnaire was filled out through interviews of 20 minutes each with male workers and 30 minutes with females. The total number of field visits was 30.

(f) Data resources

The study relied on collecting official and field data using the following:

- (a) Questionnaire;
- (b) Official data collected from both companies, the Ministry of Industry and Commerce, the General Statistics Agency of Amman and the Chamber of Industry;
- (c) A system of direct observations and personal interviews with officials in both companies;
- (d) Previous studies and scientific references related to the subject of the study.

(g) Statistical analysis

The statistics and percentages were derived and statistical computations were carried out by the computer centre in the University of Jordan.

(h) Obstacles to the study

The following obstacles to the study were noted:

- (a) The strike of the workers at the Dairy Company during the survey and the difficulty of undertaking interviews after the strike;
- (b) The holidays of the *Al-Id al-Kabir* which coincided with the survey;
- (c) The lack of official data and information about both industries in general and about the contribution of women in particular;
- (d) The carrying out of the study in a period of economic and social troubles following the economic crisis. That led to an atmosphere of doubt and suspicion with regard to social relations and to distortions in relations for work production, which affected adversely the fieldwork and the accuracy of answers to some questions related to work such as wages, participation in decision-making, relations between workers and the company administration and work continuity.

1. A summary of the two companies surveyed

(a) Jordanian Dairy Company

The Jordanian Dairy Company was established in 1968; work started in 1969 with a limited number of employees and a limited production capacity. The work was expanded with the introduction of modern machines. Then the Company founded a laboratory and developed the staff by employing efficient engineers, technicians and administrative staff. The Company produces milk, cheese, juice and ice cream. A factory for producing plastic wrappers is affiliated to the company. The number of workers in the Company reached 165, all benefiting from health insurance, savings, credits, allowances, perquisites and training courses. Among the Company's future projects are a cattle farm and the development of production lines. The Company's profits increased in 1987 then decreased in 1988 as a result of the upsurge in raw material prices.

(b) Jordanian Agwakh Factories Company

The Company was founded in 1962 and started production in 1965. The Company underwent several expansions in the years 1979, 1980, 1981, 1984, 1985 and 1986 in its imports of machines, textiles and pistons.

The production passes through seven stages before reaching the consumer. The number of workers was 170 in 1988; this figure decreased from 319 in 1978 as a result of the introduction of automation. The Company is looking forward to implementing several projects in the future.

2. Social, economic and demographic characteristics of the sample

The number of persons in the sample totalled 12 female workers in the Dairy Company and 13 in Agwakh. The males chosen for the sample totalled 30 workers employed in the Dairy Company and 50 in Agwakh. All workers selected were Jordanians.

(a) Demographic characteristics

(i) Age

The average age of the persons chosen for the sample in general was 23.1 for females and 31.6 for males. In the Dairy Company the average age was 22 for females and 32.5 for males, while in Agwakh it was 24 for females and 31 for males.

(ii) Mobility

(a) **Place of birth:** About 16 per cent of the females were born in the capital, 68 per cent in other urban centres and 16 per cent in a village. As for males, 12.5 per cent were born in the capital, 26.7 per cent in other urban centres, and 46 per cent in a village. This indicates that, with regard to the female workers, the highest percentage were born in urban centres (68 per cent), and with regard to male workers the highest percentage were born in villages (46 per cent). This percentage proves that males are more capable of emigration.

(b) **Current place of residence:** The majority of workers live in urban districts. About 4 per cent of the females lived in the capital, 88 per cent in other urban areas, and 4 per cent in villages. As for males, 20 per cent lived in the capital, 77.5 per cent in other urban areas and 2.5 per cent in a village.

(c) **Previous places of residence:** The results showed that most male and female workers lived in other urban districts. About 8 per cent of female workers had previously lived in the capital, 80 per cent in other urban areas and 12 per cent in villages, while 12.5 per cent of male workers had previously lived in the capital, 80 per cent in other urban areas and 7.5 per cent in the village.

(iii) Marital status

The results indicated that the percentage of unmarried females in the sample was 80 per cent and the percentage of married females only 4 per cent; these percentages were 60.6 per cent for married males and 32.6 per cent for unmarried males. In both factories the percentage of unmarried females was high, 76.9 per cent in the textile factory and 83.3 per cent in the dairy, while for unmarried males it was only 32 per cent in the textile factory and 33.3 per cent in the dairy. The percentage of married males was 53.3 per cent in the dairy and 68 per cent in the textile factory. This means that the majority of the female workers were unmarried and that the administration of the textile factory tried to avoid employing married females.

(b) Social and economic characteristics

(i) Educational status

There were no illiterate female workers in either of the two factories, and no illiterate male workers in the textile factory. The percentage of illiterate male workers in the dairy factory was 6.7 per cent. The percentage of female workers who had completed primary classes was 8.3 per cent in the dairy and 7.7 per cent in the textile factory: the percentage of males in that category was 13.3 per cent in the dairy and 24 per cent in the textile factory. The percentage of females who had finished preparatory classes was 58.3 per cent in the dairy and 30.8 per cent in the textile factory, while for males in this category the percentage was 40 per cent in the dairy and 44 per cent in the textile factory. As for those who had completed secondary classes, the percentage of females in this category was 33.3 per cent in the dairy and 30.8 per cent in the textile factory; for males, the percentage was 6.7 per cent in the dairy and 28 per cent in the textile factory. No females in the dairy had completed vocational training, but in the textile factory this percentage was 23.1 per cent. The percentage of males who had completed the same classes was 13.3 per cent in the dairy and 4 per cent in the textile factory. There were no female graduates in either of the two factories; however, 13.3 per cent of males in the dairy were graduates. The female workers who had earned vocational certificates occupied posts which were on a level lower than their capabilities, a reflection of the discrimination against women with regard to available opportunities.

(ii) Household family members

Of those workers with families not exceeding 5 persons per family, about 24.9 per cent of the females and 46.7 per cent of the males lived on the grounds of the dairy factory and 23.1 per cent of the females and 52 per cent of the males lived on the grounds of the textile factory. For those workers with families of 6-10 members, about 66.8 per cent of the females and 40.1 per cent of the males lived on the grounds of the dairy factory, while 76.9 per cent of the females and 36 per cent of the males lived on the grounds of the textile factory. Of those workers with families of more than 10 members, 8.3 per cent of the females and 13.2 per cent of the males lived on the grounds of the dairy, while in the textile factory the percentage reached 13.2 per cent for females and 12 per cent for males. The figures indicated that most females were unmarried and still living with their families whereas the majority of men were married and lived with their wives and children.

(iii) Dependent family members

Of those workers who supported less than 5 persons, about 33.3 per cent of the females and 60 per cent of the males lived on the grounds of the dairy factory, and 46.2 per cent of the females and 60 per cent of the males lived on the grounds of the textile factory. Of those workers who supported 6-10 persons, 58.4 per cent of the females and 33.3 per cent of the males lived on the grounds of the dairy and 53.8 per cent of the females and 36 per cent of the males lived on the grounds of the textile factory. Of those who supported more than 10 persons, 8.3 per cent of the females and 6.7 per cent of the males lived on the grounds of the dairy and only 4 per cent of the males lived on the premises of the textile factory. The family member who according to the percentages was most supported by male workers was the mother (66.7 per cent in the dairy and 64 per cent in the textile factory), followed by the wife (60 per cent in the dairy and 80 per cent in the textile factory) and the daughter (40 per cent in the dairy and 56 per cent in the textile factory), then the son (46.7 per cent in the dairy and 52 per cent in the textile factory). This denotes the social status of both sexes.

(iv) Home ownership

About 80 per cent of the female workers owned their houses, 16 per cent rented houses and 4 per cent rented houses jointly. None of the female workers owned houses jointly. Concerning males, the percentage of those who owned houses was 75 per cent and those who rented houses 22.5 per cent. None of the male workers owned or rented a house jointly.

(v) Other income resources

Of the female workers in the two factories, 8 per cent had other sources of income from embroidery, the flower industries, ceramics and crafts such as knitting. About 7.5 per cent of the males had other sources of income (undeclared); the majority were retired military officers.

(vi) Unemployment

Unemployment means here the period before getting a job; for most male and female workers in the sample, that period was not too long as they were employed in the same year they started looking for jobs. About 24 per cent of the females had been engaged in sewing clothes or in the sulphur factory, and 80 per cent of the males had been in the military service.

3. Working conditions and productivity

The variables in this part of the report concern the relations between male and female workers and the company.

(a) Working conditions

(i) Employment

All female and male workers were employed under the terms of annually renewed permanent contracts.

(ii) Working hours

Females work from 7.30 a.m. till 3 p.m.; males work according to a shift system, i.e. one week in the morning and the following week in the evening.

(iii) Overtime work

About 36 per cent of females work till 6 p.m. in the dairy and 46 per cent of females in the textile factory work till 6 p.m. This percentage is high compared with males, who do not have any overtime work in the textile factory and only 6.7 per cent of whom work additional hours in the dairy. This is due to their having other sources of income such as pensions, or income from driving a taxi in their free time, or other jobs.

(iv) Supervising other workers

The results indicated that the percentage of workers in supervisory positions was very low for all workers: only 4 per cent for females and 12.5 per cent for males.

(v) Training

The Director of the dairy mentioned the participation of workers in the training courses organized by the Ministry of Labour, but the percentage was very low, because 90 per cent of males and 88 per cent of females had no training opportunities. The training was confined to newcomers starting work and was organized by senior workers. The textile factory sent five male workers to Switzerland in 1980 to be trained on modern machines.

(vi) Quality of work tools

The majority of workers depended upon manually operated tools and machines. A total of 50 per cent of females and 40 per cent of males worked with manually operated tools in the dairy, while in the textile factory 53.8 per cent of females and 40 per cent of males worked with manually operated tools. As for manually operated instruments they were used by 41.7 per cent of females and 40 per cent of the males in the dairy, while in the textile factory 46 per cent of females and 36 per cent of male workers used manually operated tools. Only one female worker and one male worker in the dairy and three male workers in the textile factory were using automated machines.

(vii) Leave

Most leaves taken were in the categories of sick leave and annual leave. Because of the limited number of married female workers, there were no maternity leaves or leaves because of husbands. This situation increased the productivity of female workers and encouraged factory directors to refrain from employing married female workers.

(viii) Wages

The average wage (salary + overtime + allowances) was JD 72.4 per month for females and for males who did not get overtime (salary + allowances) JD 105.5 per month.

(ix) Satisfaction with work and wages

These variables are indicators for work incentives. The results demonstrated that the most important incentive for workers was to keep their jobs (30 per cent for females and 40 per cent for males). In both factories the percentage of satisfaction among males was higher than females (20 per cent among males and 8.3 per cent among females in the dairy). The percentage of dissatisfaction among females in the textile factory was double that of males (46.2 per cent among females and 24 per cent among males). This was due to the higher percentage of females who had obtained vocational certificates (23.1 per cent) whereas this percentage was only 4 per cent of male workers, and the fact that females did not get work in line with their qualifications. The next important incentive was to obtain the appreciation of the supervisor (16.7 per cent of females and 10 per cent of males in the dairy and 11.5 per cent of females and 14 per cent of males in the textile factory). Having a good work reputation came next as an incentive for workers to work harder (8.3 per cent for females and 10 per cent for males in the dairy and 19.2 per cent for females and 4 per

cent for males in the textile factory). The percentage of those contented with their salaries was 24 per cent of females and 24.6 per cent of males in general but was 33.3 per cent of males in the dairy.

(x) Stability in work

The results showed that high percentages of workers in both factories tended to change their work (73.3 per cent of the females and 40 per cent of the males in the dairy, 61.5 per cent of females and 48 per cent of males in the textile factory). The reasons cited were exhaustion from the work, family circumstances and others. The main reason for changing work was finding another job. One factor cited was the belief of some workers that their current job was irrelevant to productivity. But unavailability of other job opportunities, the high rate of unemployment, and bad economic circumstances kept workers from changing their jobs.

(xi) Work performance level

All results affirmed the existence of distinctions in the level of work performance between men and women. About 40 per cent of males and 16.7 per cent of females in the dairy said that the females worked better than the males. In the textile factory the result was the opposite: only 4 per cent of male workers and 30.8 per cent of the females believed that the female workers were better. About 64 per cent of males in the textile factory said that men worked better than women. The low percentage of females who considered their performance better reflected the women's lack of self-confidence.

(xii) Promotion opportunities

All answers indicated that men were given more promotion opportunities than women.

(xiii) Services and social subsidies

(a) **Transport:** Both factories provided this service to the workers; about 80 per cent benefited from transport services. Those who did not use the transport available either lived close to their work or owned a car. In this case the factory paid a transport allowance. The amount saved through this service was about JD 5 per month in general.

(b) **Meals:** There were canteens in both factories. Ready meals were also available at low prices. In this case the worker saved JD 1.8 which is the difference in price between the meal offered and the same bought from outside.

(c) **Health care:** In every factory there was a physician for first aid. As for the critical cases, they were sent to medical centres or hospitals. All workers were enrolled in a health insurance scheme, which saved JD 5 per month for each worker.

(d) **The institution products:** The dairy factory gave all workers gifts on special occasions such as Ramadan, *Al-Id al-Kabir* and Labour Day. The savings from these products were approximately one dinar for women and two dinars for men. The savings to employees from all services supplied amounted to JD 11.

(e) **Impact of services on work continuity:** The transport and health services had an effective impact on all workers in the context of work continuity. The impact of the meal service was less. Neither factory offered any housing or nursery service.

(xiv) Health hazards

A total of 61.5 per cent of female workers in the textile factory said that they were vulnerable to eye, nose, face and hands allergies. About 38.5 per cent of females had suffered work-related accidents. In the textile factory, 64 per cent of males confirmed that they were vulnerable to health hazards. About 36 per cent were injured during work. About 25.5 per cent of females and 53.3 per cent of the male workers in the dairy stated that they were vulnerable to health risks and the percentage of those who had been injured reached 16.7 per cent of the females and 46.7 per cent of the males. Hence, the percentage of vulnerability to accidents at work was almost the same for both sexes in the textile factory, and higher for males in the dairy.

(xv) Participation

(a) **Participation in the company union:** In the dairy the percentage of female union members was 66.7 per cent and the percentage of male union members was 73.3 per cent, while in the textile factory this membership percentage was 76.9 per cent for females and 64 per cent for males. The high percentage of female union members in the textile factory was due to their high level of education.

(b) **Participation in decision-making in the divisions and in the company:** The absence of female participation was noted in both factories. Concerning the decisions of divisions, the percentage reached 8.3 per cent for females and 20 per cent

for males in the dairy. In the textile factory this percentage was 23.1 per cent for females and 16 per cent for males. Regarding participation of males in the company decisions, the percentage was 6.7 per cent in the dairy and 8 per cent in the textile factory.

(c) **Participation in social activities:** The participation of females in the residential districts reached 8.3 per cent in the dairy and 7.7 per cent in the textile factory. The social participation of males reached 6.5 per cent in the dairy and 12 per cent in the textile factory.

(d) **Participation in family decisions:** The percentage of female participation in family decisions among the workers in both factories was as follows: 68 per cent in the daily family budget, 64 per cent in the total family budget, 60 per cent in children's education. These percentages were generally high.

4. Major obstacles and issues facing women workers in both companies

The percentage of married female workers had no essential impact on the study results, as it did not exceed three workers; one was married, the other separated and the third divorced.

(a) Percentage of women with dependants

It was noted that each married woman in the sample supported three children of more than four years of age. The percentage of unmarried women with dependants was as follows: 96 per cent supported their mothers, 80 per cent their sisters and 60 per cent their fathers and brothers.

(b) Women's reasons for working

The reasons to work that recorded the highest percentages were the following: participation in the family budget (41.6 per cent in the dairy and 30.7 per cent in the textile factory), followed by the acquisition of special income (25 per cent in the dairy and 26.9 per cent in the textile factory). The third reason was supporting the family (20.8 per cent in the dairy and 3.9 per cent in the textile factory, which is a low percentage). Finally came occupying free time (19.2 per cent in the textile factory and 4.2 per cent in the dairy). Other social reasons got very low percentages: they included having a social career, profiting from education, self-realization and benefiting society. It was noted that economic reasons recorded a higher percentage in the dairy than in the textile factory.

(c) Participation in the family budget

About 50 per cent of the workers in the dairy and 30.8 per cent of the workers in the textile factory were responsible for funding more than half of the family budget. About 33.3 per cent of the workers in the dairy and 38.5 per cent of the workers in the textile factory funded half of the family budget. Those who funded less than half of the family budget included 8.3 per cent of the workers in the dairy and 15.4 per cent of the workers in the textile factory. As for the percentage of females who were not responsible for contributing to the family budget, it was around 8.3 per cent in the dairy and 7.7 per cent in the textile factory. These results are in agreement with what was noted above, indicating a lower economic level of female workers in the dairy compared with those in the textile factory because of the difference between their educational levels.

(d) Family burdens

The female workers to a great extent shared family burdens. The percentage of women who did the family laundry themselves was high in both companies: 41.7 per cent in the dairy and 76.9 per cent in the textile factory, perhaps because washing could be done on the day off. This was followed by child care, an average of 20 per cent for the two workplaces, and house-cleaning, with an average of 16 per cent for the two workplaces, then cooking (12 per cent), contributing to the family budget (8 per cent), and finally shopping (8 per cent).

(e) Role conflict and managing to work at home and outside

The results showed that the majority of female workers could cope with their different responsibilities. The percentage reached 58.3 per cent in the dairy and 76.9 per cent in the textile factory, because of the majority of unmarried workers there. Those who could hardly manage their responsibilities were 25 per cent of the females in the dairy and 15.4 per cent in the textile factory. The percentage of those who could not manage was 8.3 per cent in the dairy and 7.7 per cent in the textile factory.

(f) Shortcomings

The major shortcoming in meeting responsibilities cited by the female workers was in cleaning the house (80 per cent of all the sample). Other shortcomings cited related to family care and absence from work, which recorded a very low percentage (4 per cent).

(g) The impact of work on marriage

About 50 per cent of female workers in the dairy and 38.5 per cent in the textile factory considered that work had a negative impact on marriage. The female workers in the dairy said that they might leave their work after they got married. The positive impact of work on marriage was limited: the percentage of female workers who gave a positive rating was 8.3 per cent in the dairy and 7.5 per cent in the textile factory. The percentage of those who said that work had no impact on marriage was 33.3 per cent in the dairy and 46.2 per cent in the textile factory.

(h) Major problems affecting work

The main challenge cited was the difficulty of coping with work and the responsibilities of marriage (41.6 per cent in the dairy and 46.5 per cent in the textile factory). The second problem cited was exhaustion from work (40 per cent), followed by dissatisfaction with work (36 per cent). The percentage of other problems was rather low.

(i) Impact of problems on work

The existence of such problems had convinced 8 per cent of the female workers that it was better to work part time, although most of them were obliged to work additional hours. About 44 per cent agreed that it was better to work at home.

(j) Work difficulties

Those who mentioned the existence of difficulties at work included 58.3 per cent of the female workers in the dairy and 38.5 per cent in the textile factory. Concerning the kind of difficulties, 41.7 per cent of the dairy workers and 30.8 per cent of the workers in the textile factory gave no answers. The reason for their silence was probably fear of their supervisors. The percentage of those bored with their work reached 28 per cent in both workplaces; for those who said they were mistreated, the percentage was 20 per cent in both workplaces.

(k) Behavioural difficulties

Those who faced interpersonal problems reached a percentage of 25 per cent in the dairy and 7.7 per cent in the textile factory. As for how they dealt with those problems, about 80 per cent of the female workers refused to answer the question. The percentage of those who complained to the administration was only 4 per cent and the percentage of those who took action 8 per cent.

(l) Feelings of discrimination

The percentage of those who said there was discrimination in wages was 33.3 per cent in the dairy and 69.2 per cent in the textile factory. The percentage of those who cited discrimination in promotions was 25 per cent in the dairy and 53.8 per cent in the textile factory. As for incentives and bonuses, the percentage of those who perceived discrimination was 33 per cent in the dairy and 30.8 per cent in the textile factory and the percentage of those who cited discrimination in the quality of work reached 41.7 per cent in the dairy and 38.5 per cent in the textile factory. The higher percentage of discrimination in wages and promotions cited by workers in the textile factory in comparison with the dairy is attributed to the higher education level of the female workers in the former.

(m) The impact of unions on discrimination

The percentage of those who said that unions had no impact was 36 per cent in both workplaces; 28 per cent said there was a very small impact and 24 per cent gave no answer.

The results recorded no answers concerning laws and preventive measures regulating working conditions, which indicated the limited awareness of the female workers of such laws.

The conclusion is that a traditional system is still governing women's participation in the workforce in Jordan. The percentage of women's participation in the administration and education sectors was 63 per cent in 1984; in the industrial sector the percentage did not exceed 4 per cent in the same year.

The reasons for the low participation of women were as follows:

- (a) The preference to employ men rather than women in certain jobs;
- (b) The favouring of men in promotion opportunities;
- (c) The orienting of women to low-wage jobs;
- (d) The non-existence of laws and procedures that protect women's rights in work;
- (e) The lack of application of laws regulating working conditions;
- (f) The minimizing of training opportunities for women;

(g) The determination of trends in women's work by social and cultural determinants unrelated to the economic and technical requirements;

(h) The difficulties confronting women that impeded their ability to work after marriage and to have children. The women were put in a position of not being able to fulfil at the same time their work and family responsibilities, and hence they were obliged to leave their work;

(i) A need for money to support their families was the motive for women to work even in the face of the inappropriate conditions in both workplaces;

(j) Discontentment with having jobs that did not conform to their qualifications (the percentage of qualified women was higher than for men);

(k) The provision of health services to workers only and not their families;

(l) Offering no special services to women such as nurseries, which created problems in the work of the married women, and resulted in them leaving work after marriage. The traditional attitude of society and the family did not exempt women from their home responsibilities;

(m) Disincentives which obliged women to search for other jobs;

(n) Non-existence of local training opportunities as a result of which the female workers became bored with their jobs.

The study was undertaken just after the economic crisis in Jordan with its effects of a decline in the rate of exchange of the Jordanian dinar and in inflation of the prices of commodities and services. The results were the following:

(a) Doubt and suspicion in social relations;

(b) Distortions in social relations with negative effects on fieldwork and credibility with regard to the willingness of those surveyed to answer questions related to the nature of their work, wages, participation in decisions, continuity of work and relations between the workers and the administration.

5. Major recommendations

1. Married women should be encouraged in their work by the provision of services such as nurseries and flexible working hours.

2. Promotion opportunities should be equalized between female and male workers.
3. Social activities should be promoted inside the workplaces to create an *esprit de corps* among the workers.
4. The base and fields of vocational training for female workers should be expanded.
5. Laws and procedures that protect women's rights in many jobs should be enacted and established.
6. Businessmen should be obliged to apply labour laws, especially those pertaining to women's rights.

I. PARTICIPATION OF WOMEN IN THE PHARMACEUTICAL INDUSTRIES IN JORDAN

Introduction

In 1965 the first Jordanian stock company for pharmaceutical industries was founded under the name of the Arab Company for Pharmaceuticals. In the 1970s, the Company expanded into five companies, three for drugs for humans and two for veterinary drugs. In the 1980s, the Arab Centre for industries producing capsules and medicines for external use was established. The United Company for Pharmaceuticals came into being in the 1990s.

The Jordanian pharmaceutical companies produced about 40 per cent of the local market requirements and intended to increase this percentage to 60 per cent in the next plans. The pharmaceutical industries occupied third place in the Jordanian export list after phosphate and chemical fertilizers. Pharmaceutical exports reached US\$ 70 million. The number of employees in all factories producing pharmaceuticals for human consumption reached 1,907. The biggest five companies employed 1,851 employees: 37 per cent of those employees were female; the majority worked in the production, bottling and packing divisions, with some females working in the administrative department.

In the first company were 393 female workers, a percentage of 42.8 per cent, most of whom worked in the non-technical divisions. The graduate female workers were employed in the research and quality development and control divisions and a woman was in charge of the administrative division.

In 1991 the number of workers in the second company reached 244 workers, among whom were 102 females, or 41.8 per cent of the workers, employed in the same division as in the first company except for 10 females who worked in main posts, including administration, packing, production and shipment.

In the two factories affiliated to the third company, 210 workers were employed, among whom were 73 females or 34.8 per cent of the workers. Most females worked in the medicine factory and not in the capsules factory because the work in the former was confined to the morning shifts. The head of one of the factories was a female pharmacist.

About 370 persons worked in the fourth company, among whom were 73 females (19.7 per cent). In this company 34 per cent of the employees were graduates, one third of them females who occupied main posts in the technical and economic divisions. Many females worked in the sales division.

The fifth company employed 55 female workers, representing half the labour force in the company.

(a) Objective of the study

The objective was to learn about women's participation in the pharmaceutical industries by studying the economic, social and demographic characteristics of the female and male workers, concentrating on female workers.

(b) Scope of the study

There were five aspects of the study. The social aspect covered the research on the subjects targeted in the study, including age, sex and dependants. The educational aspect reviewed educational and training status. The third aspect covered the location and nature of the work, housing and income resources of the subjects. The services scope surveyed transport, housing, health and social services provided to the workers in the factories. The last scope treated several issues and women's trends linked to issues such as family planning, participation in social activities, decision-making and opinions about working conditions.

(c) Time and place of the study

The study was carried out during September-December 1992, and data were collected about all pharmaceutical companies except the new one. Two companies were selected: the first was the earliest and biggest company established in Jordan in

the town of Salt; the second was a private shareholder company located on the outskirts of Amman.

(d) The subjects of the study

A random sample was selected including 160 persons from both companies. The number of female workers totalled 122, the majority of whom were working on the production line. The male workers numbered 38. The percentage of females in the sample represented in this industrial sector was 18 per cent and the percentage of males 3 per cent, whereas the percentage of female workers in the sample reached 26 per cent of all workers in both factories while the percentage of males represented 12 per cent.

(e) tools of the study

The research depended on four elements and resources:

(a) A questionnaire;

(b) Office data about the two companies obtained from the Ministry of Commerce and Industry, the Public Statistics Authority and the Chamber of Industry in Amman;

(c) Personal interviews with some officials in both companies, and direct observations about the workers;

(d) The scientific studies and references available pertaining to the study.

(f) Statistical analysis

The computer centre in the University of Jordan was utilized to extract tables, percentages and computer statistics.

(g) Obstacles to the study

Statistical data related to the economic activity of women in general, and the participation of women in industry in particular were unavailable. Because of this problem no comparisons could be undertaken to identify the conditions of women's work.

1. Summary of both companies

(a) The first company

The first company was established in 1962; it was the biggest pharmaceutical company in Jordan, comprising two factories in Salt. One was the Salalem factory, which started production in 1964; the second was Beheira, which started production in 1984. Both factories produced 26 sorts of medicinal drugs, 100 different kinds of products with known trademarks, and 45 sorts of general drugs. In 1964 the company started operating with 12 employees; their number reached 917 in 1991, among whom were 393 females, a percentage of 42.8 per cent. About 80 per cent of the female workers were engaged in non-technical work; the majority of them had completed the secondary education level. The female graduates worked in the laboratories, some worked in the administrative division and a woman was in charge of the administrative division. The company provided several services to the workers including training courses inside and outside the country, incentives, insurance, meals, uniforms, and medical and transport services.

(b) The second company

The second company was founded in 1978, then enlarged, and new branches were opened in 1989. In 1991, the number of workers reached 370 persons among whom were 73 female workers. The graduates represented 34 per cent of the total number of workers, one third of whom were female. The majority of women graduates assisted in the production, sales, control, research and administrative divisions. Some occupied principal posts in the company. The majority of employees in the sales division were women.

2. The economic, social and demographic characteristics of the sample

All 160 persons in the sample were Jordanian; among them were 122 females, a percentage of 76 per cent.

(a) Demographic characteristics

(i) Age

The average age reached 21 years for females and 29 years for males.

(ii) Mobility

(a) **Birthplace:** Most of the workers were born in urban areas. Of the females, 34.4 per cent were born in the capital, 50.8 per cent in other cities and 13.9 per cent in rural places, whereas 39.5 per cent of the males were born in the capital, 39.5 per cent in other cities and 21 per cent in rural areas.

(b) **Current residence:** Since both factories were located in the main cities, 24.6 per cent of females lived in the capital, 59.8 per cent in other cities and 12.3 per cent in the village. Of the males, 44.7 per cent lived in the capital, 52.6 per cent in other cities and none in the village.

(c) **Previous place of residence:** The majority of the workers had lived in urban areas; the percentage of females who had lived in the village was 9.8 per cent and the percentage of males 2.6 per cent.

(iii) Marital status

The percentage of married female workers in the sample reached 10.7 per cent only, whereas it was 52.6 per cent of the males although the number of females in the sample was three times the number of male workers.

(b) Economic and social characteristics

(i) Education level

There were no illiterate workers in the sample. About 90.3 per cent of females and 94.7 per cent of males had completed secondary level or higher, because the pharmaceutical industries required a relatively high level of education for workers.

(ii) Household family members

Since the majority of females were unmarried, they lived with extended families. About 37.8 per cent of the female workers lived with five persons, 40.2 per cent lived with 6-10 persons, and 22 per cent lived with more than 10 persons. As for males, most of them were married, so they lived with their nuclear families. About 57.8 per cent lived with less than five persons, 31.6 per cent lived with 6-10 persons and 10 per cent lived with more than 10 persons.

(iii) Dependants

About 63 per cent of the female workers supported less than 5 persons, 25.5 per cent supported 6-10 persons and 11.4 per cent more than 10 persons; 76.3 per cent of the male workers supported less than 5 persons 15.9 per cent sustained 6-10 persons and 7.8 per cent more than 10 persons. Most of the dependants were the parents of workers: this was particularly true among female workers (63.9 per cent) because most of them were unmarried.

(iv) Home ownership

About 65.6 per cent of the female workers and 36.8 per cent of the male workers lived in houses owned by their families. About 47.4 per cent of the males and 28.7 per cent of the females lived in rented houses.

(v) Other sources of income

About 98 per cent of the workers had no other sources of income because working in the pharmaceutical industries required all their effort and time.

3. Working and production conditions

(a) Employment

All employees worked according to a contract to be renewed annually.

(b) Working hours

Work was from 7.30 a.m. till 4 p.m. except for 2.6 per cent of the male workers who worked shifts.

(c) Additional working hours

About 33.6 per cent of the female workers worked overtime, while 60.5 per cent of the male workers recorded overtime. On the official holidays, 30.3 per cent of the female workers and 60.5 per cent of the male workers worked. Males received higher income in return for the additional hours.

(d) Supervision

The percentage of males supervising other employees was 31.5 per cent and the percentage of females was 15.4 per cent.

(e) Training

Opportunities for training courses were limited for both sexes. The percentage of females who had attended local courses was 73 per cent and the percentage of males was 63.2 per cent. Concerning those who had taken outside training, the percentage reached 5.7 per cent of females and 10.5 per cent of males. The high standard of education among employees, and the high costs of courses, especially abroad, accounted for the small number of courses provided.

(f) Machinery

The percentage of those who used manually operated tools was 68 per cent of the females and 36.8 per cent of the males, while the percentage of those who used automatic instruments was 28 per cent of the females and 39.5 per cent of the males.

(g) Leave

The majority of the workers took sick leave and annual leave; 17 per cent of the employees took sick leave and 11.9 per cent annual leave. Because most of the female workers were unmarried, only five female employees took maternity leave. Of the females, 10.5 per cent took annual leave and 7.9 per cent took sick leave.

(h) Wages

Since the number of male supervisors was higher, the males received higher wages. The average of monthly wages for males was JD 152.3 and for females JD 83.4.

(i) Contentment with work and wages

Concerning wages, 81.3 per cent of the employees were discontented with their wages: this figure included 82 per cent of the females and 78.9 per cent of the males. Regarding contentment with work, the most effective incentives were the material incentives: keeping the job; wage increases (36 per cent of females and 42 per cent of males); the appreciation of supervisors (27 per cent of the females and 23.7 per cent of the males); and promotions (10.7 per cent of the females and 15.8 per cent of the

males). A total of 17.2 per cent of females and 13.2 per cent of males felt satisfied with their work.

(j) Stability in work

Data obtained showed that the majority of employees had considered changing careers for several reasons (65.6 per cent of the females and 21 per cent of the males). Most probably their financial responsibilities and the high rate of unemployment accounted for the low rate of males who thought of leaving their work. The first reason cited for wishing to quit was exhaustion from work (48.4 per cent of the females and 35.8 per cent of the males). The second reason for females was the duration of working hours (8.2 per cent). Most employees expressed a desire to have another job because working in the pharmaceutical industries was difficult and consumed most of their time.

(k) Performance level

Of the females, 38.5 per cent believed that the women's performance was better than the men's, while 52.6 per cent of males maintained that the men's performance was better. This result indicated a lack of self-confidence among the women.

(l) Promotions

The answers of 56.6 per cent of the females and 42 per cent of the males confirmed that promotion opportunities were more available to men.

(m) Services

The percentage of those workers who used transport and medical services reached 25.6 per cent and 15.6 per cent respectively.

(n) The impact of services on work continuity

Transport and medical services had an effective impact on all employees. The impact of the meal service was less, and no housing or nurseries were provided.

(o) Health hazards

A total of 57.9 per cent of the males stated that they felt there were no health hazards, while 49.2 per cent of females said such risks were non-existent. The injuries among the males were more than among the females.

(p) Participation

About 86 per cent of the female workers and 89.5 per cent of the male workers were not members of the company union.

The participation in the decisions of the company and the divisions was confined to 29.5 per cent of the females and 52.6 per cent of the males; this was due to the low percentage of supervisors among the females.

Concerning their participation in family decisions, 67.2 per cent of the female workers answered that they participated in the family budget. The percentage of those who refrained from answering this question was also high because most of the female workers were unmarried and their responsibilities were less.

3. Major issues and deterrents facing female workers in the pharmaceutical industries

The percentage of married female workers was 10.7 per cent of the total number of female workers, and their average number of children was one per female; hence, this had no significant impact on the study results.

(a) Dependants

The percentage of women supporting parents, sisters and brothers was 63.9 per cent. The average number of persons supported by the female worker in general reached 4.6 persons, and with regard to the unmarried female worker this number was 4.8 persons, which proved that the women, whether married or unmarried, shared in supporting the family.

(b) Reasons for women working

The main reason for women's participation in the labour force was to support the family, then to acquire an income for themselves. The social reasons were the least important for motivating women to work.

(c) Contribution to the family income

About 86.9 per cent of the female workers contributed half their wages to the family budget. The percentage of those who did not contribute was 5.7 per cent.

(d) Family responsibilities

The major responsibility of the women in the study was looking after their brothers and sisters (35.3 per cent), then shopping (28.7 per cent); bringing up children recorded only 6.5 per cent owing to the small number of married female workers.

(e) Coping with work inside and outside the home

A total of 33.6 per cent of the female workers said they could cope with both responsibilities; this was due to the high percentage of unmarried female workers. Those who could said they could barely cope totalled 45.1 per cent, and those who said they could not handle all responsibilities totalled 13.1 per cent.

(f) Scope of deficiencies

About 21.3 per cent of the female workers said they were negligent in cleaning and taking care of the house, and 4.9 per cent said they were careless in taking care of their families; 4.1 per cent said they could not stick to the scheduled working hours.

(g) Impact of work on marriage

About 30 per cent of the women said that there was a negative impact of work on marriage, and 19.7 per cent said there was a positive impact. About 26 per cent said there was no impact.

(h) Main problems affecting work

The major two deterrents were: working inside and outside the home; and working conditions (20.5 per cent). The clashes among family members were the next most significant obstacle affecting work (10.7 per cent).

(i) The impact of obstacles on work

A total of 73.8 per cent of the female workers agreed to work part time owing to those difficulties. About 32 per cent preferred to work at home and 56.6 per cent refused to work at home. This result indicated that women, when confronted with difficulties, chose to work part time and not at home.

(j) Difficulties at work

A total of 70.5 per cent of the female workers said they faced problems at work: 25.4 per cent complained of maltreatment, 27.9 per cent did not identify the nature of the problems, and 6.6 per cent enumerated several types of problems. The percentage of those bored with their work reached 23.8 per cent.

(k) Behavioural difficulties

Only one female worker said that she faced problems with her colleagues.

(l) Discrimination

A total of 56.6 per cent of female workers said that men had better promotion opportunities. Concerning incentives and bonuses, the percentage of those who believed there was discrimination reached 61.5 per cent; it was 62.3 per cent for those who believed there was discrimination in the Labour Law; and 62.3 per cent for those who believed there was discrimination in opportunities to travel abroad. The high level of education among the female workers accounted for the high percentage of those who recognized the existence of gender-based discrimination.

(m) Impact of unions and parties in decreasing discrimination

About 76.2 per cent of the female workers said that the union had no impact, and 75.4 per cent negated any effect of the parties; 48.4 per cent of the female workers complained to their supervisors.

(n) Laws and procedures hindering the work of women

No answers were received concerning this issue, which indicated the ignorance of the female workers with regard to the laws applied in the company.

4. Results and recommendations

(a) Results

The female workers made up about 37 per cent of the total number of workers in the pharmaceutical industries in 1991. They were distributed in the companies according to the available specializations in the labour market and factory requirements. About half the female labour force were employed in manual work that did not require any skills or vocational training. The rest of the female workers were

employed in the production and administrative divisions in posts like those of their male colleagues. Hence job opportunities for graduates were better. For this reason, those who are concerned with the status of women should recommend that women continue with the higher education that will be needed in the labour market.

It was noted that the participation of women in pharmaceuticals was higher than in other modern industries. Women occupied principal posts in the administrative and production divisions in the factories and in the research and medical control laboratories, but the principal posts were still occupied by men. The field study revealed the following:

1. More promotion opportunities were provided to men.
2. Only men were employed in certain jobs.
3. Vocational training opportunities needed to be provided to women.
4. Women left work after marriage.
5. Women faced maltreatment from supervisors and problems with colleagues.
6. Medical services were provided to the families of male workers only.
7. Special services needed to be provided to women to assist them in continuing to cope with all their responsibilities.

(b) Recommendations

1. There should be equality in promotion opportunities for women and men.
2. Vocational training courses should be provided to female workers.
3. Medical services should be provided to the families of the female workers.
4. Nurseries should be established for the children of married female workers.
5. Women should have the option of a short working day of not more than six hours daily.
6. A pharmaceutical trade union should be established for the workers.

J. PARTICIPATION OF WOMEN IN THE ELECTRONICS INDUSTRIES IN JORDAN

Introduction

Jordanian policies encouraged an increase in the participation of women in economic activities. The financial requirements and burdens of families constituted a substantial factor in addressing this issue. In spite of all efforts, however, Jordanian women's participation in economic activity remained limited; it was dominated by several traditions and affected by the women's responsibilities at home.

In 1990 the percentage of females between 15-60 years of age reached 42 per cent of the total population. The percentage of working women represented 23 per cent of the total population; most of them were working in the services sector (83 per cent), 8 per cent in the industrial sector and 5 per cent in the agricultural sector.

About 80,000 workers were employed in industry, out of whom were 4,276 female workers. Of those, 7.2 per cent worked in the manufacturing industries. The highest percentage of female workers were employed in the textile industries (28.2 per cent), then the chemical industries (26 per cent) and the food industries (22 per cent). Women's participation in the electric and electronics industries remained secondary. The number of workers employed in these industries reached 924 in 1990. The percentage of female workers in the electronics industry was 4.2 per cent of the total number of female workers in the manufacturing industries. In 1992 the total number of workers in the electronics industries reached 653, among whom were 137 females (21 per cent of the total number of female workers employed in the electronics industries and about 3.5 per cent of the total number of females working in industry).

The electronics industry in Jordan assembles a certain number of products. The production of colour television sets and lifts represents 50 per cent of electronics production in Jordan. The Royal Scientific Society is the only centre concerned with research and development in this industry. Only the big factories employ persons specialized in the scientific research fields. Fourteen electronic units were established during the 1990s and one unit was established in the mid-1980s. In the production divisions of four factories, 72 per cent of the workers were women and 59 per cent of the workers were men. Those four factories are the only ones that will employ females.

(a) Tools of the study

- Administrative survey of the electronics factories in Jordan;
- Field survey of the four factories;
- Statistics and studies available on the electronics industry in Jordan.

(b) Obstacles to the study

- Unavailability of sufficient data on this sector. The available data reveal little participation by women in production and the labour force.
- Collection of data from several unpublished resources, formal and informal, with consequent lack of certification of data.
- No females working in eight factories and stopping of production by three factories, which confined the study to four factories.
- The field survey was confronted with obstacles in the filling out of the responses to the questionnaire, so questionnaires were handed over to the administration to be filled out by the workers in their free time. This delayed the receipt of completed questionnaires, and the answers were sometimes inaccurate.

(c) Importance of the study

It was the first time that a study was undertaken concerning this industry, which was recently established. It is expected that it will become more important in the future as it depends on a highly developed technology. Many developed and developing countries rely on women in electronics; therefore such a survey can be used to provide data on those who work in this developing industry, which would support the economic status of Jordanian women.

(d) Social context of the study

The four factories that employ females were chosen for inclusion in the study. This sample represented the biggest factories in terms of capital and number of workers, and is considered the oldest in this sector. The sample also contained several trainees in the vocational training programmes (specialized in electronics) who were completing the last stage of their courses and worked a full day in the factories. The

number of persons in the sample was 86, including 53 females, all of whom were Jordanians.

1. Summary of the factories surveyed

(a) Television Manufacturing Company

A public sector factory established in 1989, the company is located in Sahab 15 km from Amman. It started by manufacturing several types of housewares. In April 1992 a colour television division was established by a special licence of a company from the Republic of Korea. This division now produces 15,000 colour television sets annually for the local market, and production is projected to reach 50,000, in addition to production of video cassette sets. The factory was the first in the country to start producing colour television sets. It employs 38.3 per cent of the total labour force in the electronics industry and 35.8 per cent of the female workers in this industry. Most of the female workers had completed secondary school or were university graduates.

(b) Television Manufacturing Company (II)

This factory was established in 1992. It is a private company located in Sahab. The factory started to produce colour television sets in December 1992 by licence of a company from the Republic of Korea. The production of the factory reached 50 sets daily and was projected to reach 100 sets daily in six months. It also produces radio sets, recorders and video cassettes. The labour force in the factory totalled 59 workers, including 22 women.

(c) Lift Manufacturing Company

Established in Madaba in 1975, the company manufactures electronic circuits for lifts by licence of a German company. The factory produces 200 lifts annually and production was projected to increase to 365 annually during the next year. A total of 142 male workers and 24 female workers were employed in the factory.

(d) Systems and Electronic Development Company

The Company was founded in Amman in 1980, starting with programme development on computer. In 1983 it produced integrated electronic circuits. A total of 40 male workers and 10 females worked in the factory among whom 78 per cent were graduates, the highest percentage in any of the factories.

2. Demographic, social and economic characteristics

(a) Demographic characteristics

Age: The ages of the workers in the sample ranged between 18-42, with an average of 24 years for females and 26 for males. This is considered a low average and is because the factories employed young persons who were recent graduates.

Mobility: Most of the workers were born and were still living in urban areas. The results indicated that 44 per cent of the females and 56 per cent of the males returned from the Gulf countries after the war.

Marital status: The percentage of unmarried workers in the sample amounted to 76 per cent (87 per cent of the females and 58 per cent of the males).

(b) Economic and social characteristics

Household family members: The number of persons in the household in the families of the married females reached 4.4 persons per family; the average was the same for the male workers (between 7-8 persons per family).

Dependants: The married males supported the highest average number of dependants (five) and the married females had the lowest number of dependants (2.4), while the average number of dependants for the unmarried females reached 4.2 persons and for the unmarried males 3.5. With regard to which family members were dependants, mothers came first, and fathers second, then brothers and sisters.

Ownership of houses: 70 per cent of the males and 62 per cent of the females lived in their own houses, and 10 per cent of those females lived with their families.

Educational level: 92.5 per cent of females and 100 per cent of the males had completed at least the secondary level of education. There were no illiterate workers in the sample.

3. Work and production conditions

(a) **Appointment and experience:** The sample showed that the average number of years of experience for the senior workers did not exceed seven years for females and four years for males. A total of 51 per cent of the females and 45 per cent of the males had no previous experience and 87 per cent of the females and 85

per cent of the males were appointed in the factory. About 49 per cent of the females and 55 per cent of the males had worked in other jobs before the factory. A total of 36 per cent of the males and 17 per cent of the females spent one year searching for a job, while 75 per cent of the females and 64 per cent of the males found no difficulty in finding a job, and 8 per cent of the females had searched for a job for more than one year.

(b) **Stability in work:** A total of 82 per cent of the male workers and 77 per cent of the females thought of changing their job. Of those, 63 per cent of the females who had the desire to change said that they looked forward to working in another factory because of the working hours (33 per cent), because of the transportation problems (22 per cent), and for family reasons (22 per cent). About 64 per cent of the male workers who had the intention of changing their jobs said that they wanted to work in other divisions in the same factory.

(c) **Additional work:** Obstacles confronting female workers accounted for their low percentage of additional working hours. Females who did not work during holidays and after official working hours reached 45 per cent against 3 per cent for males. The recorded overtime reached 18 hours for females and 55 hours for males monthly.

(d) **Leave:** The data revealed a high percentage of all sorts of leave obtained by females.

(e) **Wages:** The average income of the female workers reached JD 111.5 and the average income of the male workers reached JD 127.9, which meant that the male worker received 15 per cent more than the female worker. Excluding from the sample the biggest two companies, the gap between the two incomes increased to 27 per cent in spite of the similarity in working years and education. This variance may be attributed to the quality of the jobs, as 61 per cent of the female workers were employed in the agricultural line where no males worked. This job did not require any skills or expertise.

(f) **Contentment with wages:** 53 per cent of the females and 52 per cent of the males were contented with their wages.

(g) **Promotion opportunities:** Owing to the limited jobs assigned to females, the promotion opportunities were few.

(h) **Supervision:** Four females undertook supervisory responsibilities (7.5 per cent) against eight males (25 per cent). The average number of workers supervised by females was 2.5 and the average number of workers supervised by males was 9.

(i) **Performance level:** 63 per cent of the females and 33 per cent of the males assured the researchers that no gender-based disparities existed while 35 per cent of the females and 6 per cent of the males said that the job performance of the female workers was better, against 2 per cent of the females and 61 per cent of the males who said that the performance of the male workers was better. Concerning incentives for improving performance level, an increase in wages came first for both sexes, then a feeling of obligation, the appreciation of supervisors, promotions, and avoiding disciplinary sanctions.

(j) **Training:** The percentage of male workers who were trained abroad amounted to 15 per cent. The percentage of female workers who joined courses on their own was 26 per cent inside the country and 8 per cent abroad; as for males the percentage reached 24 per cent inside the country and 12 per cent abroad.

(k) **Services:** The factories provided several services such as medical care, transport and a special discount on products to the workers.

(l) **The impact of services on work continuity:** 47 per cent of the female workers and 58 per cent of the male workers confirmed the importance of these services for the workers.

(m) **Health hazards:** About 24 per cent of all the workers were affected by burns and electric shocks. More females were vulnerable to problems with eyesight and to back pain.

(n) **Participation:** All married females participated in family decisions. Concerning membership in the union and the parties, 96 per cent of the females were not members of the labour union and no female was a member of the parties. A total of 88 per cent of the males did not participate in the union and 94 per cent did not participate in the parties. In connection with other social activities, a lack of free time prevented the female workers from participating in other activities, either inside or outside work.

4. Major issues and deterrents facing female workers

(a) **Reasons for women working:** The main reason for the married women's participation in the labour force was to have an income and benefit from their education. Concerning unmarried workers, they worked in the first place to support their families and then to obtain social prestige.

(b) **Contributing to the family budget:** 67 per cent of the married female workers and 38 per cent of the unmarried female workers contributed to more than half the family budget, while 33 per cent of the married workers and 36 per cent of the unmarried workers contributed less than half. A total of 26 per cent of the unmarried female workers did not share in the family budget.

(c) **Family burdens:** Women undertook all housework, cooking, shopping and looking after all the family members. Bringing up the children and housework came first in women's responsibilities (88 per cent), then shopping. For the unmarried females, taking care of their brothers and sisters came in first place (35 per cent), then shopping (32 per cent) and housework (23 per cent). About 3 per cent of the unmarried females had no responsibilities at home.

(d) **The impact of work on marriage:** 63 per cent of the female workers said the work had no impact on marriage while 24 per cent said there was a passive impact and 13 per cent said there was a positive impact.

(e) **Coping with work inside and outside the home:** About 57 per cent of the married female workers and 26 per cent of the unmarried female workers found it difficult to cope with all their responsibilities, while 43 per cent of the married female workers and 66 per cent of the unmarried female workers said they could cope easily.

(f) **Problems encountered:** For the married female workers, looking after other family members was the area most affected by their work; for the unmarried, housework, then being able to adhere to the working hours.

(g) **Obstacles affecting work:** The major obstacles confronting married female workers were caring for their children and coping with work inside and outside the home. With regard to the unmarried workers, the major obstacles were working conditions, coping with work inside and outside the home and misunderstandings among family members. More than half the married and unmarried workers preferred to work part time so as to be able to carry out all their responsibilities.

(h) **Work-related difficulties:** About 82 per cent of the female workers said they had not encountered any troubles in their work; 45 per cent of those who admitted facing several problems said that boredom was the most significant factor affecting the increase of their participation in work, then work hazards and the inconvenient location of the workplace.

(i) **Impact of unions and parties:** The female workers did not turn to the union or parties when facing troubles. About 40 per cent of them referred problems to their bosses.

(j) **Discrimination:** 71 per cent of the females and 58 per cent of the males said that they faced no discrimination in promotions: 24 per cent of the females and 36 per cent of the males said the administration was biased towards males. A total of 4 per cent of the females and 6 per cent of the males said that women were luckier in promotions. A total of 64 per cent of the female workers affirmed there was discrimination in outside training courses, in posts, quality of jobs and incentives.

5. Results and recommendations

(a) Results

1. The percentage of females working in the production divisions totalled 24.4 per cent of all workers employed in these divisions, and 72 per cent of the total number of female workers in the electronics industries.

2. The percentage of female workers who had completed their secondary education or above secondary level amounted to 85 per cent of the total number of female workers, among whom 23 per cent were graduates. In the sample, the percentage of the females who had completed secondary level or above reached 92.5 per cent, all of whom were between the ages of 18-36 and 87 per cent of whom were unmarried. The majority of the female workers were born and currently living in the capital or urban areas.

3. The average number of family members per worker was seven persons, and the percentage of female workers supporting family members was higher for the unmarried.

4. Most workers in these industries were recent graduates.

5. Vocational training courses were still few in number, especially for female workers.

6. Female workers in these industries faced the same problems existing in other industries, most significant of which were job quality, discrimination in promotions, training abroad and incentives, as well as the conflict between women's roles inside and outside the home.

TEXTILES, FOOD-PROCESSING, PHARMACEUTICALS AND ELECTRONICS

7. The disparities in income between both sexes were attributed to the discrimination in promotions, job quality, incentives and training.
8. Private factories did not abide by the law that granted equal rights and duties to both sexes.
9. Health services were confined to the female worker and were not extended to her family.
10. The administrations of the factories did not provide special services such as nurseries to the female workers. They did not permit female workers to work part time.
11. The administrations of the factories avoided hiring married women, so as to avoid applying the legal provisions pertaining to their employment.
12. Women accepted inappropriate working conditions because of their need to support their families, because of a lack of awareness, and because of the weak role of the labour unions.

(b) Recommendations

1. The effectiveness of the unions and parties should be improved in order to make the female workers aware of their rights and duties.
2. The female workers should concentrate on scientific specializations in order to take them out of the traditional secondary roles assigned to them in production.
3. Vocational and technical training programmes for females should be expanded in the electronic industries field.
4. Women's productive work in industry should be encouraged by providing women with special services. Nurseries could be established in the industrial cities if several factories cooperated.
5. Flexibility in working hours should be permitted.
6. Health services should be made available to the families of female workers.

**K. PARTICIPATION OF WOMEN IN THE TEXTILE AND
FOOD-PROCESSING INDUSTRIES IN YEMEN*****

Introduction

Before the country gained its independence, women had no right to work and were subjected to discrimination and oppression. In the late 1950s the situation changed for women of wealthy families, who were sent abroad for their education and who after their return could take up some available posts such as work in the teaching and medical professions. However, job opportunities remained limited. The only exceptions were some poor marginalized classes who allowed their women to work (these classes do not wear veils) in certain simple manual crafts, or in cleaning the streets and factories; the majority of these women were Somali or Yemeni servants.

Women in the villages were far from social innovations. They lived under the domination of the old men in the family. However, they played a major role in agriculture and in most regions were unveiled in spite of their segregation and seclusion. The division of labour was according to sex: women had the household responsibilities including collecting wood, providing water and taking care of animals. Women were responsible also for food supply. They had to work long hours in agriculture, but this kind of work was not recognized by society, nor was the essential role played by women in the field of development.

After the country gained independence in 1967 the Government was concerned about women's issues. The Government exerted efforts to mobilize women and to allow them to participate in the development process in order to benefit from their capabilities and to give them access to the profits of development.

The Government, starting from the beginning of independence, was concerned with industries, especially those using available local raw materials and satisfying the people's basic needs. The Government established textile and food industries, in particular a fish canning industry. Women had had the opportunity to work in these industries since they were established in 1975 and 1976. Women were protected by all the laws issued, including, in the first place, the Constitution which was proclaimed in November 1970 and the amendments thereto in October 1978, and other laws such as the family law issued in 1973, the literacy law of 1973, the labour law of 1978, and

*** The present case-study was confined to what was then the People's Democratic Republic of Yemen. On 22 May 1990, the People's Democratic Republic of Yemen and the Yemen Arab Republic merged to form a single State, the Republic of Yemen.

the social insurance law of 1980. All those laws promoted equality between men and women on an objective basis.

When women in Yemen began working outside the home, and in spite of laws to support them in their work, other responsibilities were added to double their burdens. Women had to play multiple roles. This is why the research undertaken, which was the first such research in the country, is so important: it examined for the first time the problems and the situation of Yemeni women working in industry.

(a) Research components

Questionnaire: This consisted of two parts: the first included both female and male workers in the two factories to compare males and females; the second was confined to female workers.

Interviews: These were with the officials in the Textile Factory in Aden and the Fish Canning Factory in Shakra in the Governorate of Abyan.

Office data: These were collected from the Central Statistics Agency and from several departments in the two factories; in addition, information on laws and data were obtained from the Ministry of Labour and Civil Service, and some references were obtained from other sources.

(b) Sample choice

The Textile Factory in Aden and the Fish Canning Factory in Abyan were chosen because they were both in the public sector with concentrations of female workers in the production lines and because the female workers continued working during school sessions.

The sample was random, as the workers were selected for the interviews without previous notification. The sample was selected from all production lines.

The number of workers in the production lines in the Textile Factory was 241 males and 301 females. A selection of one eighth of the total number of workers was sufficient to give a clear idea about the workers' situations and to compare male and female workers in the production line. Hence the females in the sample numbered 38 and the males 32 (the total 70 persons). The males in the production line in the Fish Canning Factory were only 11 workers; thus it was decided that the sample should be composed of 50 persons representing 50 per cent of the total number of workers. All the males were chosen as were 39 female workers.

(c) Problems faced in conducting the study

1. It was difficult to prepare a large number of questionnaires in one location, so they were distributed among many locations thus consuming more effort and time.
2. Transport for the team's work was not available; this was a problem since the trip between Aden and Abyan took an hour and a half.
3. There was a limited number of people available to work on the research team, since most of the team were students in the Education Faculty in Aden and the research was carried out in the summer holidays when most students were out of Aden.
4. The considerable distance between Aden and Abyan led the students' families to refuse permission for them to participate more than once in the research, which obliged the supervisor to mobilize her own daughter, a secondary school student.
5. It was difficult to convince several female workers to be interviewed, especially in the Fish Canning Factory, as the workers feared they would misunderstand the questions, or they were hesitant to talk about their personal lives. Their supervisor cooperated to facilitate the assignment.
6. The female workers were afraid to waste time and lose their bonuses because wages were related to production. The administration cooperated by taking over the matter.
7. It was difficult to find an available typist as all were busy with their work.
8. There was a heavy burden on the research supervisor: she had to supervise the interviews, revise the questionnaires, enumerate the answers then analyse them and finally prepare the report.

(d) Summary of the factories

(i) The Textile Factory in Aden

1. Construction of the Textile Factory began in 1972. Production started in 1975. Work was carried out in two shifts. The number of workers, including production, maintenance, and production services workers and administration staff, was 393 females and 413 males. The number of females was higher than the number of males in the production line.

2. Production stages in the production divisions were divided into 5 stages in the spinning division, 8 stages in the weaving division and 14 stages in the dye and print division.

3. The technology used was old and semi-automatic. The machines had been supplied by China (which founded the factory). The raw materials were local and consisted of short and long yarn cotton.

(ii) The Fish Canning Factory in Shakra in the Abyan Governorate

1. Established in 1967, the factory worked at 49 per cent of its planned capacity. It was renovated in 1986. The factory exceeded its planned quotas in the years 1986, 1987 and 1988.

2. The number of workers in the factory including production workers and employees (103 males and 83 females) reached 186. The number of females in the production line exceeded the number of males.

3. The material used consisted of local fish, cans, tomato juice and imported oil.

1. Economic, social and demographic characteristics of women in the textile and fish canning factories

(a) Economic, social and demographic characteristics

Age: The age of workers was between 15 and 40 in the Textile Factory, and 21 and 50 in the Fish Canning Factory. The disparity in ages was ascribed to workers in the Textile Factory, who usually quit their hard jobs after the age of 40 when they found other job opportunities. However, in the Fish Canning Factory, such opportunities did not exist because the factory was located in a village, so its workers, especially the females, continued working after the age of 40. The minimum age of the workers was 21, and the limited capacity of the factory could not absorb new workers.

Mobility: About 82.9 per cent of the Textile Factory workers were born in a city. A total of 85.7 per cent of them had lived in a city before working in the factory and 92.9 per cent were still living in a city. All workers in the sample in the Fish Canning Factory were born, had lived and were still living in the same village, i.e., all were of village origin.

Marital status

(a) *Textile Factory*: The percentage of unmarried workers was 23.7 per cent of the females and 21.9 per cent of the males. The percentage of divorced workers reached 12.5 per cent of the males and 13.2 per cent of the females. The percentage of married males was higher (62.5 per cent) than the percentage of married females (47.5 per cent). The percentage of engaged females was 47.5 per cent and the percentage of those neither engaged nor married was 7.9 per cent. As for males there were no engaged workers, and the percentage of males neither engaged nor wedded was 3.1 per cent.

(b) *Fish Canning Factory*: The percentage of unmarried male workers reached 45.5 per cent compared with 15.4 per cent of females. As for married workers, the percentage was 45.5 per cent of the females and 53.8 per cent of the females. The percentage of divorced females was 2.6 per cent and the percentage of divorced males was 9.1 per cent. For female workers, the percentage of widows was 20.5 per cent, of engaged workers 5.1 per cent, and of workers separated from their husbands 2.6 per cent. (This result should be interpreted with caution because the number of males in the sample was limited in this factory; the same could be said about other variables.)

The number of household families and dependent families in both factories: The majority of workers in both factories lived with families of 6-10 members. There were some families which comprised 11-15 members. Most workers supported from 1 to 10 persons. The number of children per female worker was from 1-5 in the Textile Factory and from 6-10 in the Fish Canning Factory (because of the village background).

Home ownership: About 59.4 per cent of male workers in the Textile Factory owned their own homes, as did 47.54 per cent of female workers. In the Fish Canning Factory all males owned their own homes as did 87.2 per cent of the females. This was due to the availability of houses outside the city.

Standard of education: The standard of education for the workers in the sample was as follows:

(a) *Textile Factory*

Females: 44 per cent could read, 26.3 per cent were illiterate, 15.8 per cent had completed primary education, 7.9 per cent had finished the unified stage, and 5.3 per cent had completed preparatory classes.

Males: A percentage of 37.5 per cent had completed primary education, 31.3 per cent could read, 18.8 per cent had finished preparatory classes, 9.4 per cent were illiterate and 3.1 per cent had graduated from universities.

(b) *Fish Canning Factory*

Females: 69.2 per cent were illiterate, 28.2 per cent could read, 2.6 per cent had completed primary classes.

Males: 54.6 per cent were illiterate or could only read and write, 36.4 per cent had completed primary classes and institutes, and 9.1 per cent had finished preparatory classes.

It was noted that in the Textile Factory the percentage of female workers who could barely read and write or who were illiterate was higher than the percentage of males in those categories. However, the percentage of males who had completed primary, preparatory and higher classes was higher than the percentage of females. As for the Fish Canning Factory, the percentage of illiterate female workers was higher than the percentage of illiterate male workers in the Fish Canning Factory and also higher than the percentage of illiterate females in the Textile Factory. The females in the Fish Canning Factory had not continued their education beyond primary school. This reflects a neglect of education in the village where the Fish Canning Factory is located.

Attending literacy classes: The percentage of those attending literacy programmes in the Textile Factory included 15.6 per cent of the males and 42.1 per cent of the females. In the Fish Canning Factory, 18.3 per cent of males and 23.3 per cent of females had attended programmes inside and outside the workplace. Those who had previously attended such programmes included 15.6 per cent of the males and 42.1 per cent of the females in the Textile Factory and 18.2 per cent of the males and 33.3 per cent of the females in the Fish Canning Factory. The greater interest of women in the programmes was apparent.

(b) Working and production conditions

(i) The level of female participation in both factories

(a) *Textile Factory:* The percentage of females who worked on the production line reached 55.5 per cent of the total number of workers employed in production. This percentage represented 76.6 per cent of the total number of female workers in the factory (393 female workers and employees). The percentage of female participation

was higher in all production divisions except dye and print. The percentage of female production workers in this factory represented 2.4 per cent of public sector workers.

(b) *Fish Canning Factory*: Females represented 80.2 per cent of the total number of workers on the production line; males represented only 19.8 per cent. The females working on the production line represented 76.4 per cent of all female workers in the factory. The percentage of female participation in this factory was high, and estimated to be 18.4 per cent of the total number of female workers in the food industry factories affiliated to the public sector, and 5 per cent of the total number of workers in the public sector industries.

(ii) Income

There were five categories of monthly income. The first category was from 35 to 40 Yemeni dinars (YD); the second was from YD 41 to YD 50; the third was from YD 51 to YD 60; the fourth was from YD 61 to YD 70; the fifth was from YD 71 to YD 80.

(a) *Textile Factory*: The percentage of workers in the first category was 9.4 per cent of males and 7.9 per cent of females. The percentage in the second category was 9.4 per cent of males and 26.3 per cent of females. The percentage in the third category was 31.3 per cent of males and 52.5 per cent of females. The percentage in the fourth category was 18.8 per cent of males and 13.2 per cent of females. There were only males in the fifth category, which included 31.3 per cent of the male workers. The high income for males in the Textile Factory was due to the fact that 37.5 per cent of the males in the sample were senior workers employed as supervisors.

(b) *Fish Canning Factory*: The percentage of workers in the first category was 27.3 per cent of males and 5.1 per cent of females. The percentage in the second category was 45.5 per cent of males and 23.1 per cent of females. The percentage in the third category was 18.2 per cent of males and 69.2 per cent of females. The percentage in the fourth category was 9.1 per cent of males and 2.6 per cent of females. There were no workers in the fifth category. The percentage of females in the third category was high, which was a good indicator.

Because the wages and prerequisites were determined according to plan achievement, income was calculated on the basis of years of work and then production.

The concentration on plan achievement showed the effect of a social system which placed a priority on work productivity and equality between males and females

in rights and duties. The existing disparities were ascribed to the position of women in the society.

(iii) Productivity skills

About 50 per cent of males and 52.6 per cent of females in the Textile Factory, and 63.7 per cent of males and 61.5 per cent of females in the Fish Canning Factory were primarily engaged in manual work. Manually operated tools and instruments were used by 28.1 per cent of the males and 15.8 per cent of the females in the Textile Factory and by 9.1 per cent of the males and 12.8 per cent of the females in the Fish Canning Factory. About 31.3 per cent of the males and 44.7 per cent of the females in the Textile Factory, as well as 18.2 per cent of the males and 25.6 per cent of the females in the Fish Canning Factory, used mechanical instruments and tools. Automatic instruments were used by males, 3.1 per cent of the males in the Textile Factory and 9.1 per cent of the males in the Fish Canning Factory.

Very few distinctions were noted between the sexes in the level of productivity efficiency. Most workers in both factories depended upon manual work; then came those who used mechanical tools and instruments, with a higher percentage of females. As for using automatic instruments, this was confined to a small number of male workers.

(iv) Training opportunities

Most of the available training courses were local courses directed to junior workers when they started their work. Outside training opportunities were rare. In the Textile Factory, 21.9 per cent of the males and 28.9 per cent of the females attended training courses. In the Fish Canning Factory, only 9.1 per cent of the males and 2.6 per cent of females participated in such courses. (The high percentage of trained male workers is due to the small number in the sample.)

The answers of the workers in the sample showed that the reason for low attendance at such courses was due either to the rarity of training opportunities or the fact that the employees were unaware of the existence of the courses or had no idea about them. With regard to outside courses, these required high educational levels and sometimes languages, which the workers did not possess, especially the females working in the production line. The married workers had commitments that precluded their travelling abroad and sometimes their families refused to give them permission. The percentage of females in local training courses was relatively high.

(v) Promotion opportunities

In the Textile Factory, 34.5 per cent of males and 47.4 per cent of females said there were disparities in promotion opportunities, while 43.8 per cent of males and 39.5 per cent of females said there were no distinctions made between male and female workers. About 21.9 per cent of males and 12.8 per cent of females had no idea about such disparities.

In the Fish Canning Factory, 36.4 per cent of males and 58.9 per cent of females said there was gender-based discrimination, while 54.5 per cent of males and 25.6 per cent of females said there was no discrimination while 9.1 per cent of males and 15.4 per cent of females had no idea about any disparities.

Concerning women's promotion opportunities, 3.1 per cent of the male workers believed that they were better than promotion opportunities for males in the Textile Factory. In the Fish Canning Factory 18.2 per cent of male workers and 12.8 per cent of female workers gave the same answers. The percentage of those who mentioned that promotion opportunities were higher for males was 31.1 per cent of males and 47.4 per cent of females in the Textile Factory and 18.2 per cent of males and 51.3 per cent of females in the Fish Canning Factory. Thus the majority of females believed that the promotion opportunities for males were better.

(vi) Supervision

In general, male workers occupied the supervisory positions owing to the low educational level of the women workers.

(vii) Social insurance services

a. Transport

All workers in both factories indicated that they used transport provided by the factories, except two female workers in the Textile Factory living near the Factory. The percentage of workers who used the transport provided by the factories was 75 per cent of males and 65.8 per cent of females in the Textile Factory, and 63.6 per cent of males and 69.2 per cent of females in the Fish Canning Factory. Those who did not use these transport services lived close to their work. A few female workers mentioned that they were not informed about such a service, or that they left home too late to use the bus provided. Most females said they were unable to use the transport to go back home after work due to differences in time or because the buses were under repair. All workers said they did not receive any transport allowance, except for five

workers in the Textile Factory. Two workers said that they received an allowance that covered the whole cost of their transport to and from work, and one worker mentioned that the allowance covered 75 per cent of the transport costs.

b. Meals

All workers indicated that they took breakfast in the Factory except for one female worker and one male worker in the Textile Factory. All male workers said that the factory provided a place for meals; some female workers said that the factory provided a place for meals, and some female workers said that the place for meals was only for men. In the Fish Canning Factory all workers stated that there was no place for meals. With regard to bringing their meals with them, 53.1 per cent of males and 73.5 per cent of females in the Textile Factory said that they brought their meals from home and so did all the workers in the Fish Canning Factory. As for supplying meals for the workers, it was noted that neither of the two factories provided such meals for free and that most of the workers paid for their meals in the factories at prices less than outside; about 9.4 per cent of males and 13.2 per cent of females in the sample saved about YD 1-10 per month in that way.

c. Health services

All workers in both factories mentioned that they were provided with the required health services inside the factories. In the Textile Factory there was a doctor and in the Fish Canning Factory there was a medical assistant.

Most workers in the Textile Factory (71.9 per cent of males and 65.8 per cent of females) said that the service offered was first aid; 15.6 per cent of males and 3.7 per cent of females answered that the service represented just preliminary health care, while 28.1 per cent of males and 18.4 per cent of females the service offered complete health care: 21.9 per cent of males and 10.5 per cent of females level of services provided as varying according to the disease and the case.

In the Fish Canning Factory, 36.4 per cent of males and 48.7 per cent of females answered that the service was just first aid, while 36.4 per cent of males and 58.9 per cent of females described it as preliminary health care, while 18.2 per cent of males and 2.6 per cent of females regarded it as complete health care. Finally 36.4 per cent of males and 2.6 per cent of females said the service varied according to the case and the illness. These answers proved that the awareness of the service and its level was moderate. When there was no doctor in the Factory, the cases were expedited to the health complex or the hospital. Treatment was without charge in the People's Democratic Republic of Yemen.

About 13.6 per cent of the workers saved money by using this service, economizing an average of YD 1-5 per month, and 6.3 per cent saved YD 6-10 per month in the Textile Factory. As for the Fish Canning Factory, 14.2 per cent saved YD 1-5 per month and 25.9 per cent saved YD 6-19 per month.

d. Nurseries

All workers in the Fish Canning Factory said there was no nursery service provided. The workers in the Textile Factory said their Factory did provide this service. This service, as well as one can of powdered milk, was offered for YD 2.5 per month; with two cans of powdered milk the cost was YD 4 per month. It was provided to all workers, female and male. Those who benefited from the nurseries were 5.3 per cent of the males and 28.6 per cent of the females (whose babies were less than four years old). The reasons why some did not take advantage of the service were as follows: 45.8 per cent of males and 41.7 per cent of females had somebody at home to take care of their babies; 16.7 per cent of males and 16.7 per cent of females had grown-up children; the rest lived far away and it was impractical to take their children with them.

e. Housing

The Government provided houses for all the population—houses were rented for a nominal rent—that had not exceeded one dinar since 1982. In the Textile Factory there were some houses for the workers, and the Factory rented houses built by the Government in two areas in Aden, with the workers paying rent to the Ministry of Housing. In the Fish Canning Factory, there were residences for male workers from faraway areas. In the Textile Factory 21.9 per cent of males and 26.3 per cent of females answered that the Factory provided housing for workers. In the Fish Canning Factory the percentage was 81.8 per cent of males and 71.8 per cent of females.

With regard to rent for housing, 2.6 per cent of males in the Textile Factory said that the housing was free. In the Fish Canning Factory the percentage of workers who said housing was free was 72.7 per cent of males and 53.8 per cent of females, while those who paid a nominal rent were 12.5 per cent of males and 18.4 per cent of females in the Textile Factory and only 17.9 per cent of females in the Fish Canning Factory.

The extent of benefits from this service was limited, as all the workers in the Textile Factory owned their own houses or rented houses or had temporary houses. In the Fish Canning Factory 45.5 per cent of males owned houses and 18.2 per cent of the males lived in the factory district, whereas the houses were available only for

those who lived outside Shakra (the Factory district). About 28.2 per cent of female workers mentioned that they owned houses and 7.7 per cent lived with large families; 15.4 per cent said that houses were provided for those who lived outside Shakra, and 7.7 per cent said that women could not live in the houses provided by the Factory. About 2.6 per cent said that they lived in Shakra, 2.6 per cent said that the houses provided were small, and 5.1 per cent stated that they did not like to live in houses connected with their work.

f. Free factory products

According to the answers of 37.5 per cent of males and 23.7 per cent of females in the Textile Factory, and 18.2 per cent of the males and 10.3 per cent of the females in the Fish Canning Factory, the Factories provided free samples of some of their products. However, about 62.5 per cent of males and 76.3 per cent of females in the Textile Factory and 81.8 per cent of males and 89.7 per cent of females in the Fish Canning Factory mentioned that they had received no free products.

Those products were offered either free or for a very low price or on special occasions. In regard to providing the products as a form of assistance from the Factory, very few workers gave affirmative answers. The reasons for not having such a benefit in the Textile Factory were as follows: the Factory refused to offer such products, workers bought it for the same price outside the Factory, the Factory did not give away such products, the imports in the market were better and cheaper, the workers did not demand this benefit, the products were only given to those who excelled in production, the worker did not live in an independent house, there were no decisions concerning this matter. About 18.8 per cent of males and 18.4 per cent of females refrained from answering that particular question. In the Fish Canning Factory the reasons were as follows: the Factory did not give free samples of its products as a worker benefit, the workers preferred fresh fish, they did not use such products, they had to pay the full price of products, it was forbidden to receive any products from the Factory.

Concerning the possibility of workers' savings resulting from such grants, the percentage was very low.

The reasons for workers not economizing any savings out of all services were: unavailability of meals, the free health care in the country, the provision of houses by the Government and not the factory for the workers, the bestowal of free products only on workers who excelled in production, the presentation of certificates of appreciation rather than products. Thus transport was the only area in which the workers realized any savings.

(viii) The impact of services on work continuity

There were three types of answers to this question:

(a) There was a positive effect according to the answers of 59.4 per cent of males and 57.9 per cent of females in the Textile Factory and 72.7 per cent of males and 41 per cent of females in the Fish Canning Factory;

(b) There was a negative effect according to the answers of 18.8 per cent of males and 18.4 per cent of females in the Textile Factory and only 10.3 per cent of females in the Fish Canning Factory;

(c) There was no effect according to the answers of 21.8 per cent of males and 23.7 per cent of females in the Textile Factory and 27.3 per cent of males and 41 per cent of females in the Fish Canning Factory.

2. Issues and deterrents that affect women's work

(a) Awareness of laws which govern women's work

Most women had no idea about the laws governing their work, (68.4 per cent in the Textile Factory and 69.2 per cent in the Fish Canning Factory). The majority were not acquainted with the obstructive legal practices against women, (57.9 per cent in the Textile Factory and 64.1 per cent in the Fish Canning Factory). The rest of the female workers said that those practices consisted of: allocating no incentives to females, depriving women of vacations earned, counting no overtime for women workers, providing no transport, not assigning less arduous work for those women affected by work-related injuries, and not allowing breast-feeding mothers to leave before 2 p.m. to nurse their babies. Although the country's labour law legitimized work situations and female workers' prerogatives related to pregnancy and breast-feeding, the application of the law was contradictory as, for example, when these women were prevented from leaving the Textile Factory before 2 p.m.: in the Fish Canning Factory they were allowed to leave at 12 noon. When the machines were under repair the women continued to work after official hours although they received no extra pay for that, which was against the law.

(b) Family responsibilities of female workers

About 63.2 per cent of female workers in the Textile Factory and 25.6 per cent in the Fish Canning Factory cleaned their own houses, 42.5 per cent in the Textile Factory and 41 per cent in the Fish Canning Factory did the laundry, and 42.1 per cent

in the Textile Factory and 38.5 per cent in the Fish Canning Factory cooked the meals. About 21 per cent of the female workers in the Textile Factory and 5.1 per cent of the female workers in the Fish Canning Factory supported their families. Other responsibilities included taking care of the children, of their brothers and sisters and older members of the family, shopping, collecting wood and transporting water from wells. Some members of the family participated in such assignments such as the grown-up children, relatives and mothers-in-law. Several women prevented their daughters from continuing their education after the age of 12 so that they could help them at home. The female workers in the Textile Factory participated more to the family budget than those in the Fish Canning Factory, owing to prevailing traditions in the village where the Fish Canning Factory workers lived, where men were mostly responsible for the family budget. Thus women in the village spent more money on luxuries for themselves and their children. It was noted that none of the women workers in the Textile Factory left their babies to be cared for by elder children, perhaps because nurseries were available, or because they were keen to educate their daughters.

(c) Role conflicts and related problems

Women faced a conflict between their roles at home and at work, which sometimes meant that the women were less careful and painstaking, especially during pregnancy. Some workers indicated that their work kept them from having more children. There were some problems in Shakra owing to the unavailability of nurseries.

(d) Deterrents hindering women from participating in the production process

At work: work exhaustion, troubles caused by bosses, old-fashioned and worn instruments and prohibition of those who arrived late from entering the Factory;

At home: taking care of babies, sickness of the worker or her children or mother, problems with mothers-in-law or husbands because they took the worker's wages;

Work-related difficulties: nature of the work, work risks, uncleanliness of the workplace, behavioural difficulties caused by men (one female worker in each factory);

Discrimination against women: women felt discrimination for the following reasons (in order of the most commonly cited):

(a) *In the Textile Factory*: assignment of important posts, travel abroad, nature of work, incentives and bonuses, promotions, wages and training.

(b) *In the Fish Canning Factory*: incentives and bonuses, important posts, wages, promotion, travel abroad, employment, training and quality of work.

The administration said that differences in treatment of workers were based on the criteria of expertise, number of years worked, accuracy, no absenteeism, doing work precisely, and educational level. It was noted that women were absent more than men because of their different circumstances and that the women's educational level was lower in general, in spite of their perseverance and patience.

Among the difficulties facing female workers in the Fish Canning Factory were the non-existence of transport services after working hours and the lack of complete health care in either factory, which obliged the workers to go to the hospitals and outside clinics located far away from work.

(e) Health hazards

Women were vulnerable to chest infections, asthma, oedema, varicose veins, backaches, joint fractures, general weakness, amputation of fingers and hands, menstrual problems, uterine prolapse, exhaustion and dizziness, hearing impairments due to the noise of the machines at work, visual impairments due to waste products and heat, and skin allergies on their hands.

There were no accurate statistics in the clinics of either factory about the exact number of females affected with different diseases or diseases related to their jobs.

In spite of all these obstacles and problems facing female workers, they accommodated themselves to all assignments. The percentage of women who did not protest when they faced discrimination was 39.5 per cent in the Textile Factory and 43.4 per cent in the Fish Canning Factory. The percentage who complained to the union was 18.4 per cent in the Textile Factory and 12.8 per cent in the Fish Canning Factory. The percentage who complained to friends, bosses, the Party or the Women's Committee was 37.1 per cent in the Textile Factory and 21.4 per cent in the Fish Canning Factory.

3. Participation of female workers in decision-making

(a) Participation in decision-making on the work level

The participation of women in both factories was lower than that of men. In the Textile Factory the percentage of participation included 15.8 per cent of females and 37.5 per cent of males. In the Fish Canning Factory 7.7 per cent of females and 45.5 per cent of males participated in division decisions. With regard to decisions on the institutional level, the percentage of participation was 10.3 per cent of females and 36.4 per cent of males in the Fish Canning Factory, while only males participated in decisions in the Textile Factory with a percentage of 18.8 per cent.

(b) Family decisions

Female workers' answers were as follows:

(a) General family budget: 50 per cent of females in the Textile Factory and 43.6 per cent in the Fish Canning Factory;

(b) Buying and selling properties: 51.5 per cent in the Textile Factory and 43.6 per cent in the Fish Canning Factory;

(c) Daily family budget: 23.7 per cent of females in the Textile Factory and 35.9 per cent in the Fish Canning Factory;

(d) Children's marriages: 21.1 per cent in the Textile Factory and 30.8 per cent in the Fish Canning Factory;

(e) Children's education: 23.7 per cent in the Textile Factory and 7.7 per cent in the Fish Canning Factory.

These results shed light on physical participation in family decisions. In spite of the Government policy to promote equality between men and women, men still had the upper hand in family decisions owing to prevailing traditions. The disparity of concentration in the several areas of participation between the females in urban and rural regions remained enormous. The urban women contributed more to the general family budget, participated in buying and selling properties, and in their children's education. However, rural women participated more in decisions on the daily family budget and their children's marriages.

There were certain family decisions taken by women alone (18.4 per cent in the Textile Factory and 58.8 per cent in the Fish Canning Factory). These decisions were concerned with participating with others to save money, saving money to allow their girls to attend classes, and choosing their daughters' fiancés. There were some examples of decisions taken by females alone, including buying personal items and household requirements, visiting their families, repairing and building the house, choosing their daughters-in-law (responsibilities previously assigned to the husband, the father, brothers, or older sons).

(c) Women's participation in unions

All the workers were members of the General Union of Republic Workers. The leading committees included 9.4 per cent of the female workers from the Textile Factory and no members from the Fish Canning Factory. There was a female member responsible for women's affairs in every union committee in all divisions of the Textile Factory. In the Fish Canning Factory there was only one female member responsible for women's affairs in one union committee.

(d) Female workers' participation in social activities

In spite of the existence of social activities in the residential areas, the number of women participating in such activities was few. The percentage of participation of both sexes was as follows: 34.4 per cent of males and 2.6 per cent of females in the Textile Factory, 54.5 per cent of males and 5.1 per cent of females in the Fish Canning Factory. The low percentage of women's participation was ascribed to the following reasons:

- ▶ The women's belief that they were incapable of playing a role in society;
- ▶ The limitations on women's participation imposed by the necessity of contributing to taking care of the family;
- ▶ The lack of encouragement from their families for women to participate in social activities;
- ▶ The women's commitment to numerous family responsibilities, which left them no time to share in other activities.

(e) Membership in societies

About 12.5 per cent of males and 2.6 per cent of females in the Textile Factory and 9.1 per cent of males in the Fish Canning Factory were members of the Society of Peace and People Solidarity; 9.15 per cent of males in the Fish Canning Factory were members of the Literature Society for Youth.

4. The most important recommendations to increase participation of women and improve their situation in both industries

1. Providing regular medical check-ups, especially for older workers, and keeping the medical records in the clinic;
2. Providing child care staff and nurses in the nursery and establishing a nursery if there was not one, with the assistance of the Ministries of Health and Education;
3. Renovating the factories as quickly as possible to spare women workers the difficulty of having to work with old instruments;
4. Increasing women's awareness of labour laws and changing their concepts about the ideal number of children and how to bring them up;
5. Adhering to labour laws which grant rights to pregnant women and nursing mothers;
6. Continuing literacy programmes;
7. Providing women who completed primary classes with training and qualifying opportunities.

Annex

QUESTIONNAIRE ON THE CONDITIONS OF WORKERS IN THE INDUSTRIAL SECTOR

Comparative study

Responses to questions will be kept absolutely confidential and will be used only for purposes of scientific research. Your cooperation is requested. Thank you.

Questionnaire number: _____ Date: _____

Name of interviewer: _____

Name of reviewer: _____

Name of coder: _____

PART ONE. FOR MALE AND FEMALE WORKERS

Preliminary information:

1. Nationality: _____ 2. Gender: _____ 3. Age (in years): _____

	Capital city	Other city	Rural area
4. Place of birth	_____	_____	_____
5. Present place of residence	_____	_____	_____
6. Previous place of residence (if applicable)	_____	_____	_____

7. Number of family members: _____ Members of household _____
Dependants _____

Father/Mother/Spouse/Children/Siblings/Others

8. Dependants:

9. Family members living in the household:

Own/Rent
10. Type of dwelling:

Private

Shared

Single/Married/Divorced/Widowed

11. Marital status:

12. Education

	Illiterate	Read and write	Elementary	Preparatory	Secondary or more
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13. To those responding "illiterate" or "read and write" in the previous question: Have you ever taken a literacy course?
 Yes No

14. When did you first seek work? 19____
When did you get your first job? 19____
When did you obtain your present job? 19____

15. If the dates differ in the previous question, mention previous work:

First _____

Second _____

16. Do you engage in any other income-generating activities?
Yes No

17. If yes, what are the activities?

First _____

Second _____

Work information:

18. Department in which you work _____

19. Number of workers you supervise:

20. Main job you perform _____

21. In your work do you use:
(Hands - Manually operated tools - Mechanical tools - Automated machinery)

22. Work hours: From _____ to _____

23. Do you work overtime? Yes No

24. Do you work during official holidays? Yes No

25. How many hours of overtime did you work in the last month?
_____ hours

26. Have you attended any training courses inside the country?
Yes No

27. Have you attended any training courses abroad? Yes No

28. How long did the training courses you took last? (in months)
First Second

	Basic salary	Overtime	Incentives	Compensation	Total
29. Monthly salary:	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

30. Are you satisfied with your monthly salary? Yes No

31. How much does the company provide to you for the following:

(Transport - Medical expenses - Other services - A free share in production)

32. If you do not receive a free share of your company's production, state the reason _____

33. Do these services having an influence in keeping you at your present job? Yes No

34. The most dangerous hazards you are exposed to in the workplace:
First _____
Second _____

35. Types of occupational injuries you risk in your work:
First _____
Second _____

36. How many days of leave did you have last year?

(Annual - Sick leave - Maternity - Without pay)

37. In your view, what are the two most important incentives for performing well at work? Appreciation of the boss Promotion
 Salary increase Feeling of commitment Avoid being punished
 Other _____

38. Who has better work performance?
 Men Women No difference

39. Who has a better chance of being promoted?
 Men Women No difference

40. Are you thinking of changing your present job?
 Yes No

41. If yes, state the reason: Exhausting work Working hours
 Transportation difficulties Confidential reasons
 Other _____

42. What kind of change are you seeking? Inside the workplace
 Outside the workplace Private-sector work Work in another field

43. Are you a member of:
The union council? Yes No
A political party? Yes No

44. Do you take part in making decisions related to the department
you work in? Yes No

PART TWO. FOR FEMALE WORKERS ONLY

1. For those married or previously married: Number of children:

Living

Residing with you
(4 years of age and under)
(older than 4 years of age)

2. For unmarried workers: number of dependants:

Parents Siblings Other relatives Total

3. For those with children 4 and under, where do you leave your
children while you are at work? Private nursery Government
nursery

Company nursery With relatives With neighbours

Other _____

4. What are the two most important reasons you work?

Prepare for marriage To obtain social status Earn an
income

To make use of education Support the household budget

Other _____

5. What household duties do you carry out alone?

Taking care of the children Caring for elderly persons

Running the household Caring for siblings

Ensuring that whatever the household needs is brought in

Other _____

6. Your contribution to the household budget:

- Half or more Less than half Nothing

7. Are you able to cope with your outside work and your work at home?

- Yes, easily Yes, but with difficulty No, I can't

8. If you answered "No" in question 7, what are the two most important areas impinging on your performance? Running the household

Taking care of the children Taking care of the family

Taking care of the husband Working full office hours

Continuing on with work

Other _____

For married women only

9. Does your work have an effect on your having children?

- Yes No

10. Are you presently using any form of contraception?

- Yes No

FOR UNMARRIED WORKERS

11. Does your work have any effect on your plans for marriage?

- Yes, a positive effect Yes, a negative effect No effect

12. Check two problems that most affect your work:

Having young children Working conditions Family problems

Coping between work outside and inside the home

Other _____

13. Would you prefer to work half-time? Yes No

14. Would you prefer to work at home? Yes No

15. Do you face any difficulties at work? Yes No

16.If "yes", what kinds of difficulties?

Occupational hazards Boredom at work Sexual harassment

Uncleanliness of the workplace Maltreatment

Other _____

17.Do you feel that preferential treatment is given to men in:

Training Yes No

Incentives Yes No

Type of work Yes No

Assigning positions Yes No

Travel abroad Yes No

18.If the answer was "yes" to any of the items in question 17, do you resort to:

The union Yes No

A political party Yes No

Managers Yes No

19.Does the union have any influence in reducing discrimination against women where this exists? Yes No

20.Which of the following family decisions do you take part in?

Education of the children Yes No

Household expenditures Yes No

Buying and selling real estate Yes No

Arranging the children's marriages Yes No

21.What decisions related to the family do you make by yourself?

First _____

Second _____

