THE EVOLUTION OF CYPRIOT WOMEN IN SOCIETY AND THEIR INCREASED PARTICIPATION IN CIVIL ENGINEERING

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"Εγεννήθην γυιός γελούν οι τόποι,
εγεννήθην κόρη κλαίουν τα κατώφλια."
(Κυπριακή Παροιμία)

"Eyennithin yios, yeloun e topi,
eyennithin kori, kleoun ta Katoflia."

"A son is born and the world is joyful,
a daughter is born and households mourn."
(Cypriot Proverb)

To my Family

ABSTRACT

The initial objective of this research was to investigate the evolution in the participation and status of Cypriot women in Engineering Technology. In addition one of the aims was to demonstrate and account for the apparent differences in the employment conditions of female Engineers in comparison to male Engineers.

This detailed study would have enabled the researcher to establish the factors which account for the relatively low participation of women in traditionally male-dominated areas of employment, such as Civil Engineering.

In this respect data provided by the Department of Statistics and Research was studied and analysed with the objective of identifying the trends and determinants of women's work participation.

This approach was to be reinforced by responses from a sample survey of Cypriot male and female Civil Engineers, Civil Engineering Technicians and their employers. Questionnaires were designed and completed in the form of an interview. A sample of 125 people was used consisting of 25 persons from each group.

However, before proceeding with the analysis of the questionnaires it was considered essential to study the place of women in Cypriot society in general and to include a review of the historical, social, and economic factors.

After due consideration of the above issues it became apparent that the research should cover the following areas :

To obtain the necessary data, analyse them and determine the parameters which affect the place of Cypriot women in society. Furthermore, to examine such aspects as: Sex role stereotyping, the family, public life, education and employment and to provide certain historical, demographic, political and socio-economic information about Cyprus.

To use the results of the sample survey in order to consider in detail the evolution of Cypriot women in Civil Engineering. Furthermore, to examine the development of Civil Engineering construction and the position of the women Civil Engineers in Cyprus.

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CONTENTS

Page No

LIST OF FIGURES

Page No

LIST OF TABLES

ABBREVIATIONS AND DEFINITIONS OF TERMS USED

De Facto Population comprises all the persons who were actually present in the country at a given time. This concept had been applied during all population censuses up to 1960.

De Jure Population comprises all the persons who have their usual residence in Cyprus. This concept was used in Censuses and population estimates after 1960.

Dowry is a social institution, whereby the parents of the bride negotiated prior to the marriage, the house, land, money and any other belongings they would give to the future son-in-law. In a few villages of Mesaoria the groom was obliged to provide the house. Dowry was most prevalent when the economy of Cyprus was essentially based on agriculture and husbandry.

Endogamy is when people get married to people from the same place.

Economically Active Population is defined as the total gainfully employed persons as well as the Cypriots working abroad, the unemployed and members of the National Guard.

Gainfully Employed is the full-time equivalent number of persons who work in or for the establishment including working proprietors and working partners, unpaid family workers, and persons on short-term or paid leave; persons in military service are excluded.

GDP : Gross Domestic Product : It is the value of gross output of the country produced during a calendar year, minus intermediate consumption; i.e. the value of raw materials, fuels and services rendered by others used in the production process. It represents value added generated by the sectors producing goods and services within the country. Valuation of GDP is at market prices, including import duties and other indirect taxes but excluding subsidies. (Subsidies represent all the grants on current account which private industries or public corporations receive from the Government.)

GNP : Gross National Product : It is equal to GDP at market prices plus net factor income from abroad.

Gender Role is a role assigned on the basis of biological sex, which defines specific personality traits and behavioural responses as appropriate to a person of that sex; social influences amplify the biological division and gender roles are represented in the psychological construction of masculinity and femininity.

HTI : Higher Technical Institute : The HTI was established in 1968 initially a joint project between UNDP, UNESCO and ILO and the Government of Cyprus. In 1973 it became the sole responsibility of the Government of Cyprus and operates under the Ministry of Labour and Social Insurance. Its primary objective is to train Technician Engineers (HND graduates) in Civil, Electrical, Mechanical and Marine Engineering in order to meet the needs of Cyprus industry. A three year course in Computer studies was introduced in 1985.

Nuclear Family : It consists of the two spouses living in the same household together with their children who are not married.

Occupations Dominated by Men are those where the share of women is less than their over-all share in total non-agricultural employment.

Occupations Dominated by Women are those where the share of women is greater than their over-all share in total non-agricultural employment.

Patriarchal Family implies that all the power lies in the hands of the father, who dominates the family's property and social life.

The Traditional Family pattern was in force before the appearance of the capitalist system. The family functioned as an integrated economic unit (production and consumer unit). The role of each individual member was defined by the prevailing traditions.

The Transitional Family stops functioning as an integrated economic unit. Its structure is in a stage of transition from traditional to contemporary family; there is less dependence on pre-defined roles.

CHAPTER 1

INTRODUCTION

1.1 GENERAL

During the last two decades there has been a growing concern about the inferior status of women and their limited role in society. Considerable research, motivated by this concern, has been undertaken in the developed and most of the developing countries, especially during the decade of women 1975-85.

It is generally accepted that women's participation in the labour market is inferior to that of men's in all respects: in numbers, wages and status. In order to account for these inequalities one needs to consider a whole variety of factors, such as historical, social, economic, political and personal.

In Cyprus, a middle-income developing country, significant changes have taken place since 1960, when the island became an independent republic. Political, economic and social changes resulted in the redefinition of gender roles and the rise in the participation of women in the labour force.

Despite their increasing numbers in the labour force, women are concentrated in female dominated and low-paid occupations. Their participation in male dominated areas of employment, such as Engineering Technology, is very low.

In order to establish the factors which account for the participation and the status of Cypriot women in traditionally male areas of employment, it is essential first to examine the wider question of the place of women in the Cypriot society.

1.2 RESEARCH OBJECTIVE

The aim of this research study is to analyse necessary information and to determine the essential parameters which affect the participation and status of Cypriot women in Civil Engineering, a traditionally male area of employment.

1.3 STRUCTURE OF RESEARCH

This research study is presented in nine chapters. The first chapter includes the introduction. The second chapter involves a brief survey of the history of the island, its demography and its economy.

The third chapter considers the evolution of Cypriot women in Cypriot society. First, popular sayings and proverbs have been used for reconstructing female and male stereotypes. These old sayings, many in current use, provide very clear indicators of what is regarded as desirable and undesirable behaviour in women and men and indeed what personal qualities each gender should display.

In order to present a complete picture of gender expectations of behaviour in Cypriot society the influence of the following institutions is outlined: Christian Orthodox religion, marriage, dowry and pre-marital sexual expectations.

The factors contributing to changes in the structure of Cypriot society, and to a subsequent redefinition of gender roles are outlined focusing on two major political events: the declaration of the island as an independent republic in 1960 and its invasion and part occupation by Turkey in 1974.

The changing gender roles are described and analysed in the context of the changing Cypriot family structure. These changes have been shown by using relevant information from research studies conducted before and after 1974, which was considered as the turning point.

Finally, chapter three portrays the position of Cypriot women in public life. The involvement of Cypriot women in various liberal movements and community group activities, as well as their participation in decision making bodies have been outlined.

Education appeared to play a significant role in changing the traditional attitudes and behaviour of women. Thus the fourth chapter considers the education of women in Cyprus.

Firstly it outlines the current system of education and then it investigates gender differences within the operation of the system.

Finally it examines male and female enrolments in Engineering Technology and their distribution in the Engineering courses. The factors affecting the enrolments of students in the major courses of Engineering, i.e. Civil, Electrical and Mechanical Engineering are also examined.

In the fifth chapter women's participation in the labour force of Cyprus is examined. First an historical review of female participation in Cyprus labour market is presented. Then the trends of women's employment, wages, salaries and legal status are examined. Finally, significant findings of research studies undertaken in Cyprus, concerning the determinants of female labour participation, their trends of employment, earnings and status are outlined.

Chapter six includes the methodology used for obtaining data, which enabled the researcher to investigate the participation and status of Cypriot women in Civil Engineering. The following quantitative and qualitative studies were undertaken. A sample survey, a telephone survey and informal interviews with the sample group.

The survey method used, the sample size and the method of conducting each type of survey are explained and supported by reference to relevant literature. The layout and content of the questionnaires used is also explained.

Chapter seven examines the development of Civil Engineering in Cyprus. The development of Civil Engineering construction is outlined by referring to the expansion of construction after 1960 and the construction boom after the post invasion years. Then the position of the Civil Engineer in Cyprus is investigated by examining the following: The growth in their numbers, their professional status, patterns of employment and remuneration.

Chapter eight presents the data obtained from the questionnaires, the telephone survey and the informal interviews. The responses of male and female Civil Engineers and Technicians are presented and analysed together in order to have a more direct comparison. Then the responses of the employers are analysed and compared with the relative responses of male and female employees in the sample group.

In chapter 9, the main findings of the survey studies and the background data on Cypriot women provided in this research are discussed focusing on the following :

a. The evolution of Cypriot women in society, their involvement in education and their active participation in the labour force.

b. The development of Civil Engineering construction in Cyprus and the growth in the number of male and female Civil Engineers.

c. Status of women Civil Engineers in comparison to that of men and the factors which accounted for any differences.

This research study concentrates primarily on Greek Cypriot women. The significant political events of 1963/64 and 1974 have kept the Turkish minority community separated and inaccessible and it is not therefore possible to carry out a similar study for Turkish Cypriot women.

Considering the common cultural features of the Greek, Turkish and the other minorities of the island, the author feels that the picture that emerges from the present study is representative of Cypriot woman in general.

CHAPTER 2

CYPRUS - ITS HISTORY DEMOGRAPHY AND ECONOMY

In order to carry out any study concerning the lives of women in Cyprus, it is essential to provide certain factual information about Cyprus itself and Cypriot society in general. This is developed from a review of the studies carried out on the history of the island, its demography and its economy.

2.1 HISTORICAL BACKGROUND

Cyprus is the third largest island in the Mediterranean after Sicily and Sardinia. It lies in the north-eastern corner of the Mediterranean basin. Its geostrategic location has played a decisive role in its development as a financial, commercial and strategic centre.

The island was first inhabited in the 7th millenium B.C. during the Neolithic Period. From the 14th until the 11th century B.C. the Achaean Greeks arrived and settled in the island as merchants and immigrants and introduced the Greek language and culture. Its culture was also influenced by the nearby Eastern nations (Egyptians, Assyrians and Phoenicians) who in turn conquered Cyprus[1].

In 58 B.C. Cyprus came under the dominion of the Romans. On division of the Roman Empire, in 395 A.D. it became a province of the Byzantine Empire.

In the 12th Century during the 3rd crusade, Richard the Lion Heart of England conquered the island and passed it to the Knights Templar and then to the Lusignans from France. They established a French dynasty, which lasted until 1489, when the island became a part of the Republic of Venice.

In 1571 Cyprus was conquered by the Ottomans and stayed under Ottoman Rule until 1878 when it was ceded to Britain, in exchange for protection against Russian hostilities. In 1914 Turkey entered the First World War against Great Britain and then annexed Cyprus.

During the Ottoman Regime Turkish Settlers were brought in to inhabit Cyprus and the ethnic composition of the island changed. In 1881, according to the Census of Population taken by the British Administration, the ratio of Greek to Turkish population of the island was 4.3 to 1.

In 1960 Cyprus was declared an independent republic under the Zurich agreement and became a member of the United Nations, the British Commonwealth and the Council of Europe.

The Zurich agreement signed by the two communities (Greeks and Turks) and the three guarantor powers (Britain, Greece and Turkey), provided for the sovereignty of Britain over two military bases in the island's territory as well as the stationing of armed forces from Greece and Turkey.

The 1960 Constitution of the Cyprus Republic proved unworkable in many of its provisions and its smooth implementation appeared to be impossible. These discrepancies led to a friction between the two communities in 1963. Eventually the Turkish community withdrew from the administration.

In 1974 the Military Junta of Greece, which controlled the Greek armed forces in Cyprus, brought about a coup d'etat. This forced the President of Cyprus to flee and provided an opportunity for the invasion of the island by Turkey. This was in direct conflict with the Zurich agreement.

The Turkish army to-date continues to occupy 37 per cent of the island. As a result of this 200,000 Greek Cypriots were displaced and became refugees in their own country. Their homes were then occupied by Turkish Cypriots and Anatolian settlers from Turkey.

A United Nations peace-keeping force is maintained to patrol a 'Green Line', which separates the Greek and Turkish communities. In subsequent years discussions have been held under the auspices of the United Nations.

However, the situation is unchanged and the 'Cyprus problem' remains unsolved. In 1984 Turkish Cypriots declared independence from Cyprus, an act which has been recognized only by Turkey.

The Greek Cypriot government, which is the internationally recognised legitimate authority, has effective control of only 60 per cent of the island and 80 per cent of the total legitimate population.

No study of present day Cyprus can ignore these major political upheavals which have had such a profound effect upon the lives of all people in Cyprus. The impact of these changes may be seen very clearly by examining the demography of Cyprus.

2.2 DEMOGRAPHY

Population censuses were made by the British colonial government until 1946 and by the Government of Cyprus in the succeeding years. Table 2.1 sets out the information on the population of Cyprus by sex for the years 1881 to 1982.

TABLE 2.1 : POPULATION BY SEX - CENSUS YEARS 1881-1982

YEAR	POPULATION			ANNUAL GROWTH RATE %		
	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES
1881	186173	95015	91158			
1891	209286	106838	102448	1.2	1.2	1.2
1901	237022	121066	115956	1.3	1.3	1.3
1911	274108	129383	134725	1.5	1.4	1.5
1921	310715	155965	154750	1.3	1.1	1.4
1931	347959	172754	175205	1.1	1.0	1.3
1946	450114	222510	227604	1.7	1.7	1.8
1960	573566	281983	291583	1.7	1.7	1.8
1973	631788	312566	319212	0.8	0.8	0.7
1976	612851	306144	306707	-0.9	-0.6	-1.1
1982	642731	319562	323169	0.8	0.7	0.9

Source : Demographic Report 1992, Nicosia, Department of Statistics and Research, Ministry of Finance, p.29.

1. Up to 1960 data refer to the de facto population, but thereafter to the de jure.
2. Estimates of total population for 1976 and 1982 are based on the Census of Housing 1982 conducted in the Government Controlled Area.
3. Illegal settlers from mainland Turkey are not included in the statistics.

The above Table shows that in the years 1881 to 1901 there was an excess of males of about 4 per cent. This preponderance of males, although contrary to the experience of all European countries (except of Greece and Bulgaria), has been found to exist to a greater or lesser extend in all Asiatic countries[2].

The British Superintendent of the Census of Cyprus 1881 explained this excess as[3] :

> "Amongst other reasons, it has been alleged that the mortality is higher amongst females of all classes than amongst males in consequence of: early marriages, the absence of efficient aid at the time of parturition, the exposure and hardships endured by the Cypriot females in field labour, and, amongst the Turkish population, to the practice of abortion, which is said to be very common, but to what extent these allegations are justified present knowledge does not enable me to judge."

The increase of females noticed in 1921 and 1931 is explained by the British Superintendent partly as a result of emigration being confined for the most part to the male sex.

After the Turkish invasion of July-August 1974 the population experienced negative growth, through war losses, emigration and fertility decline, calculated at -0.9 per cent in the intercensal period 1973-1976. The illegal Turkish immigrants from mainland Turkey who have settled and continue to settle in Cyprus since 1974, are not included in the Statistics of population.

The estimated ethnic composition of the population based on the Census of Cyprus 1982 gives 80.1 per cent Greek Cypriots including Armenians, Maronites and Latins, 18.6 per cent Turkish Cypriots and 1.3 per cent foreign residents, mainly British, Greek and Lebanese. The Greek Cypriot to Turkish Cypriot ratio is thus estimated at 4.3 to 1.

This ratio is at about the same level as the one found in the Population Census of 1960, which was taken on the establishment of the Republic.

In the years after 1976 demographic developments favoured population growth and the population gradually increased. The rate of growth is currently about one per cent. The demographic situation in Cyprus is characteristic of countries in Southern Europe. There is a gradual ageing of the population due to the declining trend in fertility.

According to the Census of Population of 1982, between 1971 and 1981 the proportion of the population in the 0-14 age group registered a decline from 33 to 27 per cent in rural areas and from 29 to 25 per cent in urban areas. This decline in the numbers of young people was instrumental in bringing about job opportunities for women. The positive evolution of the Cypriot economy also has had a decisive effect on the employment of women.

2.3 ECONOMY

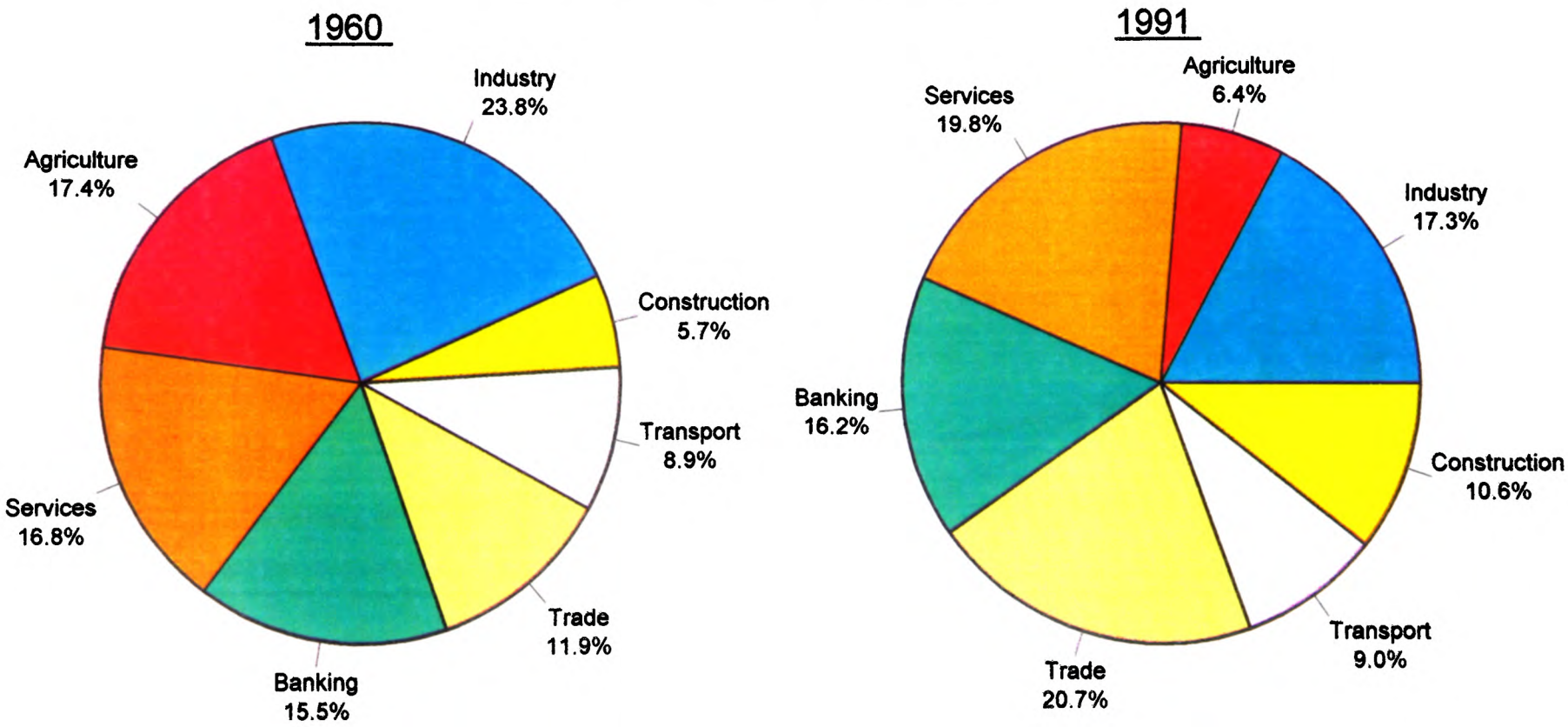
Before the second world war the economy of Cyprus was essentially based on agricultural and animal husbandry. Then a period of gradual transformation to a commercial, city centered system followed.

After the independence of the island in 1960, rapid economic and welfare developments were achieved resulting in the creation of employment opportunities for the population in a variety of sectors. Figure 2.1 overleaf, presents the distribution of the GDP (Gross Domestic Product) in 1960 and 1991 at current market prices.

Political upheavals on the island have always had a negative impact on its economic development. The rising progress of the per capita Gross National Product shown in Figure 2.2, in page 16 showed a decline during the political crisis of 1964 and the invasion of the island by Turkey in 1974.

The decline in the GDP in 1974 was 17 per cent. The booming tourist industry collapsed and much manufacturing equipment and machinery were lost. Unemployment rose from about 3 per cent to 30 per cent immediately after the invasion. The well coordinated and collective action of the Cyprus government and dynamic private sector together with foreign aid enabled Cyprus to overcome the destabilising effects of the Turkish invasion.

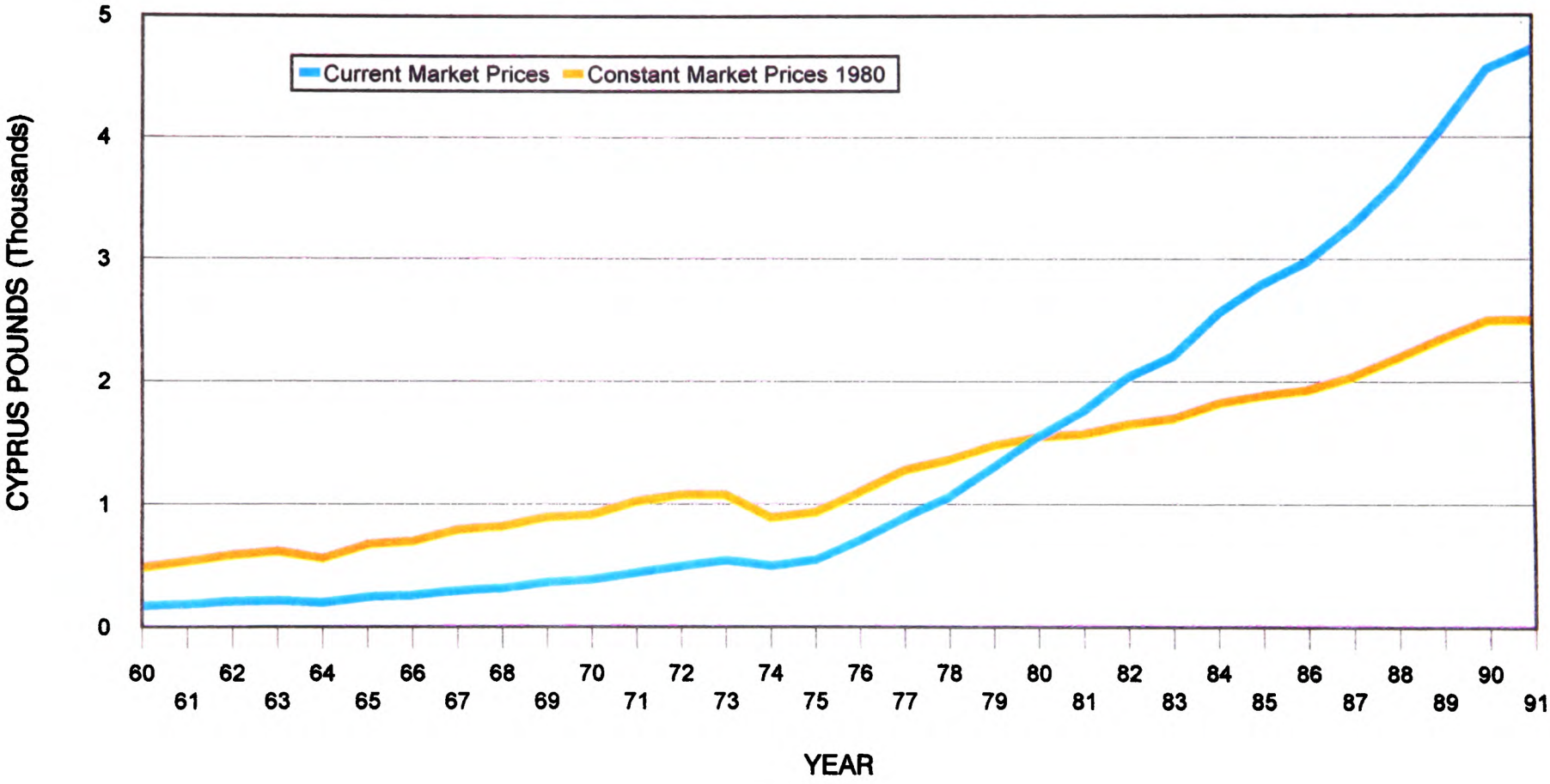
THE DISTRIBUTION OF GROSS DOMESTIC PRODUCT AT CURRENT MARKET PRICES



Source : Statistical Abstract 1987 and 1991, Department of Statistics and Research
Ministry of Finance, Nicosia, Cyprus

Figure 2.1

PER CAPITA GROSS NATIONAL PRODUCT, 1960-1991



Source : Statistical Abstract 1987 and 1991, Department of Statistics and Research
Ministry of Finance, Nicosia, Cyprus

Figure 2.2

By 1976 recovery was well under way and an intensive growth with a transformation of the underlying structure of the economy followed. Whereas in the early post 1974 period growth was led by the construction boom and by manufacturing industry, especially clothing and footwear, during the 1980s tourism became the leading sector.

By 1982, tourism accounted for more than 50 per cent of the surplus of invisible trade. The share of agriculture in the GDP showed a decline from 17.4 per cent in 1960 to 6.4 per cent in 1991, while the share of construction rose from 5.7 per cent to 10.6 per cent. In addition agriculture's share of employment fell over the 1960-1992 period from 40.3 per cent to 12.2 per cent[4].

These changes had critical effects on the structure of Cypriot society and the participation of Cypriot women in the labour force.

REFERENCES

1. Katias Hadjidemetriou, History of Cyprus, Nicosia, 1985.

2. Report on the Census of Cyprus 1881, Department of Statistics and Research, Ministry of Finance, Nicosia, p.8.

3. Census of Cyprus 1881, op.cit. p.10.

4. Statistics of Agriculture, Agriculture Section, Department of Statistics and Research, Ministry of Finance, Nicosia.

   (The data for the years 1960-74 refer to the number of persons working for at least one third of the year on the farm, while for the years 1975-92 the figures refer to 'full time working equivalent' number of persons employed.)

CHAPTER 3

THE POSITION OF WOMEN IN CYPRIOT SOCIETY

3.1 INTRODUCTION

It is generally accepted that times tend to change faster than attitudes. In only a few generations, a mighty transformation has turned a rural society into an urban and industrial one. This revolution has a direct effect on family structure and a consequent change in the relations between its members. Thus, the old balance of the social roles of men and women has been disturbed without as yet being replaced. Gender roles need redefining and this must take into consideration a whole variety of factors including personalities and circumstances[1].

In contemporary sociology a 'gender role' is a role assigned on the basis of biological sex, which defines specific personality traits and behavioural responses as appropriate to a person of that sex; social influences amplify the biological division and gender roles are represented in the psychological construction of masculinity and femininity. The definition of masculinity and femininity varies between different societies and also historically within each society.

In order to present the position of women in Cypriot society it was considered essential to portray gender roles in traditional and contemporary Cypriot society.

3.2 GENDER ROLES IN TRADITIONAL CYPRIOT SOCIETY

In Cyprus, similar to all the Mediterranean countries, there were different roles for men and women. The man was the public representative of the family and the woman's role was in the house. The woman's social status was determined by that of the male head of the family[2].

Clearly there were quite different gender roles for men and for women. There are many different ways of analysing the details of these roles. Popular sayings i.e. sayings in common usage, defining the roles of men and women or praising or often condemning certain behaviour in either sex, are a very good indication of what is considered appropriate behaviour for men and for women.

Ann Oakley supports the view that a set of myths about woman's place in society, in which femininity and domesticity are equated, maintained the ideology of gender roles.

> "Myth enshrines conservative social values, raising tradition on a pedestal[3]."

In order to outline a picture of women in traditional Cypriot society, it is important to describe male and female gender roles as they emerged through popular sayings as well as the major influences of Christian Orthodox religion on women's social position.

It is also necessary to make reference to the institutions of marriage and dowry, which were of primary importance to young peoples' lives. The factors which contributed to the changes in the structure of Cypriot society are also considered, primarily the two major political events; the declaration of the island as an independent republic in 1960 and its invasion by Turkey in 1974.

Furthermore, considering that the relations between members of the family reflect the relations in society, the changing patterns of the Greek-Cypriot family were also examined.

3.2.1 Gender Roles as Defined by Popular Sayings

The sayings used in this chapter were selected from the work of Pavlos Xioutas, Sayings of Cypriot People, (Nicosia, 1984). Each of the sayings referred to below is given a brief explanation of its meaning and significance as developed from Xioutas' interpretation.

The following sayings which refer to both men and women were selected.

"Eyiennithin yios, yeloun e topi,
eyiennithin kori, kleoun ta katoflia."

"A son is born and the world is joyful;
a daughter is born and households mourn."

Interpretation : This is a strictly male view, which still prevails in all newly married Greek Cypriot men, who wish to have a baby boy born. The grown up man goes out in the world and brings joy around him, while a girl stays in the house together with the other women and she is like a burden upon the household.

"O athropos me to yomarin
tj'e yeneka me to koutalin."

"The man with a big load
and the woman with a spoon."

Interpretation : This saying is found in Mesaoria and especially in Lefkoniko. It depicts a male dominated view of the man's enormous contribution to the house and the family, contrary to the insubstantial contribution of the woman.

"O antras en' o stillos tou spithkiou,
tje e geneka e lampa."

"The man provides the support
and the woman illuminates the house."

Interpretation : The man is the main support of the house, while the woman gives light and beauty to the house.

"Enan kommatin athropos axize shillies lires
tje ena kommatin yenekos axizi thkio mpakires."

"A part of a man equals to a thousand pounds
and a part of a woman equals to two piastres."

Interpretation : The man (athropos) is very worthy, while the woman (yenekos) is of no value. This saying emphasises the great importance of the man as against the insignificance of the woman.

"An pethane o tjiris, ta pethkia is te yonia,
an pethane e mana, ta pethkia sten yitonia."

"The father's death, keeps the children in the house,
but the mother's death, scatters them in the streets."

Interpretation : This saying emphasises the importance of the mother in the rearing of children in comparison to the inefficiency of the father.

The above sayings demonstrated clearly demarcated sex roles. The man's role was to support and to represent his family to the public. He was the main support of the house and he had to carry the big burden of the marriage obligations. The man was expected to go out in the world and it was impossible for him to bring up children.

The woman's role was to become a good housewife and mother. She was expected to give warmth and beauty to the house, to be tender and openly caring. Her role as a good mother was highly appreciated while her material contribution to the house was described as unimportant. The latter is prejudicial to women, since evidence shows that women worked hard in the home and in agriculture[4].

In addition the birth of a girl brought sorrow around her and she was seen as a burden to her parents. This can be seen in the concern of the parents to safeguard their daughter's good 'name' and to provide the 'dowry' for her marriage[5].

Reference to the Greek text of the sayings shows that man is referred to as 'athropos' and woman as 'yenekos'. These terms imply a positive attitude towards men and a negative attitude towards women.

3.2.2 Major Influences of the Greek Christian Orthodox Religion

The Christian Orthodox Religion supports doctrines of love and equality for all people. However, in the case of women, the concepts of equality are overridden by prevailing male dominated practices. Women are identified with evil; Eve was deceived by the tempter whilst Adam was not. The woman induced the man to evil and she was considered responsible for their expulsion from Paradise.

Below are some of the imperatives and ideas contained in Saint Paul's Epistle to the Ephesians which is still read during the Greek Orthodox wedding ceremony[6].

> "Wives submit to your husbands as to the Lord. For a husband has authority over his wife just as Christ has authority over the church... every husband must love his wife as himself and every wife must respect her husband."

The imperatives mentioned in the previous page, are in contradiction to the doctrines of equality, which are included in his Epistle to Galatians[7] :

> "So there is no difference between Jews and Gentiles, between slaves and free men, between men and women."

The Greek Orthodox Church makes a clear distinction between the gender roles. Men always have the leading and privileged positions. Women can attend all the religious ceremonies but they are not allowed to have any positions in the ranks of authority of the church.

Special seats are reserved for women at the back or upstairs in the mezzanine floor of the Church and they are not permitted to enter the holy room, where the ceremony takes place. Furthermore, entrance is prohibited to them in certain monasteries; like Stavrovouni in Cyprus and Mount Athos in Greece.

The Cypriot Greek Orthodox Church has been very powerful due to historical, political and social reasons. The head of the Church combined religious and political power during the Ottoman regime. As the property of the Church was not liable to taxation, many people donated their land to the church, which became more powerful and has maintained its leading role up until now. Archbishop Makarios III, was the first President of the newly formed Republic of Cyprus in 1960.

The Church had the exclusive authority on matters of Family Law until 1990[8]; the Law which regulates Civil marriage and relevant issues, was introduced in March 1990. The Church has not accepted the above Law, and until now there is a direct contradiction between the Civil Court and the Church.

The role of the Church was instrumental in preserving the ideology of inferiority and dependence of women on men. In addition it maintains the hierarchical pattern of dominator - dominated in the relationship of the two spouses within marriage and the family.

3.2.3 Marriage and Dowry System

Getting married and having a family was a primary objective and the means to acquiring the necessary social recognition for both, men and women. Married men were considered full and mature members of society, but women through marriage achieved their life's goal to become wives and mothers[9]. This goal was the foundation of the socialisation that they had received through their family, school and community.

The marriage pattern was the arranged marriage, where the dowry was of great importance. In 1930, Surridge[10] mentioned that dowries often resulted in the impoverishment of parents in their old age.

> " A young man without property was able to find as a bride a girl with a little property but the dowerless girl could not hope for a husband."

In addition, the Greek Orthodox Church contributed to the maintenance of the dowry system since the 'Dowry Agreement' was a part of the religious betrothal ceremony; this anachronistic system was abolished in the early 1980s.

3.2.4 Pre - Marital Sexual Expectations

In Cyprus, as in all traditional societies, there were different pre-marital sexual expectations for men and women and a double standard was used to evaluate male and female behaviour.

Men had more freedom of action and any transgression of norms affected only their own reputation, while for an unmarried woman any shame which she incurred reflected on brothers and parents who were responsible for protecting her honour. After a woman was married these responsibilities passed to her husband. Surridge[11] writing in 1930, stated :

> "The lightest whisper against the innocence of a village girl will endanger her chances of marriage. Doubts cast upon the fidelity of a wife have been and still are the cause of murders. The husband's 'honour' must be above reproach."

The traditional concepts of 'honour' and 'shame' were responsible for the pre-marital double sexual standard which is still in strong force in Cyprus today. The double standard is so much internalised that any of its manifestations to the people seem just 'natural'[12].

3.3 FACTORS CONTRIBUTING TO CHANGES IN THE STRUCTURE OF CYPRIOT SOCIETY

The political and economic events which took place in the Republic of Cyprus after 1960 brought about rapid social and cultural changes. The Cypriot economy, after the Second World War, was already in a process of transformation from agricultural to one based on commerce and light industry.

The subsequent relative rise in the living standard of people and the inflow of rural workers to the towns, contributed to a change of the societal model, from rural to urban. Moreover, two major political events were responsible for bringing about change in Cypriot Society: i.e. the declaration of the island as an independent republic in 1960 and its invasion and part-occupation by Turkey in 1974.

3.3.1 Cyprus - an Independent Republic

The newly formed Republic and the subsequent economic growth brought about many innovations to Cypriot society. The leading role played by agriculture in the economy was overtaken by light industry; moreover, the employment opportunities which were offered in a variety of sectors, brought about the full employment of the population and a high participation by women in various sectors of the developing economy. These resulted in an inflow of rural workers to the towns and a considerable increase in the standard of living.

Furthermore, the creation of professional posts in the newly established Republic, led to the appreciation of education, the improvement of its standard and the high attendance of students of both sexes in all its levels. These innovations contributed to a change in the traditional values and attitudes of Cypriot people.

3.3.2 The Turkish Invasion

The Turkish invasion of 1974 had very marked effects upon Cypriot society. Its consequences have affected the Cypriot family in various ways. The sudden displacement of 200,000 Greek Cypriots from the north of the island to the south, have brought about changes in the demography, economy and social life of Cyprus.

The majority of the Greek Cypriots from the northern rural areas were settled in the refugee camps, which were built in the towns of the free southern part of the island. This resulted in the change of the structure of the economy, which experienced a rapid reorganisation soon after the war.

The role of agriculture was diminished, since many farmers lost their lands, and light industry became the main sector of the economy. The factories (mostly clothing and footwear), which were built near the refugee camps, depended on female labour.

Moreover, tourism, which was the most rapidly growing sector throughout the 1980s, offered employment opportunities to males and females. Thus, female employment changed from unpaid family worker in agriculture to paid employee in manufacturing, trade and services.

These changes in the economy and in demography affected peoples' attitudes and ideologies. In addition, the fact that many people were left without any property and the emergence of financial schemes, which were offered to people in buying dwellings, led to the decline of the institution of the dowry.

The financial independence of women, combined with the fact that many of them were turned into heads and supporters of their families (since they lost their husbands or their protectors), led to a change in the traditional image of the female stereotype.

Furthermore, the involvement of Cypriot people with foreign tourists, the development of the mass communication media and the increasing numbers of students studying abroad, contributed to the diffusion of western ideas about sex stereotypes, marriage, family relations and the position of women in the family and society. These changes were instrumental in the redefinition of sex roles and the re-evaluation of the personal qualifications of the people.

3.4 THE CHANGING PATTERNS OF THE GREEK CYPRIOT FAMILY

3.4.1 Family Patterns

Sociologists classify family patterns into different types, which have as a base either the relation of the family to the relevant existing social system or the relations between its members. In relation to the social system family types can be classified into four broad groups:

a. The Traditional
b. The Transitional
c. The Contemporary
d. The Ideal Contemporary Family

The definition of the above groups, as given by Vitnyi is mentioned by Mousourou[13] in her research study Women in Occupation and Family.

From the above classification, the Cypriot family pattern before 1974 can be defined as Traditional and the one after 1974 as Transitional. Although the Cypriot economy has been in a stage of transitional change after the Second World War, 1974 was a turning point in recent changes in the Cypriot family pattern. The primary reason for this being the dramatic consequences of the Turkish invasion of Cyprus. This is also supported by several research studies[14] on the Cypriot family structure before and after the Turkish invasion.

3.4.2 Traditional Cypriot Family

The Greek Cypriot family has traditionally held to a nuclear family household system. In the research about the village of LYSI[15], the rural family was characterised as : "nuclear, patriarchal, religious, traditional and endogamous with separated roles for the two sexes."

These characteristics could also be attributed to the urban family, since in Cyprus, as Attalides[16] stated : "there is no distinguishing differentiation between urban and rural." In his study Social Change and Urbanisation in Cyprus, he observed a high degree of cultural uniformity amongst middle and lower level urban dwellers with rural dwellers.

The roles played by both the man and the woman in the Cypriot family were not fundamentally different to their counterparts in other Mediterranean societies. The man belonged to the world and the woman in the house. The socialisation of boys was different from that of girls from a very early age. The girls were brought up to be tender and to care about others, while the boys were taught to be tough and competitive.

Gender role socialisation influenced the relations of the members of the Cypriot family. In the family the father lacked the intimate relationship that the mother had with the children.

3.4.3 Transitional Cypriot Family

The Cypriot family after 1974, maintained its nuclear character, but experienced significant changes as far as its other characteristics were concerned, that is: "Patriarchal, religious, traditional and endogamous with separated roles for the two sexes."

Kalava[17] in The Cypriot Woman, mentioned that the traditional family pattern had been replaced by the democratic pattern which entailed dialogue and cooperation between the parents and the children as regards family matters.

In the research, The Structure of the Cypriot Family[18], the Cypriot family was characterised as nuclear and democratic with a high degree of protection of children against natural and moral dangers.

The traditional form of religiousness of the Cypriot family has begun to diminish and the endogamic characteristic of the Cypriot family appeared to undergo a rapid decline.

The great demographic upheaval, which occurred in the island after its invasion by Turkey contributed to a change in traditional values, which had been preserved in the close society life, especially in the villages.

In the modern family, sharing between parents in the tasks of physical upbringing is increasing steadily. The research, Child Upbringing in Cyprus[19], indicated that 34.3 per cent of the fathers appeared to help often in feeding the child compared to 37.1 per cent who never helped.

This is a big step, considering that in the research, LYSI, it was mentioned that the father never dressed or fed the child. Despite changes, many characteristic remnants of sex role socialisation can still be detected in the practices and attitudes followed by parents in the rearing of their children.

The survey, Child Upbringing in Cyprus, revealed that mothers had greater expectations from their daughters concerning the issue of 'love others' and as far as 'housework' were concerned.

On the other hand they were more concerned about the attribute of 'honesty' for their sons; a possible explanation might be this attribute's relation to men's traditional role, as representatives of their family to the public.

In addition parents exercised more restrictions to their daughters than their sons, concerning their behaviour and their leisure activities. The traditional behaviour attributes, confined to the two sexes can be manifested in the different leisure activities of the two sexes.

In traditional as well as in contemporary family, the boys spent most of their leisure time outside the house, to cafes or were involved with sports, while the girls mostly stay home reading books or visiting friends.

In contemporary Cypriot society the strength of certain social institutions has begun to be eroded by modern concepts, and opposition to the institution of dowry and arranged marriage prevailed.

Costas Paschalis[20] mentioned that the contemporary Cypriot woman, especially the younger and more educated one, is at a quite advanced stage of sexual liberation; however, this change is confined within the framework of marriage. The Cypriot woman is in a transitional stage, where at every step she is confronted with the traditional image of herself.

3.5 PARTICIPATION OF WOMEN IN PUBLIC LIFE

Traditionally man was involved with community and professional activities -as protector and supporter of his family. The woman was responsible for the house and family affairs -doing the housework, raising her children and serving her husband. Public and political life was a male domain and women played a secondary role.

At the beginning of the 20th century women won the right to vote. In many countries women movements and associations fought for many decades for women's rights. In 1910, Norway was the first European country that gave women the right to participate in municipal elections. In 1913, these rights were subsequently extended to include participation in political elections[21].

Despite the fact that women fought hard to win equal political rights with men, their participation in public life has been very low. Very few women stand for election and as a rule very few get elected.

In 1991, a seminar was held in Cyprus, organised by the Permanent Central Agency for Women's Rights[22]. This seminar specified the following two areas under which women's participation in public life could be considered :

1. Women's participation in the liberation movements.
2. Women's participation in decision making centres.

3.5.1 Women's Participation in the Liberation Movements

Contrary to their gender role expectations women play a significant role during wartime. There are many cases where women fought bravely in the front line alongside men. It is well known that women played an important role in espionage during the Second World War and in more recent political and military conflicts. History books, which are mostly written by men often neglect the actual contribution of women[23].

In Cyprus women contributed in several ways to the struggle of its people for freedom throughout its turbulent history. They participated in many activities during wartime. Some typical examples are transportation of weapons and supplies, spying, providing refuge for freedom fighters and many others.

After wartime women who lost their husbands had to undertake enormous family obligations and responsibilities. This role became particularly dominant after the Turkish invasion and the consequential calamities that had fallen upon the people of Cyprus.

3.5.2 Women's Participation in Decision Making Centres

In 1984, M. A. Macciochi[24] in her research study The Position of Women in Decision Making Centres, found that women's participation in such centres was very poor.

Macciochi in her study considered the following decision making centres :

> "Higher Education, National Governments and Parliaments, The European Council, The Leadership of Political Parties, Trade Unions, Means of Communication, Administration of major Cultural Centres, Diplomacy and Juridic power."

In comparison, participation of Cypriot women in the following decision making centres is examined.

1. Government Elected and Appointed Posts.
2. Political Parties.
3. Trade Unions.
4. Community Activities.

Women's participation in centres other than those referred to (1-4) is negligible and they are therefore excluded.

3.5.2.1 Women's Participation in Government Elected and Appointed Posts

Women's participation in administrative posts and positions of authority is very poor although there has been minor improvement in recent years.

In the relatively short political life of Cyprus there were two women who were appointed to positions of authority in the Republic.

Ms Stella Soulioti was appointed to the Ministry of Justice in the first government of Cyprus, in 1960, and maintained this post until 1970. In 1984, Ms Soulioti was appointed as the Attorney General of the Republic and held this position until 1988. Another significant appointment was that of Ms Claire Angelidou who was appointed in 1993 as the Minister of Education.

In 1981, Ms Rina Katselli became the first woman to be elected in the House of Representatives[25]. This was a poor response taking into consideration that 23 women stood for election during that year. This situation continued until 1985 when Ms Katselli was reelected. In 1991, 31 women stood for election and 3 were elected[26].

3.5.2.2 Women's Participation in Political Parties

The political life of Cyprus commenced with the independence in 1960. The rights of men and women to elect and be elected are embodied in Article 31 of the Constitution. However, the political views of a large number of Cypriot women are influenced and directed by men.

The Council of the Permanent Central Agency for Women's Rights comprised representatives from organisations which are affiliated to the four main parliamentary political parties. In addition the Council includes eight organisations linked to Trade Unions and there is one independent organisation.

A research study conducted in 1978 on women's attitudes to politics found that women were in a transitional stage towards crystallising their own political views; only women with higher education were informed and involved with politics[27]. There is no woman in the leadership of any political party, while their representation in the decision making centres is negligible.

3.5.2.3 Women's Participation in Trade Unions

The Survey of Wages, Salaries and Hours of Work, 1979, revealed that the extent of unionisation of female employees, though lower than that of males, was quite high; women constituted 31 per cent of the total Trade Union membership[28].

Trade Unions are usually affiliated to political parties and women's role within the Unions has little influence. Whilst all Unions have sections dealing with women's matters, policy making in the section is directed by men.

In the labour history of Cyprus, women never went on strike in pursuit of their specific rights as women. However, there is evidence that women fought alongside men, demanding basic labour rights, such as Social Insurance, increase of wages and shorter working hours. Figure 3.1 overleaf, depicts a delegation of the women's branch of the Pancyprian Federation of Labour (PEO), on their way to deliver a resolution to the court, demanding legislation for Social Insurance[29].

Cypriot Women Demanding Legislation for Social Insurance (1954)

A delegation of the Women's Branch of the Pancyprian Labour Union on their way to deliver a resolution to the Court demanding legislation for Social Insurance

Source : Archives of Pancyprian Federation of Labour (PEO), Nicosia, Cyprus.

Figure 3.1

Trade Unions did not actively pursuit women's rights for equality in the labour market. On the contrary Trade Unions accepted pay discrimination against women in labour agreements with respective employers [30]. It is characteristic that in the Public sector, the acceptance of the principal of equal pay, in 1961 was the result of a one woman fight (Ms Xinari's case against the Republic of Cyprus in 1961).

3.5.2.4 Women's Participation in Community Activities

The contribution of women in voluntary organisations, is an activity closely linked with their female gender role socialisation -of giving and caring about others. Until the last century this was the major domain of women's participation in public life, especially of middle and upper class women.

In Cyprus most charity organisations are subscribed to and run by women. It is worth mentioning the activities of women in the Cyprus Red Cross, staffed mainly by women, which contribute to the welfare of people in need in times of war and peace. Another area where Cypriot women show a willingness to participate is Local Government. During the last elections for Councillors and Mayors[31], which were conducted in 1991, women constituted 15 per cent of the elected Councillor posts. Only one woman mayor was elected in the occupied municipality of Kyrenia. In addition three women were elected by the members of the Municipal Councils as vice-mayors.

REFERENCES

1. The Challenge to Women, ed. Seymour M. Farber and Roger H. L. Wilson, New York, 1966, pp.20-33.

2. Eleni S. Nikita, Cypriot Woman Rise and Downfall, published by the Social Research Centre, Nicosia, 1975, p.4.

3. Ann Oakley, Housewife, 1976, p.156.

4. B.J. Surridge, A Survey of Rural Life in Cyprus Nicosia, 1930, p.109, and Elengo Rangou, 'Cypriot Woman during the 18th and 19th century', in Life in Cyprus during the 18th and 19th century, Nicosia, p.116.

5. Roula Kaklamanaki, The Position of the Greek Woman, Athens, 1984, pp.9-10.

6. Good News - New Testament, ed. American Bible Societies, Collins, (New York, 1966), 1981, pp.488-89.

7. Good News, op. cit. p.472.

8. By Laws Map of the Holy Cyprus Church, Nicosia, 1979, pp.28-9. The above map, which is in use today, contains grounds for divorce which are discriminatory to women.

9. Kyriakos C. Markides, Eleni S. Nikita and Elengo Rangou, LYSI, Social Change in a Cypriot Village (LYSI) published by the Social Research Centre, Nicosia, 1978, p.109.

10. Surridge, op. cit. p.25.

11. Surridge, ibid. p.21.

12. Margrit Eichler, The Double Standard, 1980, p.20.

13. Loukias M. Mousourou, Women in Occupation and Family, Athens, 1985, pp.21-25.

Definition of family patterns as given by Vitnyi in the above mentioned book.

a. The traditional pattern was in force before the appearance of the capitalist system and aimed at the preservation and transmission of traditions. The family functioned as an integrated economic unit (production and consumer unit); the role of each individual member was defined by the prevailing traditions.

b. The transitional family stops functioning as an integrated economic unit; its structure is in a stage of transition from traditional to contemporary.

c. The contemporary pattern characterises big industrial societies; there is less dependence on pre-defined roles.

d. The ideal contemporary family is 'personality centred'; each member functions according to his individual characteristics, instead of bearing a specific role.

14. Research studies conducted before 1974, used for investigating the Traditional Cypriot family.

a. Brian K. Taylor, A Report on Three Community Studies in Cyprus, by the government of Cyprus, Department of Social Welfare Services and Swansea University College's Department of Social Administrations, Nicosia, 1970 (unpublished).

(In the second and third part of this report 34 rural and 60 urban adolescents between the ages of 14 and 18 were interviewed. Interviews were also conducted with 38 village and 56 urban mothers. In the rural study the village of Agros was used; it is a village in the mountains of Troodos, in Nicosia District. In the urban study Pallouriotissa, a Nicosia suburb was used.)

b. Jack Balswick, The Greek Cypriot Family in a Changing Society, Department of Social Welfare Services, Nicosia, 1972-73 (unpublished).

(In this research brief studies around the institution of the family were presented in seven articles. The studies were based on statistical information available, on information in published or unpublished governmental reports and on an exchange of ideas with senior scientists in the Cyprus Welfare Department.)

c. Kyriakos C. Markides, Eleni S. Nikita, and Elengo N. Rangou, LYSI, Social Change in a Cypriot Village, Social Research Centre, Nicosia, 1978.

(This study was conducted in 1973 and 1974 in Lysi; a village in Famagusta District. As explained by the researchers this village was selected for its centrality in the Mesaoria region which is the largest plain in Cyprus and because of its economic and urban development. Lysi is in the northern part of Cyprus which has been under the occupation of the Turkish troops since 1974.)

d. Michael Attalides, Social Change and Urbanization in Cyprus, Social Research Centre, Nicosia, 1981.

(The main sources of information used for this study were; The Nicosia Migrant Survey conducted in 1971 and various government and other publications. The study was completed in 1973, and covered the Nicosia area and suburbs, and ten villages within a radius of about ten miles from Nicosia.)

Research studies conducted after 1974, used for investigating Contemporary Cypriot family.

a. Lia Mylona, Costas Paschalis, Eleni Kalava, Niki Patsalidou Athos Erotokritou, The Cypriot Woman, Nicosia, (1982), 1986.

(This study covered all Cypriot women over 15 years of age residing in the free areas of Cyprus. About a thousand women were interviewed in order to investigate the attitude of Cypriot women towards certain fundamental aspects of life such as: marriage, the role of the married woman in the family, equal rights, politics, relations with opposite sex, sex, religion, problems, pleasures and aspirations. The collection of the data took place during 1978.)

b. The Structure of the Cypriot Family and the Position of the Adolescent in the Family, by the National Committee of the International Child Committee of Cyprus, Nicosia, 1982.

(The aim of this research was to investigate the structure of the Cypriot family and the position of the adolescent in the family. It covered all the Cypriot households in the free areas of Cyprus and a thousand households were interviewed.)

c. Child Upbringing in Cyprus, by the Department of Social Welfare Services, Ministry of Labour and Social Insurance, Nicosia, 1989.

(The purpose of the survey was to find out the practices and attitudes of parents, and in particular those of mothers, in the process of raising children of 12 years of age. The survey covered the Nicosia area (urban and rural) and three hundred families were interviewed.)

15. (Lysi), op. cit. p.78.

16. Michael Attalides, op. cit. pp.192-3.

17. The Cypriot Woman, op. cit. p.74-5.

18. The Structure of the Cypriot Family, op. cit. p.43.

19. Child Upbringing in Cyprus, op. cit. pp.21-22.

20. The Cypriot Woman ibid. pp.43-60.

21. Angela Zucconi The Responsibilities of Women in Social Life, ed. Council of Europe, Strasbourg, 1968, p.7.

22. The Permanent Central Agency for Women's Rights was set up in 1988 by the government of Cyprus. It consists of a core service at the Ministry of Justice and a network of boards composed of representatives of government departments and women's organisations.

23. Deirdre Beddoe, Discovering Women's History, 1987 (1983), pp.3-5.

24. M. A. Macciochi, 'The position of Women in Decision Making Centres', in The Position of Woman in Europe, ed. European Council, Strasburg, 1984, pp.139-147.

25. The House of Representatives exercise the legislative authority in the Republic of Cyprus. According to the 1960 Constitution two thirds of the members are Greek Cypriots elected by the Greek Cypriot community and one third of the members are Turkish Cypriots elected by the Turkish Cypriot community. After the withdrawal of the Turkish Cypriot members in 1963 the House has been functioning only with the Greek Cypriot members.

26. Data were obtained from the Election Department, Ministry of Interior, Cyprus Government, Nicosia.

27. Eleni Kalava, 'Politics', in The Cypriot Woman, ibid. pp.101-13.

28. Survey of Wages, Salaries and Hours of Work, 1979, Department of Statistics and Research, Ministry of Finance, Nicosia, 1979, p.43.

29. PEO (Pancyprian Federation of Labour), is a left wing Trade Union. The corresponding right wing Trade Union is SEK (Cyprus Workers' Confederation). These are the major Cypriot Trade Unions.

30. W. J. House, Discrimination and Segregation of Women Workers in Cyprus, ed. Department of Statistics and Research, Ministry of Finance, Nicosia, 1977, p.52.

31. Data were taken from the Election Department op. cit.

CHAPTER 4

EDUCATION

4.1 INTRODUCTION

In Cyprus, similar to the practice followed in all other countries, until the end of the 19th century, girls were given different education to boys. Girls were taught to be good wives and mothers while boys were prepared for their role as family-breadwinners.

The main subjects taught to girls were literature, foreign languages and domestic economy while science and mathematics were considered as incompatible to their female nature.

In recent years a considerable improvement has been achieved with the unification of 'male' and 'female' studies, the abolition of separate schools for the two sexes, and the revision of reading books so as to eliminate sexist ideology.

Research studies in Europe and the United States show that although all sex discriminatory laws and regulations have been abolished, there is a hidden curriculum for gender in teacher expectations and behaviour, as well as social organisation of the school.

Meighan[1] defines the hidden curriculum as :

> "Those aspects of learning in schools that are unofficial, or unintentional, or undeclared consequences of the way teaching and learning are organised and performed."

Ann Oakley[2] mentions in her book titled Subject Women:

> "The hidden curriculum is important both because of its obvious capacity to shape pupils' attitudes and progress, and because, being implicit and often unconsciously implemented, it is peculiarly resistant to change."

Through family and education adolescents are socialised and conditioned to their gender role expectations. The effects of gender role socialisation in the family and primary education can be seen in the routes followed by boys and girls in secondary and tertiary level education.

Under this chapter the development of the education of women in Cyprus will be examined, by reference to the current education system and gender differences within the operation of the system. The overall enrolments of males and females in Engineering Technology locally and abroad will also be considered.

4.2 THE EDUCATION SYSTEM

During the Ottoman occupation of Cyprus (1571-1878) the standard of education was very poor. The level of education in Cyprus improved considerably during the British Administration.

With Independence in 1960, the education system was improved significantly. The Zurich agreement embodied the principles and responsibilities for the education of the two communities. Effectively the Greek and the Turkish Community Councils became responsible for the educational needs of each ethnic group.

However, after the inter-communal hostilities of 1963-64, the two communities were separated. The House of Representatives then created the Ministry of Education, which became responsible for all education matters on the island.

However, the obligations of the Ministry of Education could be applied on the free sector of Cyprus. The Turkish community made their own alternative arrangements.

This research is confined to the study of the educational system of the Cyprus Republic and does not cover the Turkish Cypriot minority, since the political events of 1963-64 and the Turkish invasion in 1974 have kept the Turkish minority inaccessible.

In Cyprus education is provided through[3] :

1. Pre-Primary and Primary schools.
2. Secondary General and Secondary Technical and Vocational schools.
3. Special schools and non Formal institutions.
4. Tertiary education institutions.

4.2.1 Pre-Primary and Primary Education

Pre-primary education is offered through State, Community and Private day nurseries. In 1989/90 52.3 per cent of children aged between 2-5 years were attending pre-primary education.

Primary education is mainly confined in the State sector. It is aimed for children aged 5.5 years old and provides a six-year course. Primary education became compulsory in 1962.

4.2.2 Secondary Education

This is provided generally at State schools but there are also several Private schools. There are two types of secondary schools :

a. Secondary General : They consist of two stages: Stage I comprises the first three classes and Stage II the last three classes. In 1977/78 the Lyceums of Optional Subjects were introduced.

b. Technical and Vocational : They aim to provide local industry with trained technicians and craftsmen.

Free secondary education in the State sector was first introduced in 1972/73 for class I. This was subsequently extended to cover all classes in 1985/86. Stage I of the secondary education became compulsory in 1985/86.

4.2.3 Special Education and Non-Formal Education

Special education for children and persons with special needs at all ages, is provided in special schools of primary and secondary level and vocational training. Non-formal education consists of various State and Private part-time institutions which provide miscellaneous courses at various levels.

4.2.4 Tertiary Education Institutions

The newly established University of Cyprus, which is academically autonomous, has commenced operation in September 1992. It has accepted 400 students in the following three Schools : School of Humanities and Social Sciences, School of Pure and Applied Sciences and the School of Economics and Management.

In Cyprus there are six State tertiary education institutions, which were established in order to produce qualified personnel for the Cypriot industry.

The six State educational institutions are :

1. The Paedagogical Academy offering a three-year course for teachers of primary and nursery schools. The function of this institution has now been absorbed by the University.

2. The Higher Technical Institute, providing a three-year course in Mechanical, Electrical, Civil and Marine Engineering. A three-year course in Computer studies was introduced in 1985.

3. The Hotel and Catering Institute provides education and training for Hotel and Catering.

4. The Mediterranean Institute of Management provides a one-year post-graduate course in Management.

5. The Forestry College which offers two-year training and a six-month postgraduate course in Forestry.

6. The School of Nursing and Midwifery running a one, two or three year courses in General and Psychiatric Nursing and Midwifery.

In addition, a number of Private colleges were established. These colleges have academic links with British and American universities and polytechnics. Their number increased from 7 to 21 between 1978/79 and 1990/91.

The Private colleges offer one to four year courses in fields such as : Business Administration, Secretarial Studies, Electrical, Mechanical and Civil Engineering, Wireless Communications, Hotel and Catering, Banking, Accountancy and recently in Computer Programming.

A considerable number of students are attending tertiary and university education abroad. They mainly study in Greece, the United Kingdom, and the United States of America. In Cyprus, education is highly appreciated and Table 4.1 below, indicates that the figures of education attendance at all levels can be favourably compared to relevant figures in developed countries.

TABLE 4.1 : INTERNATIONAL COMPARISON OF EDUCATION IN SOME SELECTED COUNTRIES, 1987

COUNTRY	GROSS ENROLMENT RATIOS (%)		THIRD LEVEL STUDENTS FOR 100,000 INHABITANTS
	PRIMARY EDUCATION	SECONDARY EDUCATION	
DEVELOPED COUNTRIES			
GREECE	104[1]	090	1,987
ISRAEL	095	083	2,762
U.S.S.R.	106[1]	098	1,793
UNITED KINGDOM	106[1]	083	1,880
UNITED STATES	100	098	5,142
DEVELOPING COUNTRIES			
CYPRUS	106[1]	087	2,327
EGYPT	090	069	1,758
LEBANON	125[1]	066	2,634
TURKEY	117[1]	046	1,020

Source : UNESCO Statistical Yearbook, 1989 (Statistics of Education 1990/91, Nicosia, p.6.)

[1] Based on insufficient data from source.

4.3 GENDER DIFFERENCES WITHIN THE CYPRUS EDUCATION SYSTEM

In order to show gender differences in the education system in Cyprus, first the figures of male and female enrolments are presented. Then some of the striking gender differences which appear in the curriculum and the books are outlined. Thirdly, the sex distribution in the different fields of study is examined.

4.3.1 Male - Female Attendance

Traditionally the destiny of women in Cyprus was to become a good housewife and mother. Education therefore was not considered to have a value. Illiteracy was higher among females than males.

The decennial censuses indicate that the percentage number of literate women (all ages) increased from 12.7 per cent in 1911 to 42.6 per cent in 1946 while the corresponding increase in the male figures (all ages) was from 38.6 per cent to 65.4 per cent for the same period.

After Independence education became one of the essential objectives of the Cypriot people and there has been a remarkable increase in attendance at all levels of the education system.

Statistical information covering the period 1970-1991, obtained from the Department of Statistics and Research, Ministry of Finance, shows that :

a. More than 40 per cent of Secondary School leavers entered tertiary education locally and abroad during the last two decades; in 1990/91 their percentage was 58%; (34% locally and 24% abroad).

b. There has been a dramatic increase in the number of students attending tertiary education locally. Their number as a percentage of the total enrolments locally and abroad increased from 5.7 in 1970/71 to 42.1 in 1990/91.

c. The participation of females in tertiary education, locally and abroad as a percentage of the total, male and female enrolments, increased from 25.6 per cent in 1970/71 to 45 per cent in 1990/91.

d. During the years 1970/71 and 1990/91, the number of females following tertiary education locally, increased from 43.8 to 51.5 per cent of all local students.

e. During the years 1970/71 and 1990/91 the number of females attending tertiary education abroad increased from 24.4 to 40.3 per cent of all students abroad.

From the information given in the previous page, it is reasonable to conclude that :

a. There has been a significant increase (19.4%) in the participation of females in tertiary education locally and abroad.

b. The percentage of females attending local Institutions has been always very high; 43.8 per cent in 1970/71 and 51.5 per cent in 1990/91.

c. There has been a considerable increase (15.9%) in the number of females studying abroad as a percentage of the total number of students abroad.

It is clear that a larger number of females attend local tertiary colleges. This can be attributed to the following factors :

a. Lower costs in comparison with overseas tertiary institutions.

b. Availability of shorter duration courses in fields which are traditionally considered suitable for females, such as Secretarial training and Nursing.

c. Females study in their own environment and under more direct control and protection of the parents.

d. The courses undertaken in Cyprus are designed to suit the needs of the local labour market and the graduates are therefore more employable. It should be noted however that those students attending local tertiary education cannot at present obtain recognised qualifications above Higher National Diploma.

e. The traditional Cypriot parents are not so willing to invest in their daughter's education and they consider their son's education a matter of much higher priority.

This 'opinion' is supported by other researchers such as Eleni Nikita[4], who takes the view that parents are prepared to make enormous financial sacrifices to send their son to tertiary education irrespective of whether he has the ability or potential to follow such education.

4.3.2 Gender Differences

There is no published research on gender inequalities within the Cyprus system of education. For this reason, the apparent differences, as extracted from the curriculum are outlined below. Gender differences as shown in the standard textbooks in elementary education will also be examined.

4.3.2.1 Apparent Differences in the Curriculum of Cyprus Education System

State elementary schools were always mixed and during the 1970s, all secondary State education schools were turned from single sex to mixed, except for certain Private elementary and secondary schools.

The syllabus is common for both sexes at all levels of education; the only exception was the subject of Domestic Economy which was taught only to the girls whilst Craft Design and Technology was taught to the boys. The Ministry of Education decided to make available both subjects to both sexes on a trial basis the academic year 1991/92.

The role of the teacher is instrumental in the preservation of the gender role system. Every teacher is a former pupil. Every teacher has already been through the process of learning the roles for each sex. Therefore each reflects consciously and subconsciously their own attitudes and expectations in their treatment of their pupils.

Research carried in other countries revealed that adults in the home and school treat children differently[5]. In the European countries, special seminars are organised, aiming to eliminate gender discrimination practices, followed by teachers.

In the Ministry of Education in Cyprus, there has been some preliminary discussion but to-date there is no established policy towards the examination of gender differences in the education system.

Another important factor which contributes to the establishment of inequality is the academic staff structure of schools. The system provides clear examples of sexist ideology at work. For example : Despite the high participation of women in education, especially in elementary schools, there are very few women holding Managerial posts.

In Cyprus, in 1990/91, there were 208 men headmasters in primary education as against 65 women, out of a total of 1,229 males and 1,840 females. In secondary education there were 90 men headmasters compared to 10 women out of a total of 2,025 males and 1,710 females. As observed by Sue Sharpe[6] :

> "It is true that men are identified as figures of authority, much like fathers in the home, and this image is often endorsed by the figure of the headmaster who rules over a primary school largely staffed by women."

4.3.2.2 Elementary Textbooks

The textbooks used in the elementary education in Cyprus are the same as those used in Greece. A revision of these books was carried out in Greece in 1981 in order to eliminate obvious sexist messages.

In 1979, Anna Frangoudaki made an analysis of the textbooks which were used in Greece before the revision of 1981[7]. The analysis revealed a distinct sexist content in all the textbooks.

These books clearly show that the destiny of the boy was to become man-father whilst a girl should become mother-housewife. This was the only female role which a girl could identify with. All other role-models in the books belonged to the male sex; the good student, the teacher, the father, the hero.

Although the recent revision of textbooks aimed to avoid any apparent gender discrimination, a detailed analysis shows examples of sexist messages. A brief examination of the textbook Us and the World, which is used in the first class in the elementary school revealed the following[8] :

> "Out of 115 pictures illustrating people at work, 82 pictures were depicting only men, 26 pictures only women and 7 pictures men and women together. In 10 out of the 26 pictures referring to women workers, only school teachers were depicted. In the rest of the pictures women were mainly portrayed in their traditional professions, like office employee, agricultural labourer and cleaner. The pictures referring to men covered a wider variety of professions and most of them were male dominated ones, like builder, craftsman, machine operator or driver."

The effect of these gender differences can be seen in the different streams of study followed by boys and girls in secondary and tertiary education.

4.3.3 Distribution of Males and Females in the Streams of Education Offered

In Cyprus there is a well defined segregation of the sexes in the different streams of education at secondary and tertiary level. In secondary education the participation of girls in the Technical and Vocational courses is insignificant whilst they are concentrated in the Commercial and Secretarial courses.

In 1990/91, only 5.7 per cent of the girls in secondary education were in the Technical and Vocational stream compared to 27.8 per cent of the boys. The total participation in all streams of secondary education, are seen in Table 4.2 below :

TABLE 4.2 : PUPILS IN SECONDARY EDUCATION IN THE SECOND CYCLE OF STUDIES BY STREAM AND SEX, SCHOOL YEAR 1990/91

STREAM	MALES %	FEMALES %
General	12.7	10.2
Technical and Vocational	27.7	5.7
Classical (Lem S1)	3.3	11.9
Science (Lem S2)	18.6	11.4
Economics (Lem S3)	23.1	28.1
Commercial and Secretarial (LemS4)	13.1	24.5
Foreign Languages (Lem S5)	1.5	8.2
Total	100.0	100.0

Source : Statistics of Education 1990/91, Nicosia, p.49.

Note : LEM is the abbreviation for Lyceum of Optional Studies.

There is also a distinct division in the fields of study at tertiary education level, locally and abroad:

In local tertiary education only females attended Teacher Training for Nurseries and Secretarial, whilst only males attended Marine Engineering and Forestry. Female enrolments in the courses of Nursing and Teacher Training comprises more than 70 per cent of the total number of students of both sexes, compared to 10 per cent in Engineering courses.

Table 4.3 below, shows that there is a clear concentration of female students abroad in courses which are 'categorised' as their gender expectation.

TABLE 4.3 : FEMALE PARTICIPATION IN THE MAIN FIELDS OF STUDY FOLLOWED BY STUDENTS ABROAD IN 1990/91

FIELD OF STUDY	DISTRIBUTION OF STUDENTS IN THE MAIN FIELDS (%)	FEMALES IN THE FIELD (%)
Commercial and Business Administration	15.9	34
Engineering Technology	14.0	10
Medical and Paramedical	11.8	47
Social Science	10.9	42
Mathematics and Computer Studies	6.3	31
Humanities	5.3	77
Law	5.1	56

Source : Statistics of Education 1990/91, Nicosia, pp.200-14.

Statistical information also shows that Engineering Technology was a popular first choice during the 1980s. Business Administration approach the same level and is now marginally above Engineering Technology.

4.4 ENGINEERING TECHNOLOGY IN CYPRUS

Technology is considered very important contributor to the development of the economy of a nation. The competitiveness at national and international level dictates more investment in the development and refinement of Technology. In addition, technological innovations need to be fully exploited by all levels of industry. To achieve this commercial exploitation, industry requires educated and highly skilled personnel.

In response to these demands Cyprus, like many nations, throughout the world, invested in the development of tertiary education towards Engineering Technology. During the 1980s there was a rapid increase in the number of Cypriot students who enroled in Engineering Technology. This was a result of economic changes and the sharp increase in the number of students who followed tertiary education after the post invasion years.

4.4.1 Enrolments in Engineering Technology

In 1966/67 Social Sciences and Natural Sciences occupied the first and second places among the fields of study followed by Cypriot students abroad, whilst Engineering Technology together with Agriculture, was in the fifth place. By 1979/80 Engineering Technology was ranked first in the preferences of Cypriot students abroad.

In local education in Cyprus, a considerable number of students are attending Engineering courses. In 1970/71, students in Engineering courses constituted 28 per cent of all students in local tertiary education, whilst in 1990/91 they constituted 14 per cent of the total enrolments.

Although there has been an increase in the number of students following Engineering Technology, from 196 in 1970/71 to 853 in 1990/91, their share as a percentage of the total enrolments shows a decline. This reduction was the result of the increase in the number of tertiary education institutions, offering courses in various fields of study other than Engineering.

4.4.1.1 Female Enrolments in Engineering Technology

The number of females enroled in Engineering courses, locally and abroad, increased considerably during the last twenty years. The female enrolments as a percentage of the total enrolments in Engineering abroad increased from 3.4 per cent in 1970/71 to 10 per cent in 1990/91, whilst the corresponding increase in the participation of females in Engineering courses locally was from 6 to 10 per cent.

In 1990/91, approximately 3.0 per cent of the total number of females studying locally and abroad were enroled in Engineering Technology compared to 23 per cent of males.

4.4.2 Distribution in the Engineering Specialisations

In Cyprus, Civil Engineering together with Electrical and Mechanical Engineering have been absorbing the majority of students enroled in Engineering Technology abroad. Figures 4.1 and 4.2 in pages 66 and 67 present the distribution of male and female enrolments in Engineering courses abroad[9].

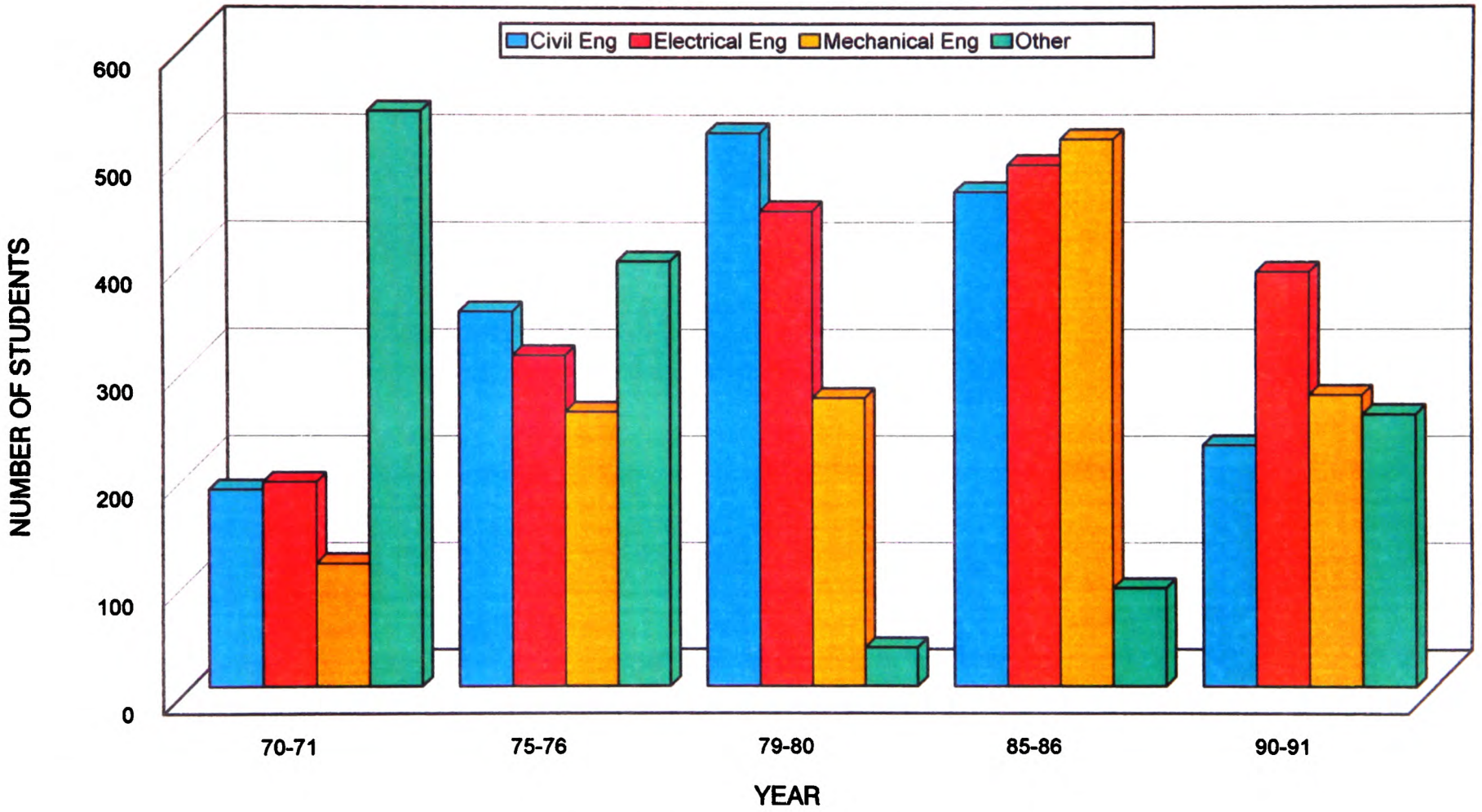
Civil Engineering has been the most traditional specialisation and occupied the first place in all Engineering specialisations until the mid 1980s. Since 1985 there has been a change in the distribution of students in the three Engineering fields. There has been a decline in Civil Engineering, whilst Electrical Engineering has taken the lead.

In local tertiary education, state and private institutions provide the following Engineering courses :

1. Civil Engineering
2. Electrical Engineering
3. Mechanical Engineering
4. Marine Engineering

Statistical information shows that since 1985 there has been an increase in the number of students following Electrical Engineering, while there was a decline in the number of students enroled in Civil Engineering.

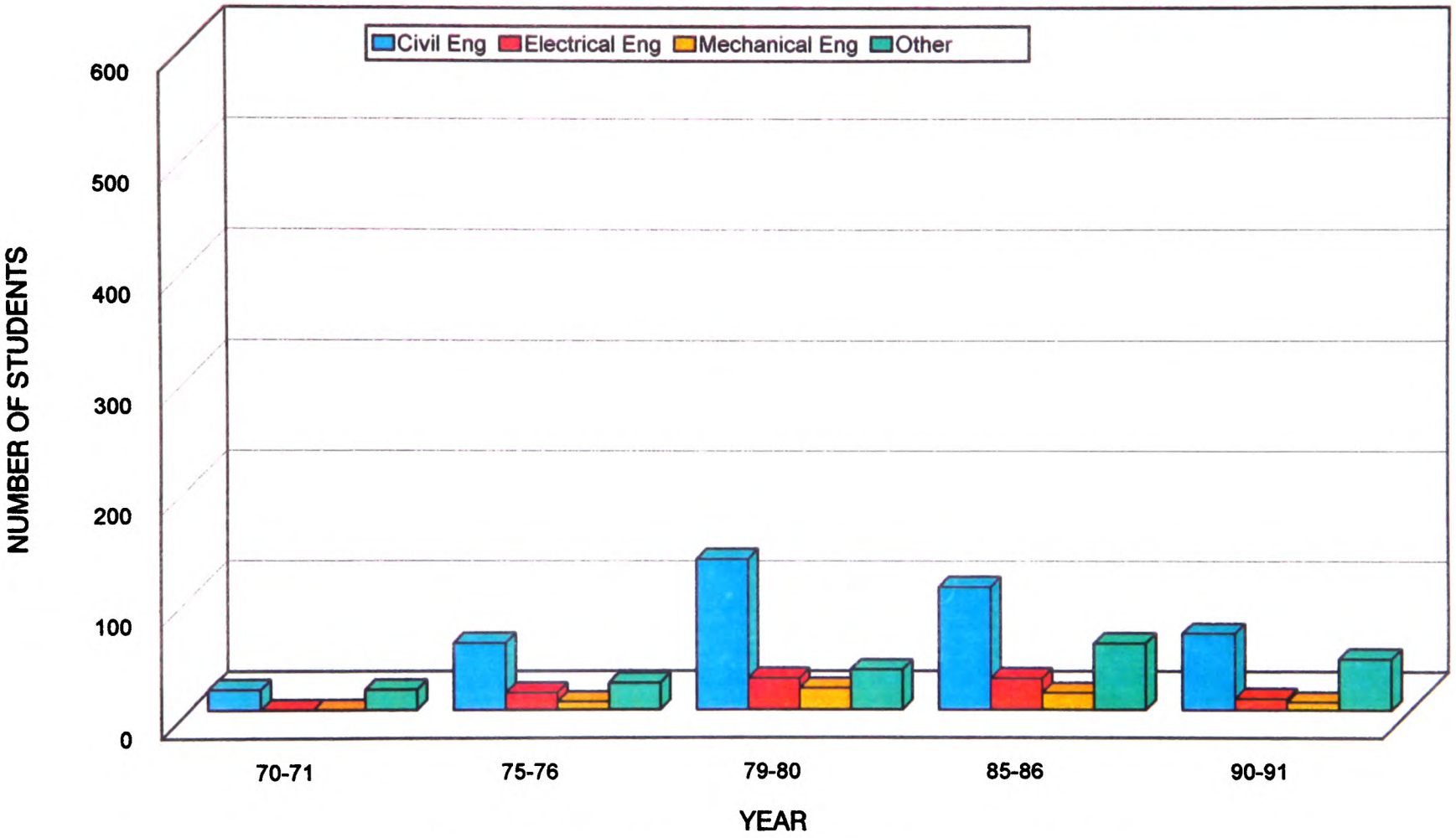
DISTRIBUTION OF MALE STUDENTS IN ENGINEERING TECHNOLOGY ABROAD



Source : Statistics of Education, Department of Statistics and Research
Ministry of Finance, Nicosia, Cyprus

Figure 4.1

DISTRIBUTION OF FEMALE STUDENTS IN ENGINEERING TECHNOLOGY ABROAD



Source : Statistics of Education, Department of Statistics and Research
Ministry of Finance, Nicosia, Cyprus

Figure 4.2

The redistribution of students within the three main specialisations of Engineering Technology, locally and abroad may be attributed to the following factors :

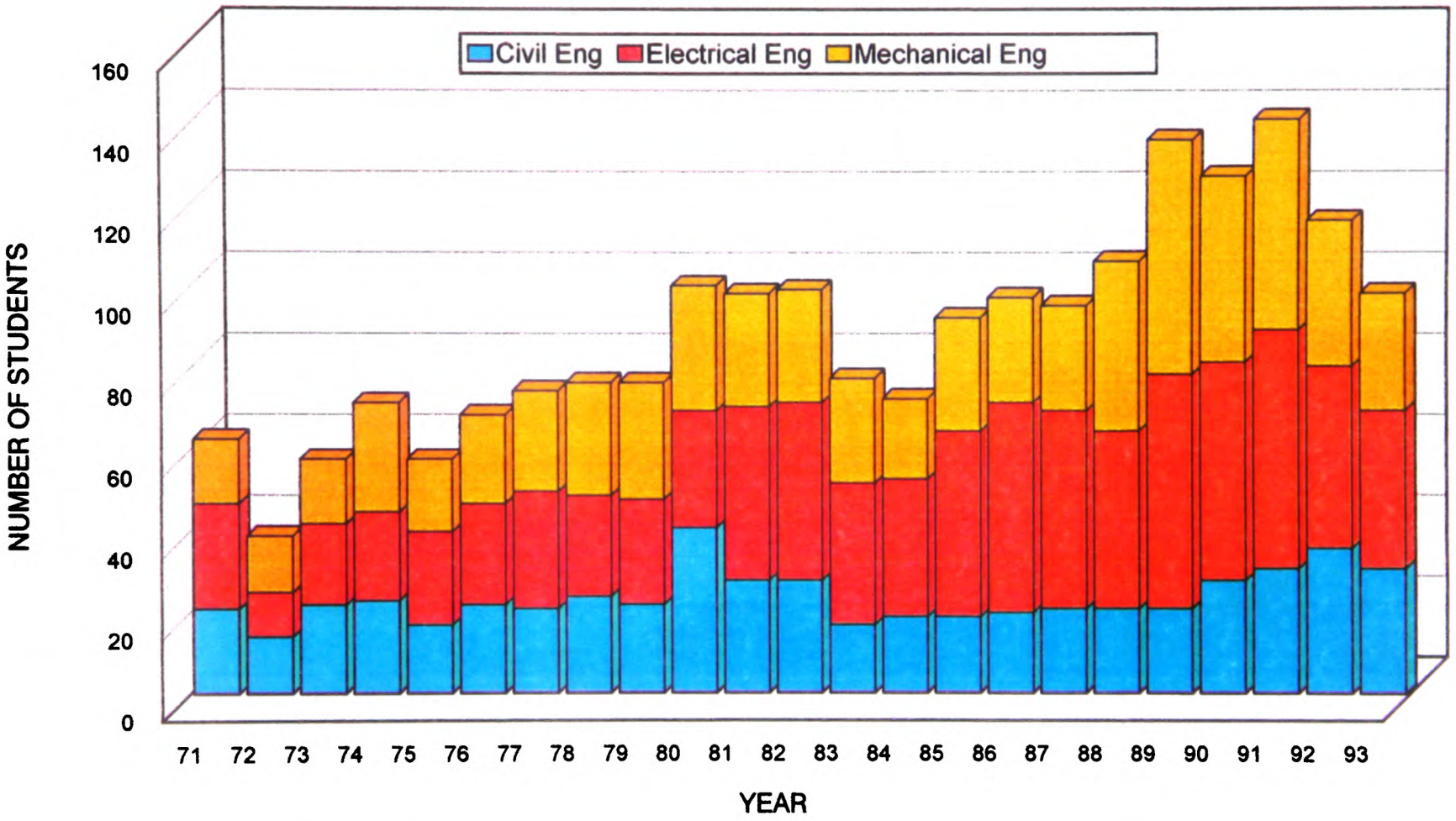
a. The rapid decline in the construction boom, which started in 1981.

b. The increased employment opportunities offered to Electrical Engineering graduates, due to the increasing applications of Electrical and Electronic Engineering.

c. The increasing use of modern technology in industry and other sectors of the economy of Cyprus. The modernisation and development of the manufacturing industry demanded a new generation of professional Engineers both in Electrical and Mechanical Engineering.

Most of the students following Engineering courses are studying at the Higher Technical Institute (HTI). This is the only State institution providing courses in Engineering. HTI started its operation in 1968 with courses in Civil, Electrical and Mechanical Engineering, whilst in 1976 Marine Engineering was added. It should be noted that all the above courses are taught entirely in English and graduates obtain the Higher National Diploma. Figures 4.3 and 4.4 in pages 69 and 70 show the distribution of males and females who graduated from the main three Engineering courses.

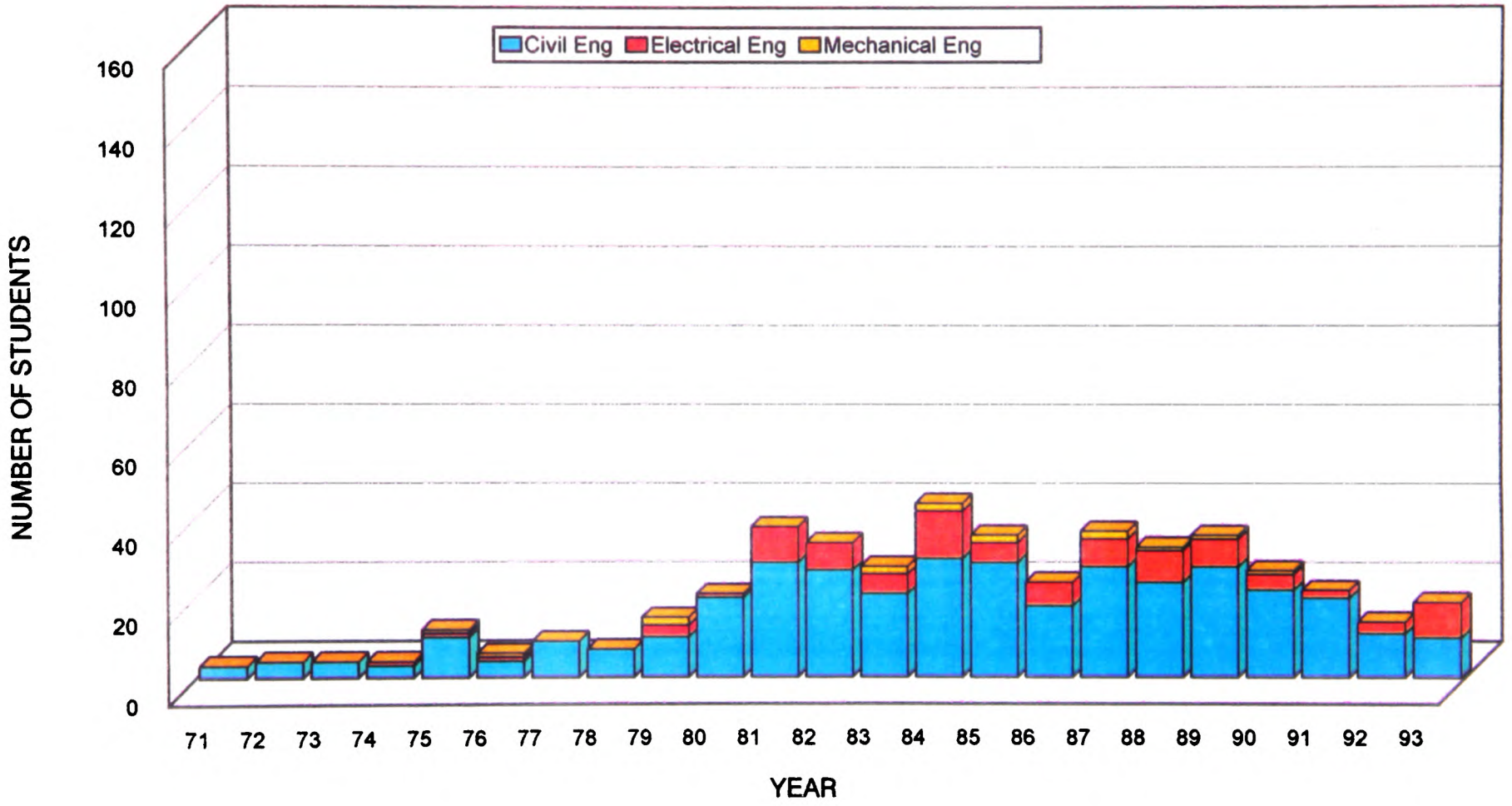
DISTRIBUTION OF MALE GRADUATES FROM THE HIGHER TECHNICAL INSTITUTE (1971-1993)



Source : Higher Technical Institute Archives, Nicosia, Cyprus

Figure 4.3

DISTRIBUTION OF FEMALE GRADUATES FROM THE HIGHER TECHNICAL INSTITUTE (1971-1993)



Source : Higher Technical Institute Archives, Nicosia, Cyprus

Figure 4.4

4.4.2.1 Distribution of Females in Engineering Courses

Civil Engineering was absorbing more than 50 per cent of the total number of women attending courses in Engineering Technology abroad. Although after 1970 the number of women attending Mechanical and Electrical Engineering showed a gradual increase, the overall enrolments of female students in these fields is considered very poor.

In 1990/91 54 per cent of the total number of women in Engineering abroad were attending Civil Engineering, compared to 8 per cent in Electrical Engineering and 5.6 per cent in Mechanical Engineering.

The majority of women enroled in Engineering courses in local tertiary education were in Civil Engineering where they constituted more than 75 per cent of the total number of females in Engineering courses.

During the 1980s, female graduates in Civil Engineering at the HTI comprised more than 50 per cent of the total number of Civil Engineering graduates.

By 1992/93, a total of 477 females graduated from HTI; 77.8 per cent (371) in Civil Engineering, 19 per cent (91) in Electrical Engineering and 3.2 per cent (15) in Mechanical Engineering.

Female enrolments in Engineering Technology, locally and abroad indicate the following :

a. There is no relation between the patterns of the flow of male and female students into the major three fields of Engineering. The number of women attending Civil Engineering course has always been high, while the corresponding number of males dropped considerably, especially after 1985.

However, statistical information shows that there has been a decline in the number of women in the fields of Electrical and Mechanical Engineering but there has been a considerable increase in the number of male students in these two particular courses.

b. It is apparent that although the distribution of males in the three major courses of Engineering Technology is influenced by economic changes, it is not so clear in the case of women.

NOTES AND REFERENCES

1. Ann Oakley, Subject Women, (1981) 1986, p.129 (Meighan, 1979, p.102).

2. Ann Oakley, Subject Women, op.cit. pp.129-130.

3. Information about the System of education, the attendance and the distribution in the streams of education in Cyprus is derived from the Statistics of Education 1990-91, ed. Department of Statistics and Research, Ministry of Finance, Nicosia, 1991.

4. Eleni S. Nikita, Cypriot Woman Rise and Downfall, ed. the Social Research Centre, Nicosia, 1975, p.8.

5. Diane Mitsch Bush "The Impact of Family and School on Adolescent Girls' Aspirations and Expectations: The Public-Private Split and the Reproduction of Gender Inequality", in The Trapped Woman, ed. Josefina Figueira-Mc Donough and Rosemary Sarri, 1987, Dale Spender and Elizabeth Sarah, Learning to Loose, (1980), 1988, Ann Oakley Subject Women, Sue Sharpe, Just Like a Girl, (1976), 1985.

6. Sue Sharpe, Just Like a Girl, London. (1976), 1985, p.146.

7. Anna Frangoudaki, Elementary School Reading Books, Athens, 1979, pp.10-48.

8. Us and the World, ed. Publishing Organisation of Teaching Textbooks, Athens.

9. According to the Cyprus Statistics of Education, which are based on the International Standard Classification of Education (ISCED 1972) of UNESCO the field of Engineering Technology includes the following specialisations:

    1. Civil Engineering
    2. Electrical and Electronic Engineering
    3. Mechanical Engineering
    4. Automobile Engineering
    5. Chemical Engineering
    6. Industrial Engineering
    7. Metallurgical Engineering
    8. Aeronautical Engineering
    9. Shipbuilding Construction Engineering
    10. Surveying and Topographical Engineering
    11. Drafting and Design
    12. Agriculture and Forestry Engineering
    13. Mining Engineering
    14. Mechanical and Electrical Engineering
    15. Telecommunications Engineering
    16. Marine Engineering
    17. Structural Engineering
    18. Quantity Surveying
    19. Computer Engineering

20. Fuel - Energy Engineering
21. Other Engineering and Technology

In figures 4.1 and 4.2 the term other includes the specialisations of Engineering Technology listed between the numbers 4 and 21. Although there is some overlapping between the three major specialisations of Engineering Technology and certain specialisations included in the term other, it was considered more appropriate to follow the above classification.

CHAPTER 5

EMPLOYMENT

5.1 INTRODUCTION

The participation of women in the labour force has exhibited a steady increase internationally. The International Labour Organisation estimates showed that women's participation rates increased considerably after 1950, with the result that in 1980 women constituted more than one third of the total number of workers worldwide[1].

Despite their increasing number working women still suffer a great deal of discrimination and their status and earnings are inferior to those of men. The sex equality legislation introduced in many countries has rested on the philosophy that inequality derives from discrimination in the public world outside the home and ignored the importance of 'gender roles' in the structure of the family and society in general.

In practice most women still do most of the domestic tasks and their attitude towards work is influenced by their gender expectations implied by the traditional society. They are assigned with the dual role of: -reproducing children and looking after men -and going out to work. The widespread views on woman's double role are an obstacle to equality as long as woman is allotted two roles and man only one.

In this chapter dealing with the employment of women in Cyprus, first an historical review of the participation of Cypriot women in the labour force is presented. Then the trends of Cypriot women's employment as well as their wages and status are examined.

In addition, the Legal status of Cypriot women in the labour market is presented. Finally the determinants of female labour force participation rates, trends of employment, earnings and status, as applied generally and particularly in Cyprus are investigated.

5.2 HISTORICAL REVIEW

The main sources of statistical information regarding employment in Cyprus are the decennial Census reports and the Registrations of Establishments carried out by the Department of Statistics and Research. Both have their limitations and deficiencies.

According to the above sources the number of economically active women in Cyprus has grown from 12.2 thousands in 1891 to 111.0 thousands in 1992. Women constituted 18.0 per cent of the total employment in 1891 and 38.7 per cent of the total economically active population in 1992.

There is plenty of evidence that women's contribution to the family, especially in the rural areas, was not confined only to housework and child raising. The majority of women in the rural areas worked on their family farms as unpaid family workers or were occupied in other household duties, like weaving, spinning or other occupations, which were not carried on as a business.

In addition they were employed as labourers in the construction of roads and other outdoor works. Figure 5.1 overleaf, shows women labourers crushing stones at Akamas Quarry, in Paphos, in 1924.

Crushing Stones at Akamas Quarry, Paphos, Cyprus (1924)

Women labourers at work under the supervision of a well dressed foreman

Source : Archives of Pancyprian Federation of Labour (PEO), Nicosia, Cyprus.

Figure 5.1

Women's participation in the labour force of Cyprus experienced a considerable increase from 11.9 per cent of the total female population in 1891 to 27.5 per cent of the total in 1960. In 1960, women constituted 50.3 per cent of the total population and 33.2 per cent of the economically active population.

The political crisis between the two communities in 1963-64 prevented a full census of the population after 1960 and Statistics after that date cover only the Greek population and the small minorities (Armenians, Maronites, etc.) in the Government controlled area. This renders any comparison before and after 1960 inaccurate.

Since 1960, employment opportunities were offered to women in a variety of sectors of the newly formed Republic. In addition, the socio-economic changes brought about by the consequences of the Turkish invasion, resulted in a considerable increase in the participation of women in the labour force.

A significant increase occurred in the participation rates of married women as the economy rapidly expanded in the post-1974 war years. In 1980, 38.6 per cent of Cypriot married women were engaged in the labour force[2]. It is obvious that the myth of the man as breadwinner and the woman as homemaker does not apply in practice and the friction between the working and the family life of women is diminishing.

As in other parts of Europe, the labour force participation rate of Greek Cypriot women has been rising in recent years.

Table 5.1 below, indicates that the participation rate of Greek Cypriot women can be favourably compared to the corresponding rates of the southern European countries.

TABLE 5.1 : FEMALE LABOUR FORCE PARTICIPATION RATES (1987) IN OECD COUNTRIES

COUNTRY	LABOUR FORCE PARTICIPATION RATE (%)
CYPRUS	46.9
AUSTRALIA	57.5
AUSTRIA	53.1
BELGIUM	52.0
CANADA	65.4
DENMARK	75.9
FINLAND	72.9
FRANCE	55.7
GERMANY	51.9
GREECE	41.7
IRELAND	38.5
ITALY	43.4
JAPAN	57.8
NETHERLANDS	41.9
NEW ZEALAND	38.5
NORWAY	63.2
SPAIN	37.5
SWEDEN	79.4
SWITZERLAND	54.6
U.K.	62.6
U.S.A.	66.0

Source : Cyprus : Labour Force Migration Survey 1986/87.
Other countries : OECD/Fourth Conference of European Ministers of Labour.

Note: OECD : Organisation for Economic Cooperation and Development.

(The above percentages represent the percentage of female population over 15 years of age who participate in the Labour Force.)

5.3 WOMEN'S TRENDS OF EMPLOYMENT

In Cyprus as in all Mediterranean countries traditional values were very strong and gender roles were distinctly defined. Women's domestic role influenced their patterns of employment and the earliest female occupations were mostly in industries which were home-based.

The occupational distribution of women in 1921, shown in Table 5.2 below, provides a clear example of women's segregation in female dominated jobs. The majority of female employment (88.64%) was concentrated in the following six principal occupations.

TABLE 5.2 : OCCUPATIONAL DISTRIBUTION OF WOMEN, 1921

OCCUPATION	FEMALE EARNERS (number)	PERCENTAGE OF FEMALE EARNERS
1. Weavers	9,727	35.27
2. Farmers and Cultivators	1,490)	24.77
3. Ploughmen and Agricultural Labourers	5,341)	
4. Sewers and Dressmakers	3,408	12.36
5. Embroiderers	2,449	8.88
6. Domestic Servants	2,030	7.36
TOTAL	24,445	88.64

Source : Census of Cyprus, 1921, p.12.

According to the 1960 Census, agriculture was the largest employment sector, engaging 38.6 per cent of the economically active population followed by manufacturing and construction, employing 13.4 per cent and 8.3 per cent respectively.

Agriculture has been the sector with the largest representation of women in employment. In 1960, a proportion of 63.2 per cent of the total economically active women's population were employed in the sector of agriculture, where they constituted 53.5 per cent of the total employment.

According to the International Labour Office statistics, 1985, in the developing countries approximately two thirds of women workers work in agriculture, while in the industrialised market economies less than one-tenth work in agriculture. Between 1970 and 1980 the proportion of women working in agriculture declined all over the world[3].

In Cyprus the consequences of the Turkish invasion on the economy accelerated the decline in the sector of agriculture and created employment opportunities in other developing sectors of the economy, i.e. manufacturing and trade. In 1992, the total employment in agriculture constituted 12.2 per cent of the economically active male and female population. A proportion of 14.2 per cent of economically active women's population were employed in the sector of agriculture, where they constituted 45.0 per cent of the total employment.

Despite the major structural changes taking place in the economy, there were small changes in the occupational distribution of males and females over the period 1976-1989. The participation of women in the various occupations showed a well defined segregation.

Table 5.3 below, sets out information on the occupational distribution of women in non-agricultural employment for the years 1976, 1981 and 1989.

TABLE 5.3: NON - AGRICULTURE EMPLOYMENT OF WOMEN BY OCCUPATION 1976, 1981 and 1989.

OCCUPATION	NUMBER OF WOMEN			PERCENTAGE OF WOMEN IN TOTAL EMPLOYMENT OF OCCUPATION		
	1976	1981	1989	1976	1981	1989
Professional, Technical and related workers	4620	6890	10371	36.1	38.2	40.9
Administrative and Managerial	160	260	485	6.5	7.6	10.2
Clerical Workers	7210	1150	19540	43.6	51.8	57.3
Sales Workers	4070	6240	10189	29.9	35.9	40.0
Service Workers	6240	8010	13825	37.3	41.8	45.3
Agricultural Workers(1)	10	130	75	5.0	16.5	10.0
Production Workers	12150	18050	21051	24.6	25.5	25.6
TOTAL	34460	50730	75536	30.8	33.6	37.2

Source : Registrations of Establishments, 1976, 1981 and 1989.

Note : (1) Includes only the agricultural workers employed in non-agricultural sectors.

Women's representation in the Administrative and Managerial group is very poor, while they are concentrated in Clerical, Service and Sales occupations.

Although the proportion of women in the professional group is quite high, the majority of women under this occupation belong to the Paramedical personnel, Teachers and Technical employees.

There is a distinct occupational segregation of the sexes in Cyprus, which is indicated in Table 5.4 overleaf.

TABLE 5.4 : FEMALES IN NON - FARM OCCUPATIONS DOMINATED BY MEN AND DOMINATED BY WOMEN

REGION AND COUNTRY	PERCENTAGE OF WOMEN IN ALL NON FARM OCCUPATIONS	SHARE OF WOMEN IN ALL OCCUPATIONS DOMINATED BY WOMEN	SHARE OF WOMEN IN ALL OCCUPATIONS DOMINATED BY MEN
Southern Europe			
Cyprus	32.4	55.6	8.1
Greece	22.3	45.3	6.0
Portugal	30.3	56.7	9.8
Spain	23.4	47.8	7.2
Yugoslavia	33.4	59.3	10.7

Source : Cyprus :W.J. House and O. Stylianou, Population, Employment Planning and Labour Force Mobility in Cyprus Nicosia, 1981, p.107.

Note : The figures for countries other than Cyprus were derived from United Nations Economic Commission for Europe, 'The Economic Role of Women in the ECE Region'.

The above Table reveals that in all countries of Southern Europe, men were well represented in female dominated occupations, comprising more than 40 per cent of those employed in these occupations. Women however were very poorly represented in male dominated occupations, constituting less than 10.7 per cent of employment.

In comparison with the other Southern European countries, the share of Cypriot women in female dominated non-farm employment is among the higher participation rates, while their share in male-dominated occupations is amongst the lower participation rates. Occupational segregation of the sexes is very well defined in Cyprus, even by the standards of Southern Europe, where sex segregation is much greater than in Western Europe, North America and the former socialist countries of Eastern Europe[4].

5.4 EARNINGS AND STATUS OF CYPRIOT WOMEN

Women in Cyprus are generally paid much less than men in all occupational groups. Overall women's earnings amounted to just 55 per cent of men's earnings in 1976. As seen from Table 5.5 the rates of pay were different within the various professional groups.

TABLE 5.5 : MONTHLY FEMALE EARNINGS AS A PERCENTAGE OF MALE EARNINGS BY OCCUPATION, 1976, 1981, 1985 and 1989

ISCO 1968	OCCUPATION	FEMALE TO MALE EARNINGS (%)			
		1976	1981	1985	1989
0/1	Professionals	53	62	77	72
2	Administrative and Managerial	70	68	71	73
3	Clerical	75	71	74	69
4	Sales	38	39	46	50
5	Services	59	58	53	54
6	Agriculture	52	51	57	55
7/8/9	Production	68	54	56	57
	TOTAL	55	57	67	63

Source : Annual Wages and Salaries Surveys, 1976, 1981, 1985, and 1989. Department of Statistics and Research, Ministry of Finance, Nicosia, Cyprus.

Note : The data provide only an indicator and not absolute levels.
ISCO : International Standard Classification of Occupations. As from 1990 a different ISCO was used. (ISCO 1988) This renders inaccurate any comparison of earnings by occupation, before and after 1990.

There was a considerable increase of female wages as a percentage of males from 55 per cent in 1976 to 63 per cent in 1989. In the estimate of the above earning percentages, over-time pay is included as well. The percentage ratio of female to male rates of pay, excluding over-time are 58 for 1981, 63 for 1985, 65 for 1989 and 66 for 1992. Thus the increase in female earnings is continuous.

The monthly female earnings as a percentage of male earnings are highest in the Professional and Administrative and lowest in the Sales, Services and Production occupations, where women are overrepresented.

It should be noted that Table 5.5 refers to paid employees only. Considering the self-employed who are mostly male, and unpaid family workers, most of whom are female, women's earnings as a percentage of men's may be even lower than the figures indicated in Table 5.5.

The examination of the figures and trends of Greek-Cypriot female workers in the previous sections proves that the status of Cypriot women in the labour force is inferior to that of men. This is detected in the lower participation of women in the labour force, their concentration in a small range of low-paid occupations and their poor representation in Administrative and Managerial posts.

Moreover, there is a higher incidence of unpaid family work and unemployment among female workers. As shown in Table 5.6, overleaf, there is a much larger proportion of unpaid female workers and a very low number of self-employed women compare to men.

TABLE 5.6 : ECONOMIC STATUS OF WORKING POPULATION

WORK STATUS	TOTAL NUMBER			WOMEN'S PERCENTAGE PARTICIPATION		
	1976	1981	1989	1976	1981	1989
Self Employed	23840	30570	31518	12.3	13.5	21.3
Unpaid Family Worker	3603	3573	3471	79.8	84.4	82.9
Paid Employee	89338	121504	168086	32.9	36.5	30.2

Source : Registration of Establishments 1976. 1981 and 1989, Department of Statistics and Research. Nicosia, Cyprus.

In 1989, 53 per cent of those registered as unemployed at the Labour offices were females. Considering that the share of women in total employment, excluding agriculture, was only 37 per cent it is evident that the incidence of unemployment is higher among female workers. It is worth noting that 55 per cent of the registered unemployed with tertiary education were women, although fewer women than men attained tertiary education.

5.5 THE LEGAL STATUS OF CYPRIOT WOMEN IN THE LABOUR MARKET

In Cyprus the Constitution of the Republic in 1960 guarantees equal rights and liberties for all persons irrespective of sex, with some exceptions with respect to Family Law, taxation and children's citizenship, which stem from the traditional consideration of man as the head of the family. The discriminations against women concerning Family Law and taxation were abolished in 1990.

In the field of employment, women enjoy more or less the same protection as men from labour legislation on such matters as social insurance, redundancy annual holidays, etc. In addition there are some cases of special allowances to women such as[5] :

1. Marriage grant.
2. Maternity grant.
3. Maternity allowance to women who receive reduced wages
4. Widow's pension to the widow of an insured person.
   (A widower is allowed a pension if he is financially dependent on his wife's earnings.)

Furthermore, the ratification of most of the United Nations and the International Labour Office Conventions provided more security to Cypriot women workers; although some additional measures need to be taken for the safeguard and the implementation of the full equality of both sexes in the Labour Market. Some of the major Conventions are listed overleaf :

1. The UN Convention 34/180 on the Elimination of All Forms of Discrimination Against Women

The above convention was ratified by Cyprus in 1985 by Law 78/85.

In order to prevent discrimination against women on the grounds of marriage or maternity the Convention recommended the State's Parties to provide protective legislation which should be reviewed periodically in order to ensure women's effective right to work.

An important area not guaranteed by legislation is the right of women to the same employment opportunities (paragraph 1(b) of the Convention). There are instances in the Private sector where there is open sex discrimination - for example vacancy advertisements often specify the desired sex of applicants.

Concerning the principle of equal pay for work of equal value (paragraph 1(d) of the Convention) it is officially acknowledged in the Public sector and in some areas of the Private sector including banking and the hotel industry.

In other parts of the Private sector women face pay discrimination, although it is difficult to ascertain its extent. The Law 158/89 on Equal Remuneration Between Men and Women for Work of Equal Value is expected to reduce the extent of sex pay discrimination in the Private sector.

2. The ILO Convention No 100 on Equal Remuneration for Work of Equal Value

The Convention was ratified in 1987 but its major principles were expected to be implemented after the passing of Law 158/89 on Equal Remuneration Between Men and Women for Work of Equal Value. The Law became effective three years after it was passed in October 1989, i.e. in October 1992, so as to give time for the necessary amendments of the collective agreements and the preparation of the mechanisms for its implementation.

It must be noted that the definition of 'work of equal value' given by Law 158/89 as 'work performed by men and women which is of a similar nature' is narrower than the term implied in ILO Convention 100 on Equal Remuneration for Work of Equal Value; which also covers cases where work is of a different nature but is deemed to be of equal value.

3. The ILO Convention No 103 on the Protection of Maternity

The above Convention has not yet been ratified, but the Law 54/87 is an essential step to safeguard most of the provisions contained in the above ILO Convention. In particular the law contains provisions for maternity protection with respect to entitlement to maternity leave, duration and timing of the leave, the level of social insurance benefits, nursing breaks and protection from dismissal.

The preceding outline of the legal status of Cypriot women indicates that in the last few years, considerable progress has been achieved in terms of recognising women's right to equal treatment in the labour market. Moreover, it is worth noting that the government has set up a Permanent Central Agency for Women's Rights. This measure will have a positive impact on women's affairs since it provides for the participation of women's organisations in the formulation, supervision and practical implementation of the policy of equality between the sexes.

5.6 FINDINGS OF RESEARCH STUDIES ON THE DETERMINANTS OF CYPRIOT WOMEN WORKERS' PARTICIPATION IN THE LABOUR FORCE, TRENDS OF EMPLOYMENT AND STATUS

Several research studies have been undertaken by the Department of Statistics and Research of Cyprus after 1975 (International Women's Year), aiming to investigate the determinants of the participation, pattern of employment and general status of women in Cyprus.

In addition, in 1986 a survey was conducted on graduating students abroad which provides useful information on their employment situation. Recently, in 1991, a very interesting research survey was carried out, by the Industrial Training Authority, on the exploitation of the economically inactive female population.

Data were obtained from the above mentioned research studies, in order to explain the factors which influence the participation, pattern of employment and status of Cypriot women in the labour force. In addition, information was used from the previous chapters on women's position in Cypriot society and education.

5.6.1 Cypriot Women's Participation in the Labour Force

The factors contributing to the increase in the number of employed women, especially married women, can be classified in three broad groups[6] :

1. Increase of women's employment opportunities.
2. Increase in the availability of women workers.
3. Increase in the incentives for women to enter the labour market.

1. Increase of women's employment opportunities as a consequence of :

a. The transformation of the structure of the economy after independence in 1960 and the effects of the Turkish invasion in 1974, resulted in employment opportunities for women in a variety of sectors. There was a decline in the sector of agriculture while there was an increase in manufacture, trade activities and services (where women were mostly employed).

b. The rapid economic developments after Independence which were accelerated by technological development.

c. The transformation of the Cyprus economy and the change of the society model from rural to urban resulted in a change in the traditional values and attitudes of Cypriot people.

Gender roles were re-evaluated and the personal qualifications of the people were appreciated. The fading strength of social constraints led to the increasing numbers of employed women and their general emancipation.

2. Increase in the availability of women workers due to :

a. The decline in fertility.

b. The improvement of women's health and general physical condition.

c. The availability of services like nursery schools and other facilities (laundry machines and other electrical equipment) which saved house labour time.

d. The unification of 'male' and 'female' studies and the increase in female attendance in the different streams of education and other vocational and training schemes, which improve the skills and qualifications of female labour.

3. Increase in the incentives for women to enter the labour market as a result of :

a. The increasing consumption needs of the contemporary family (which could not be met with the income of one salary earner).

b. The increase in women's interest to work and the ratification of ILO and other conventions enabled the participation of women in more qualified and demanding occupations.

An analysis of the female labour force participation in Cyprus, made by W. J. House in 1981, indicates that market wage was the major incentive, while the number and age structure of children were the major potential constraints imposed on a woman to enter the labour market. The perceived need for income usually is expected to be a function of family income and family size. In Cyprus the effect of increasing family income and family size seemed to thwart the wife's participation; many women claimed that the quality and quantity of child-care institutions prevented them from taking up paid employment while they had small children[7].

The findings of the research conducted by the Industrial Training Authority, ten years later shows that caring for children, household work, low wages as well as the distance between employment and residence seem to be the major constraints on women's participation in the labour force[8].

Although, since 1976, the number of State pre-primary schools and Private Nurseries has increased considerably, it is obvious that caring of children is still a constraint on the employment of married women.

A research conducted in 1989 by the Permanent Central Agency for Women's Rights revealed the following[9] :

More than 90 per cent of children under 2.5 years old were under the care of services which could not be controlled by the relevant authorities.

Most of the children between 2.5 and 4.5 years old (65%) were attending pre-primary education in State (36%) and Private (29%) day nurseries, whose working days and hours are not convenient for working mothers. Day nurseries, State and most of the Private ones follow the holidays of the Public sector.

The research Child Upbringing in Cyprus revealed that there is a problem in the care of children in primary education who returned home while mothers are at work. Almost 50 per cent of these children have nobody to care for them, whilst another 40 per cent are looked after by their grandmothers[10].

The above mentioned factors indicate that the biological and traditional roles of women in maternity, child-care and home-tending influence their availability to enter the labour force.

5.6.2 Women's Trends of Employment

Human capital theorists explain female occupational segregation as a consequence of women's choice to enter occupations which do not reward work experience and penalise them least for taking time off for childbirth and child-rearing. Hence their initial choice would be of low level and low skill occupations.

Other theorists explain the overcrowding of women into certain occupations as a result of the employers' discrimination against hiring women in certain occupations. Women are employed only when their wage, relative to the male wage, is low enough to compensate for the disutility suffered in their hiring.

Since women are thought to follow a pattern of intermittent participation in the labour market because of their family responsibilities they will be placed at a disadvantage again in these occupations. In addition, Trade Unions are considered to have played a role in barring women from certain occupations; Trade Unions regard women as a threat to job and income security[14].

Another decisive factor is the influence of gender socialisation and education on the career aspirations of boys and girls. Girls are expected to be tender and to care about others, while boys are taught to be tough and competitive.

The distribution of students in tertiary education provides a clear example; the majority of the girls are in Humanities, Social Science and Medical and Paramedical, while the majority of the boys are in Commercial and Business Administration and in Engineering Technology.

In addition the effect of religion is instrumental in keeping women in low status professions. Religion maintains the traditional bonds, where the man is the dominator of the woman; the man is the authority while the woman is kept in an inferior position. Thus, women are brought up to be dependent and obedient to men and this influences their behaviour at work. There are very few women in managerial and other posts of authority.

The Survey on the Employment Status of Women in Cyprus, conducted in 1981 revealed that employers were found to believe that women were in general not committed to the job market though investigation showed that the overall labour market experience of younger women exceeds that of comparable men[12].

The findings of the Survey provide useful information on the employers' attitudes towards the two sexes. Men were said to fare better than women for all the performance indicators except for taking orders from supervisors.

The employers claimed that the greatest disparity between the sexes was attributed to women's greater absenteeism, voluntary turnover, and lower supervisory skills.

It is important however to note that a high percentage of respondents (ranging between 52 and 69 per cent) claimed no difference between the two sexes for all the other performance indicators (efficiency and productivity, lateness, reliability, working with fellow employees of the same and opposite sex and taking orders from supervisors).

It seems that gender role expectations and employers' attitudes to the recruitment, promotion and training of women are contributory factors for women's segregation in lower paying occupations.

5.6.3 Earnings and Status of Cypriot Women

It is generally accepted that sex discrimination in pay and other conditions of employment is widely practised worldwide. In Cyprus equal pay is applied only to government, semi-government and banking organisations. The Ministry of Labour and Social Insurance has identified from a survey, carried in 1978, that wage discrimination against women is widespread in private firms.

The survey found that nineteen of the forty-two enterprises investigated discriminated against women, while in the remaining, the difference in pay was accounted for by the difference in job content[13].

House and Stylianou[14] used data collected by the Survey of Wages and Salaries, 1979 in order to find the factors of wage discrimination against women. Considering that work experience and the attained educational level were two important parameters determining wage scale, the age-earnings profiles for eight different educational groups, by sex were derived : i.e. (no Schooling, Primary, Secondary Drop-out, Secondary General, Secondary Technical, Post-Primary Vocational, Post-Secondary Vocational and University Graduates).

The age-earning profile of women for each educational level was found to lie much below and to be flatter than that of men. This indicated that women's average earnings were not only lower than men's but they also rose at a slower rate with age than men's earnings.

The age-earning profiles implied that age and education did not seem to be responsible for the earning differentials of the two sexes, since women earned less than men of the same age and educational level.

W.J. House claimed that the greatest part of the average sex earning differential remains unexplained, even after incorporating proxy variables for educational attainments, work experience, training, occupation and sector of employment.

The Survey on the Employment Status of Women in Cyprus[15], conducted in 1981 revealed that employers' attitudes to the recruitment, promotion and training of women contributed to the sex pay differentials.

According to the survey employers gave the following reasons for sex earning differences: lower productivity, trade union agreements and willingness of women to work for lower wages.

The Survey on Graduating Students Abroad 1986[16], revealed that females anticipated to be employed with a lower salary than males; coming to 77 per cent of the salary anticipated by males.

The general conclusion must be that sex discrimination in pay and other conditions of employment is widely spread in Cyprus. Although there is a considerable improvement in the participation and position of women in the Cyprus labour market, there is a long way to go until women are as favourably treated as men.

NOTES AND REFERENCES

1. World Labour Report, ed. International Labour Office, Geneva, 1985, p.204.

2. William J. House, Discrimination and Segregation of Women Workers in Cyprus (Discrimination and Segregation), Department of Statistics and Research, Nicosia, 1987, p.4.

3. World Labour Report, op.cit. pp.204-5.

4. William J. House, Cypriot Women in the Labour Market, published by ILO, Geneva, 1985, p.25.

5. William J. House, Dora Kyriakides, Olympia Stylianou, The Changing Status of Women Workers in Cyprus, Department of Statistics and Research, Nicosia, 1987, pp.2-13.

6. Loukia M. Mousourou, Women in Occupation and Family, Athens, 1985, pp.90-2.

7. W.J. House, Cypriot Women in the Labour Market, op.cit pp.47-52.

8. Elisavet Voulgari Ioannou, The Exploitation of Economically Inactive Female Population of Cyprus, ed.Industrial Training Authority of Cyprus, Nicosia, 1991, pp.30-40.

9. Report of the Sub-committee of the Permanent Central Agency for Women, The Caring and Education of Children of Working Parents, Nicosia, pp.1-16.

10. Child Upbringing in Cyprus, ed. Department of Social Welfare Services, Nicosia, 1989, p.18.

11. W.J. House, Cypriot Women in the Labour Market, ibid. pp.33-40.

12. Survey on the Employment Status of Women in Cyprus, ed. Department of Statistics and Research, Nicosia, 1983, pp.9-17.

13. William J. House, Discrimination and Segregation, op.cit.p.29.

14. W. J. House, D. Kyriakides, O. Stylianou, op.cit. pp.25-31.

15. Survey on the Employment Status of Women in Cyprus, op.cit. pp.9-17.

16. Survey on Graduating Students Abroad 1986, ed. Department of Statistics and Research, 1988, p.106.

CHAPTER 6

METHODOLOGY

6.1 INTRODUCTION

The primary objective of this research is to determine the position of Cypriot women in Civil Engineering. To achieve the above aim the following specific objectives need to be investigated :

1. To demonstrate and account for the growth of women's participation in Civil Engineering in Cyprus.

2. To compare the status and earnings of Cypriot women in Civil Engineering to that of men and to account for any differences in the above areas.

Two categories of men and women Civil Engineers were included in the survey :

1. University degree graduates in Civil Engineering.

2. Higher Technical Institute (HTI), Nicosia, HND diplomates in Civil Engineering.

Although a considerable number of HND graduates, from various tertiary education schools, locally and abroad, enter the Cyprus market every year, HTI graduates were chosen for the following reasons :

a. HTI is the only State tertiary education institution providing courses in Engineering. It was established in 1968, with the specific aim of meeting the demands of Cyprus industry for qualified Technician Engineers.

b. The majority of Technicians with HND in Civil, Electrical and Mechanical Engineering are graduates of HTI.

c. HTI graduates are highly appreciated by the construction world, as well as by people employed in other industries.

d. There is more uniformity in the sample group of Technicians, since they are graduates of the same tertiary education institution.

e. The author will examine whether HTI influences the decision of secondary school graduates to choose Civil Engineering as a specialisation.

6.2 SURVEY METHODS USED

In order to investigate the increased participation of Cypriot women in Civil Engineering data were collated from the following sources :

1. The Council of Registration of Architects and Civil Engineers. This source provided the number of men and women Civil Engineers registering in each year.

2. The Higher Technical Institute (HTI) Archives. The numbers of Civil Engineering graduates for each year were obtained.

3. The Department of Statistics and Research, Ministry of Finance, Nicosia. This source provided specific information on the field of employment, number and remuneration of men and women Civil Engineers and Technicians.

The status of Cypriot women Civil Engineers was compared to that of men by undertaking the following quantitative and qualitative studies :

Survey 1 : A sample survey based upon structured questionnaires was completed during personal interviews. The aim of this questionnaire was to obtain data with a view to investigate and define the attitudes of women Civil Engineers in the work place.

Survey 2 : A telephone survey was conducted with the objective of establishing the employment location of men and women Civil Engineers registered in 1979 and 1980.

The specific years were selected because during 1979 and 1980 the figures of women who registered as Civil Engineers, showed a rapid increase, for the first time. In addition it was considered that for the period 1980-1990, i.e. ten years of experience, is a credible indication of men and women Civil Engineers' professional achievements.

Survey 3 : Additional interviews were carried out with each member of the sample group, with the objective of investigating on a personal level the following :

a. The factors which contributed to the increase of male and female participation in Civil Engineering.

b. The status and position of women Civil Engineers compared to that of men.

c. The attitude of women Civil Engineers as derived from their personal involvement and experience in site work.

Interviews were carried out with men and women Civil Engineers in the sample group, as well as with men and women Civil Engineers registered before 1970.

6.3 SURVEY 1

The questionnaires relating to this type of survey were directed to the following three groups :

1. Women Civil Engineers and Technicians.
2. Men Civil Engineers and Technicians.
3. Employers of men and women Civil Engineers and Technicians.

The data derived from these questionnaires were used to investigate the following matters :

1. The employment behaviour of women and the comparison with that of men, which is considered to be the 'norm'.
2. The employers' attitude towards male and female Civil Engineers and Technicians.

6.3.1 Sample Method

After a careful examination of the literature on survey methods, the sample survey method was considered to be the most appropriate for the scope of this research.

Although surveying a sample is never a substitute for a survey of everyone in the population, sampling can provide an efficient and accurate method obtaining reliable information about a large number of cases[1].

The type and size of sample used, as well as the method of collecting data from the sample, depend on the required degree of accuracy from the survey. In addition the extent to which there is variation in the population with regard to key characteristics of the study as well as economic factors are equally important. Considering the above factors the following parameters were influential in determining the type and size of sample used :

a. High degree of accuracy is not vital for the current survey, since the objective is to obtain a credible indication of the differences in the attitude of male and female Civil Engineers and Technicians rather than to establish what proportions of population give a particular answer.

b. A sampling frame of the population, which is necessary for the random selection of the sample, is not available. The target population in this research is the aggregate number of employed Civil Engineers and Civil Engineering Technicians, graduates of the Higher Technical Institute, Nicosia.

c. The population is widely dispersed in all the districts of the free sector of the Republic of Cyprus.

d. There is a considerable difference in the size of the two groups, which are intended to be compared; the size of the male group is higher than the size of the female group.

In 1989 the number of registered male Civil Engineers in employment was 594 and the corresponding number of females was 104. The figures of Higher Technical Institute graduates in Civil Engineering were 421 males and 308 females.

e. The relatively small number of the population under study.

f. There are limitations in the size of the sample group, since the survey is to be undertaken only by one researcher.

A thorough examination of the above factors led to the conclusion that probability sampling techniques are impractical and unnecessary for the scope of this research. Systematic Matching sampling[2] was considered more appropriate. It is a non-probability technique, aiming at producing a representative sample without random selection of cases and it is used when comparing two groups of very different sizes.

The United Nations Publication on Sampling states[3] :

> "Purposive sampling is much used in opinion surveys and the like, whereby each unit in the sample is more or less deliberately selected by reference to one or more ancillary population characteristics so that the sample would reflect these characteristics in exact population."

6.3.2 Sample Size

The sample group consists of 25 Employers and 100 male and female Civil Engineers and Technicians; more specifically, 25 male and 25 female Civil Engineers as well as 25 male and 25 female Technicians were interviewed.

The employment pattern of Civil Engineers was thoroughly investigated in order to select a representative sample.

As there was no list of the population available, the Establishments employing Civil Engineers and Technicians were used as sampling units for the selection of the sample group. The following matching features were used :

1. Sector of Employment.
2. District of Employment.
3. Experience of Sample Group.

6.3.2.1 Sector of Employment

According to the last Registration of Establishments (1989), 20 per cent of the Civil Engineers were employed by the Public sector and 80 per cent by the Private sector. Since there was no information available on the actual distribution of HTI graduates in the sectors of employment, the proportion used for the sample group in the sectors of employment, was 20 per cent in the Public and 80 per cent in the Private sector.

a. In the Public sector, the following departments, involved in major construction projects, were considered :

1. The Public Works Department.
2. The Water Development Department.
3. The Cyprus Ports Authority.
4. Nicosia Municipal Authority.

b. In the Private sector Consultancy firms in Architecture and Civil Engineering as well as Development Construction companies were selected, considering the following :

1. In 1989, the majority of the Construction companies (95%) were employing less than 20 persons. There were 83 companies (5%) employing more than 20 persons, whilst only 16 companies employed more than 100 persons.

2. Out of a total of 334 Architectural and Civil Engineering practices, 55 practices (17%), employed more than 5 persons; 41 practices employed 5-9 persons and 14 Architectural practices employed more than 10 persons.

The sample group was selected from the major Construction companies (5%) and the major Consultancies (17%). These firms were considered as more representative of the actual situation in the Cyprus market as it relates to remuneration, conditions and attitudes at the work place.

6.3.2.2 District of Employment

The distribution of the sample group in each District was proportional to the general share of employment in the four major Districts of the free sector of the Republic of Cyprus, indicated in Table 6.1 below :

TABLE 6.1 : DISTRIBUTION OF EMPLOYMENT IN THE FOUR MAJOR DISTRICTS OF CYPRUS, 1989

DISTRICT	PERCENTAGE DISTRIBUTION OF EMPLOYMENT
Nicosia	60
Limassol	20
Larnaca	10
Paphos	10
Total	100

Source : Registration of Establishments, 1989, Department of Statistics and Research, Nicosia, Cyprus.

6.3.2.3 Experience of Sample Group

The experience of the Civil Engineers and Technicians in the sample group was assessed by reference to the date when they were first employed.

According to the Registration of Establishments 1989, the total number of Civil Engineers employed in Cyprus was 698, 594 males and 104 females. The number of 25 female Civil Engineers used in the sample represents about 25 per cent of the total number of female Civil Engineers.

The total number of HTI graduates in Civil Engineering until 1989 was 729 including 308 females. Considering that approximately 40 per cent of HTI graduates continue for further studies abroad, the sample of 25 female Technicians represents a reasonable percentage of about 10 per cent.

6.3.3 Method of Conducting the Survey

The approach followed in this survey was personal interviewing undertaken by the researcher. According to references this is the best method for collecting information on employees' attitudes. The following is mentioned by T.K. Reeves and D. Harper[4].

> "This need in most commissioned employee surveys to seek explanation and diagnose causes of attitudes leaves little alternative but to conduct the survey by means of personal interviews which allow probing in depth.... interviewing has many advantages over self-completion methods, the main one being the greater depth of information it is possible to obtain."

Although self-completion techniques have the advantage over personal interviews of being cheaper, they were not preferred in this research because the data obtained are more superficial than those obtained using personal interviews.

6.3.4 Operational Aims and Information Selected

The two questionnaires were designed to collect information in a clear and concise way. The context of the questionnaires was based on the concepts mentioned in relevant literature, which was studied in depth. Similar surveys conducted in Cyprus and abroad, were also considered, for the final formulation of the questionnaires.

For example, the Survey on the Employment Status of Women in Cyprus, published in 1983 and the Survey on Graduating Students abroad 1986, published in 1988. Both surveys were undertaken by the Department of Statistics and Research, in Nicosia, Cyprus.

In addition, Women in Engineering: The Realities of 1987, carried out in Indiana Vocational Technical college, and Experiences of Female Engineering Graduates of the University of Louisville, (1985), 1986 were also considered.

The two different questionnaires designed for this survey are presented in Appendix B.

1. Questionnaire for Male and Female Civil Engineers and Civil Engineering Technicians.
2. Questionnaire for the Employers of Male and Female Civil Engineers and Civil Engineering Technicians.

The operational aims of the questionnaires are as follows :

a. To obtain data and other relevant information, which will enable the researcher to compare the employment behaviour of women Civil Engineers to that of men and to identify the differences if any.

b. To investigate possible discrimination practices against female Civil Engineers at work and to establish the reasons of such practices.

c. To locate any particular problems faced by female Civil Engineers, which are attributed to their gender.

In order to achieve these operational aims it was necessary to gather the following information from the two questionnaires.

6.3.4.1 Questionnaire for Male and Female Civil Engineers and Technicians

Section A

General information that could provide a profile of each Civil Engineer. Questions were asked about their place of residence, age, marital status and the number of children. In addition information was gathered on their education, further education during their working experience and their choice of specialisation.

The above information was important for classifying the interviewees under the appropriate group in order to complete the quotas set for the pre-determined matching characteristics.

Section B

Questions were asked on their employment history, including the number of employers they had worked for. More detailed information was collected on their present employment, including earnings and work description as well as second employment and their participation in Trade Unions and other organisations.

Section C

For comparing the efficiency of male and female Civil Engineers at work, the interviewees were asked direct questions which covered a wide spectrum of the different tasks and areas of their employment.

They included comparison of men and women as regards their efficiency, supervisory and organisation skills, working on site, travelling to other towns, willingness to work over-time, relations with people at work (workers, contractors, managers) and general attitude at work, such as priorities and reliability.

Most of these questions were repeated in order to inhibit people from giving any exaggerated or biased answers. Qualitative questions were also used, which required interviewees to give reasons for their answers.

Additional information was obtained about the attitude of Civil Engineers towards their work, including expectations from work and problems at work. Moreover, questions were asked investigating their views on the status of women in Civil Engineering and the employment of married women.

Section D

This section included questions directed to female Civil Engineers and Technician Engineers. These questions aim to identify any particular problems faced by women Civil Engineers as well as any discrimination against them.

6.3.4.2 Questionnaire for the Employers of Male and Female Civil Engineers and Technicians

Section I

General information that could provide a profile of each Establishment. Questions were asked about the place, the size and the sector of the establishments in the sample group. Additional information was obtained on the characteristics of the person being interviewed. i.e. sex, education, age and position in firm.

The above information was important in establishing the criteria, which would enable these firms to be included in the sample group.

Section II

Issues on the current employment practices were investigated aiming to identify differences in the behaviour of employers towards male and female Civil Engineers. More specifically questions were asked about recruitment and promotion practices followed, the number of male and female Civil Engineers employed as well as their responsibilities, tasks and wages.

Section III

For obtaining data concerning the employers' perceptions on the behaviour and attitude at work of male and female Civil Engineers and Technicians, direct questions were asked which covered the following areas of work :

Comparison of men and women as regards their efficiency, supervisory and organisation skills, working on site, travelling to other towns, willingness to work over-time, relations with people at work (workers, contractors, managers) and general attitude at work, including self confidence, priorities and reliability.

Qualitative questions were also used, which asked interviewees to give reasons for their answers. In addition, direct questions were addressed to the interviewees asking about their biggest problem with men and women Civil Engineers as well as their perception on the employment of married women with young children.

6.3.5 Questionnaire Design

The formulation of the questionnaire was designed to meet the operational aims of the research. The questionnaire was sectionalised and the questions within each section were designed to achieve certain specific objectives. Care was taken not to influence the interviewees, whilst there was often a useful discussion on the subject area covered by the relevant question.

The majority of the questions used were closed ended. These questions are widely used by researchers because they proved to be more reliable.

Fink and Kosecoff stated the following on closed ended questions[5]:

> "The overwhelming majority of surveys rely upon multiple choice or closed ended questions (also called 'forced choice') because they have proven themselves to be more efficient and ultimately more reliable. Their efficiency comes from being easy to use, score and code (for analysis by computer). Also their reliability is enhanced because of the uniform data they provide, since everyone responds in terms of the same options."

Most of the closed ended questions were followed by open ended questions aiming to obtain more qualitative information on the given answers. The method of conducting the survey, by personal interviews, enables the use of open ended questions and pre-coded questions without the risk of the replies being influenced.

As mentioned in Surveys at Work[6] :

> "Pre-coded response categories save time during the completion of the questionnaire and reduce the cost of coding the questions afterwards."

The design and effectiveness of the questionnaire was tested by carrying out a pilot survey and adjustments were made as appropriate. In addition the draft format and content of the questionnaire was discussed with officials from the Department of Statistic and Research, the Planning Bureau, the Industrial Training Authority as well as my Director of Studies, Supervisors and Advisors.

The full survey was carried out from January to June 1990. The interviews took place at the interviewees premises or residence.

6.4 SURVEY 2

A telephone survey was conducted in order to investigate the employment status of all Civil Engineers in the sample group, registered during 1979 and 1980, by the Council of Registration of Architects and Civil Engineers. During this period a total of 155 Civil Engineers were registered, including 31 women Civil Engineers.

The objective of the research was to identify any possible differences in the employment location of male and female Civil Engineers.

Data were collected by telephone interviews with Civil Engineers in the sample group. This information was supplemented by data obtained from the Association of Civil Engineers and Architects[7].

6.5 SURVEY 3

An informal interviewing of men and women Civil Engineers within the sample group were carried out in order to obtain more qualitative information, on the participation, position and attitudes at work of women Civil Engineers compared to those of men.

It was considered essential to conduct the interviews in an informal manner so that the interviewees could express their views and ideas more freely. This technique is supported by other researchers. Sims[8] stated the following on research interviews :

> "To collect accounts, however, requires that the people whose accounts you want are willing to give you the accounts that you want, and keen enough to do so that they are prepared to put in the sometimes considerable amount of effort to articulate an account of one's actions. The most straight forward way around the problem seemed to me to be to encourage people to give accounts about things which were of such relevance and significance to themselves that their primary intention became to give those accounts, often for their own interests as well as mine. For many of the participants, this then ceased to be seen as a research interview and became a chance to tell somebody about something which was of major importance to them, and yet which they might never have talked about before."

NOTES AND REFERENCES

1. D.A. de Vaus, Surveys in Social Research, 1986, p.69.

2. B.R. Dixon, G.D. Bouma and G.B.J. Atkinson, A Handbook of Social Science Research, 1987, pp.134-158, V. Barnet, Sample Survey, 1988, pp.1-21.

3. A Short Manual on Sampling, ed. United Nations, New York, 1972, p.13.

4. T.K. Reeves and D. Harper, Surveys at Work, p.23.

5. A. Fink and J. Kosecoff, How to Conduct Surveys, 1985, p.26.

6. T.K. Reeves and D. Harper, op.cit. p.112.

7. The Cyprus Civil Engineers and Architects Association was registered under the companies law in 1940. It is a non profitable and non compulsory body. Its function is to promote, develop and safeguard the high status of the Architect and Civil Engineering professions.

8. Sims, 1981 p.375, in R. Ahmad, Educational Simulation Techniques for Students' Project Work in Building, (MPhil Project), 1991, p.105.

CHAPTER 7

THE DEVELOPMENT OF CIVIL ENGINEERING IN CYPRUS

Historical events such as the Independence of Cyprus in 1960 and the Turkish invasion of Cyprus in 1974 produced a rapid expansion in Civil Engineering construction and consequently an increase in demand for professional Civil Engineers. These significant factors are given specific consideration in this chapter and the current position of the Civil Engineer is examined.

7.1 THE DEVELOPMENT OF CIVIL ENGINEERING CONSTRUCTION

The geostrategic location of the island contributed to its development as a financial, commercial and strategic centre, since the ancient times. This can be witnessed from the ancient temples, theatres, palaces, ports, organised cities and military works which are scattered throughout the island.

When Cyprus became a British colony the island was in a state of underdevelopment while its economy was mostly based on agriculture. More than 40 per cent of the economically active population were in agriculture and there was great lack of professional and technical personnel[1].

The British Administration considered the survey of the land as a first priority. It was carried out between 1878 and 1882 by Kitchener[2], a British soldier in the Royal Engineers.

In addition, the British Administration introduced basic infrastructure projects primarily for the needs of the military bases and the installations on the island. Buildings were also constructed for the housing of the government personnel. Most of these buildings are still in use today.

Since 1945, there has been a considerable increase in the construction of houses in Cyprus. The Census of Cyprus 1960, indicated that over 40 per cent of all housing units were built in Cyprus during the 15 years following the Second World War[3]. Naturally during the Second World War there was hardly any construction activity. However, the end of the war brought about significant economic changes, which resulted in the influx of rural workers to the towns and a major increase in housing developments.

7.1.1 The Development of Civil Engineering Construction after the Independence of Cyprus

In 1960, the newly formed Republic of Cyprus was undergoing a period of economic recession. The government worked intensively on the implementation of a series of five-year development plans aiming to restore economic growth. The decline in agriculture and the consequent growth of tourism and manufacturing resulted in considerable increase in the construction industry; its share in the GDP (Gross Domestic Product) rose from 5.7 per cent in 1960 to 8.4 per cent in 1971[4].

Basic infrastructure projects were needed in order to meet the demands of the major sectors of development. They mainly included port development, new airport and airport terminal buildings, the improvement and extension of the road network, the development of telecommunications, the expansion of the electricity grid-system and water works. In addition new hotels and hotel apartments were constructed for tourism purposes.

During the first two five year development plans (1962-71), a total of 72.5 million Cy Pounds was spent on the implementation of various projects and programmes out of the Development Budget[5]. Emphasis was given on the development and proper use of water resources and several storage reservoirs were constructed. Water storage capacity in dam reservoirs increased from 6 MCM (Million Cubic Meters) in 1960 to 47 MCM in 1971.

There was a major extension of Famagusta port, the most important port of the country, while in 1970 work begun on the construction of a new port in Limassol. The Nicosia International Airport and terminal building were completed and there was a considerable development of the road network.

In addition, the long term loans offered by the government for the building of new hotels, contributed to the rapid increase of hotel accommodation, which increased by 40 per cent between the years 1962 and 1966.

The new government of Cyprus realised the need for technically trained personnel and the existing Technical schools were expanded, while new ones were established in all Districts of Cyprus. In 1968, the Higher Technical Institute was established, aiming to meet the demands of industry for qualified Technician Engineers, in the fields of Civil Engineering, Electrical Engineering and Mechanical Engineering.

7.1.2 The Development of Civil Engineering Construction after The Turkish Invasion

It is estimated that about 70 per cent of the economic potential of Cyprus was in the north of the island, which was occupied by the Turkish troops. More than 50 per cent of the land used in agriculture, the majority of the industries and about 32 per cent of the housing units were in the occupied area[6]. In addition, basic infrastructure was lost which included the island's International Airport in Nicosia, its major port in Famagusta and many important road networks.

The Turkish invasion had disastrous effects on the construction sector. Most of the construction work was taking place in the occupied areas, which was the most prosperous in terms of agriculture, tourism and industrial estates.

Large units producing aggregates and sand, the biggest part of brick producing industries as well as machinery and equipment of big construction companies were occupied by the invaders.

The economically active population of the sector dropped from 28,100 persons before the invasion to 16,750 persons in 1975, while unemployment rose from 2.1 to 47.9 per cent. Large numbers of employees in the construction sector departed abroad through Cypriot contracting firms which undertook work abroad or through bilateral state agreements.

The Cyprus government considering that the construction sector affects many other sectors of the economy, took measures and contributed to the maintaining of construction public works at high level. The share of the Public sector in the gross output of construction rose from 27.1 per cent in 1973 to 58.2 per cent in 1975[7].

Subsequent economic changes generated substantial construction activity. The economy of Cyprus in the post invasion years was led by manufacture, tourism and construction. The share of construction in the GDP rose from 8.4 per cent in 1971 to 14 per cent in 1980 and occupied 11.7 per cent of the gainfully employed population.

The following factors were responsible for the construction boom between the years 1976 and 1980[8] :

a. <u>The housing of refugees</u> : The two Emergency Economic Action Plans, (1975-76 and 1977-78) of the government, included the rehousing of 200,000 refugees and the reactivating of the economy, as the first priorities.

The building of new homes was undertaken jointly by the central government and the Private sector. In addition the government established favourable financing schemes for supporting those willing to undertake self-build housing. From 1974 to 1990 50,227 households were rehoused. The government expenditure amounted to 294.5 million Cy pounds and the United Nations Housing contribution was 24.5 million Cy Pounds.

b. Provision of infrastructure : The concentration of the population in the south of the island, the loss of vital infrastructure as well as the growth of trade and tourism necessitated provision of major infrastructure works. These included mostly : The construction of a new International Airport and airport terminal buildings in Larnaca, the extension of Limassol port, the development of new port facilities in Larnaca and the improvement and development of a new road network.

The total expenditure for road construction for the years 1981 and 1990 was 146.97 million Cy pounds. The first major scheme after the 1974 Turkish invasion was the new Nicosia-Limassol Highway. It was completed in 1985 at a cost of 25 million Cy pounds.

c. Irrigation projects : The development of agriculture and tourism as well as the dry climatic conditions of the island necessitated the proper and effective use of water resources and the construction of large water storage dams.

The island-wide projects implemented by the Water Development of the Ministry of Agriculture and Natural Resources, increased water storage capacity in dam reservoirs from 47 MCM in 1971, to 275 MCM in 1990.

The largest water development project undertaken in Cyprus is the Southern Conveyor Project, which includes the construction of the Kourris dam. The works commenced in 1984 and were completed by 1993. The overall cost of the project was 200 million Cy pounds. Through the latest five-year development plan (1989-1993) about 123 million Cy pounds is estimated to be allocated for water development.

d. Tourist facilities : The Turkish invasion had a disastrous effect on the tourist industry with the loss of the Nicosia International Airport and about 65 per cent of the island's bed capacity, in the main tourist regions of Famagusta and Kyrenia.

The combined efforts of the government and the private sector resulted in the spectacular growth of tourism. By 1980 tourism became the leading sector of the economy and tourist arrivals surpassed the pre-invasion level.

This growth resulted in the construction of major Civil Engineering and Building projects in order to meet the increasing demands for tourism.

In addition, the favourable financing schemes offered by Banks and other financing Institutions contributed to a considerable increase in the building of dwellings. From 1976 to date housing construction has been absorbing more than 50 per cent of the money invested in the construction industry[9].

By 1981, the projects for the rehousing of refugees were completed and the construction sector returned to its pre-invasion level of approximately 10 per cent of the GDP[10]. In 1990, 53 per cent of the money invested in new construction was spent in housing, 30 per cent in non-residential buildings and 17 per cent in Civil Engineering projects[11].

These projects generated substantial activity in the construction industry, thus increasing the demand and role of the Civil Engineer.

7.2 THE POSITION OF THE CIVIL ENGINEER IN CYPRUS

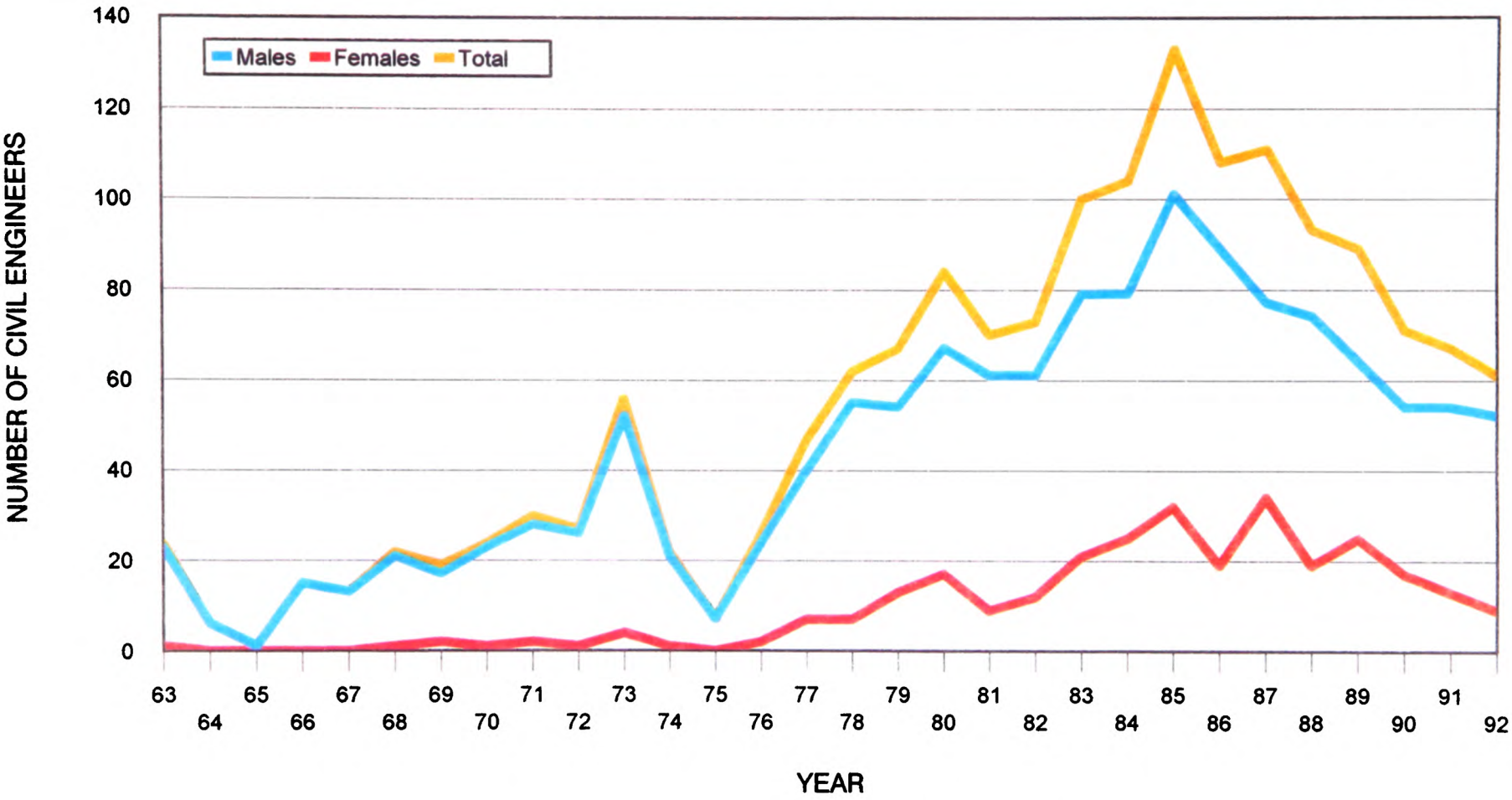
7.2.1 The Growth in the Number of Civil Engineers

The first known Cypriot Engineer was Theodoros Fotiades, who completed his studies in Athens in 1905[12]. He was awarded the Degree of Engineering, which at the time covered the fields of Architecture and Engineering. After 1944, economic changes produced an expansion in the construction sector and a subsequent increase in the number of Cypriots who chose to study Civil Engineering.

In 1963, when the Council of Registration of Architects and Civil Engineers was first introduced[13], 24 Civil Engineers were registered: 23 men and one woman. The number of Architects registered in 1963 was 38, all men. The first woman Architect graduated in 1960, but she applied for registration after 1970.

The change of the economy after 1960 and the considerable growth in the construction sector led to a significant increase in the number of Cypriots who followed Civil Engineering careers. By 1974, 163 Architects and 262 Civil Engineers were registered, including 39 Turkish-Cypriot Architects and 34 Turkish-Cypriot Civil Engineers. The total number of women registered was 11 Architects and 13 Civil Engineers. The number of Cypriot Civil Engineers and Architects registered annually during the years 1970 and 1992 is shown in Figures 7.1 and 7.2 in pages 133 and 134.

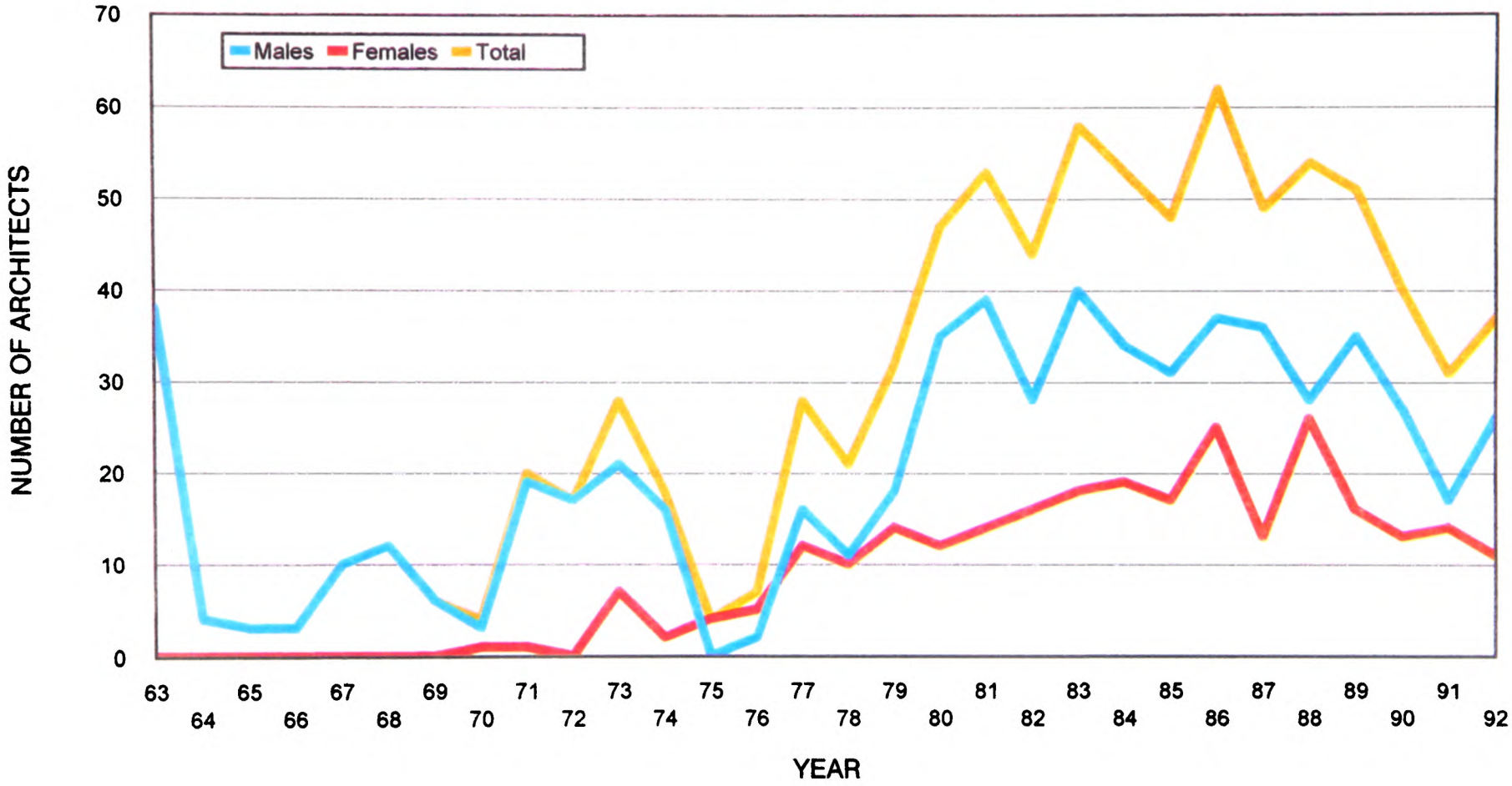
CYPRIOT CIVIL ENGINEERS REGISTERED ANNUALLY BY THE COUNCIL OF ARCHITECTS & CIVIL ENGINEERS (1963-1992)



Source: Council of Registration of Architects and Civil Engineers, Nicosia, Cyprus

Figure 7.1

CYPRIOT ARCHITECTS REGISTERED ANNUALLY BY THE COUNCIL OF ARCHITECTS & CIVIL ENGINEERS (1963-1992)



Source: Council of Registration of Architects and Civil Engineers, Nicosia, Cyprus

Figure 7.2

The number of Architects and Civil Engineers quoted after 1974, does not include Turkish Cypriots, since the Turkish invasion in 1974 has Kept the Turkish community inaccessible. The drop in the number of Civil Engineers registered during the years 1974 and 1975 was the result of the consequences of the Turkish invasion, which had a major impact on the construction sector and the economy of Cyprus. Most of the graduates in Civil Engineering found employment abroad and primarily in the Middle East countries.

The construction boom after the post invasion years brought about a rapid increase in the rate of Civil Engineers becoming registered. Between 1976 and 1985, a total number of 766 Civil Engineers were registered, including 155 women. This was followed by a significant drop due to the decline in construction projects.

By 1992, the total number of male and female Civil Engineers registered came to 1,632; 1,338 males and 294 females. The corresponding number of Architects registered was 882; 612 males and 270 females. Women constituted 18 per cent of the total number of Civil Engineers and 31 per cent of the total number of Architects.

In Cyprus and indeed in many other countries, women's participation in Architecture is higher than their participation in Civil Engineering[14].

7.2.2 The Position of the Civil Engineer in Cyprus

In Cyprus, most people still cannot distinguish the role of a Civil Engineer from that of an Architect. In the past, things were not well defined. Engineers were expected to have knowledge on all matters relating to Engineering. It is characteristic that during the 1940s a Mechanical Engineer was in charge of structural design in the biggest Architectural practice in Nicosia.

At this time Engineering and certain other related professions were not understood by Cypriot society. This was attributed to the low level of education and hence it was more difficult to distinguish between Craftsmen and Engineers. In 1946[15] only 1.7 per cent of the total population aged 20 and over received higher education, while the first Technical schools were established in 1951.

In addition a Civil Engineer was required to train craftsmen into new techniques. Thus, Theodoros Fotiades, the first known Cypriot Engineer, was considered by the builders and the craftsmen on site, as a 'master mason'. The appointment of Cypriot Civil Engineers to well paid governmental posts, previously occupied by British Civil Engineers contributed towards elevating the status of the Civil Engineering profession and led to an increase in their numbers during subsequent years[16].

Concerning the social spectrum of the students studying Civil Engineering it seems that most of them belong to the middle and the lower class, since they come from families, with some link to construction; their father or close relative is a builder, a technician or craftsman.

Secondary students from the higher and upper middle class, are traditionally studying to become Doctors, Lawyers or Economists, which are considered as professions with the highest status in Cypriot society.

It should be noted that in Cypriot society, there is no distinct discrimination of social classes, due to political and economic reasons. There are no lines between working class, middle class and higher class.

The newly formed Republic in 1960, offered to fully qualified working class youngsters opportunities to climb to high status positions. On the other hand, the Turkish invasion, created an upheaval in the existing social spectrum, since many people lost their land, property or their enterprises in 1974 and became employees.

In 1963, the number of registered Architects was larger than the corresponding number of Civil Engineers. However, there has been a much greater growth in the number of Civil Engineers in subsequent years.

This increase may be explained as follows :

a. Up until 1960, the scale of construction was relatively small and the structural design and site supervision of the works was normally carried out by an Architect.

b. From the independence of Cyprus in 1960, the scale and form of construction became more complex and this necessitated the appointment of qualified and experienced Civil Engineers in the design and construction of projects. Since 1960, the government of Cyprus embarked on major development programs, including roads, dams and other infrastructure works. This type of project was primary directed towards Civil Engineers specialising in such fields as: Highway Engineering, Traffic Engineering, Public Health and Water Engineering.

c. The growing construction industry, which introduced the use of modern materials and new innovative methods demanded qualified personnel and it has therefore offered Civil Engineers a wider range of employment opportunities than Architects.

Until recently there was no distinction between the responsibilities of Architects and Civil Engineers. According to the requirements set up by the Council of Registration of Architects and Civil Engineers, architectural and structural designs could be submitted either by an Architect or a Civil Engineer.

In 1992, the Scientific Technical Chamber of Cyprus was established and supported by legislation. Its main objective is to separate and safeguard the duties, obligations and responsibilities of Architects, Civil Engineers and other Engineering professions.

In order to give a clearer picture of the status of the Civil Engineering profession, it is considered necessary to give certain information about professionalism in general and Civil Engineering in particular, in Cyprus[17].

a. Cyprus is a small state with a young age of existence and with limited tradition in professional activities. There is a very low desire for further education and training in all the professions. This may be attributed to the fact that Cypriots do not necessarily choose the best professional for a task. They usually prefer their relative or their friend, irrespective of ability and relevant experience.

b. The lack of a university course in Civil Engineering in Cyprus and the very poor links with professional bodies abroad, as well as the lack of a library or a centre of information on the new Technological innovations in Civil Engineering, have a negative impact on the professional and technical advancement of Civil Engineers.

c. There are few Chartered Civil Engineers in Cyprus. They are known only within Civil Engineering or construction circles.

This can be attributed to the fact that major projects are mostly undertaken by the government and the structural design is assigned to foreign consultants or to civil servants. In the Private sector, where houses and hotels are mainly constructed, the Architect is playing a more dominant role than the Civil Engineer.

d. The fact that there is no clear distinction between the duties and rights of Architects and Civil Engineers, as well as the lack of appropriate measures and control on authorised Architects and Engineers have serious implications on keeping the Civil Engineer as less important.

e. In the post invasion years many Cypriots graduates in Civil Engineering acquired experience and skills by working abroad primarily in the Middle East countries. This experience proved a valuable professional investment when they returned to Cyprus as fully qualified and experienced Civil Engineers. As the Civil Engineering profession developed and more experience was gained both in the fields of design and construction the need for foreign consultants diminished.

All the above mentioned development in the construction industry demanded a high calibre of managerial ability and Civil Engineers have become a natural choice. For example the post of Minister of Communications and Public Works, is generally offered to a person qualified in Civil Engineering.

7.2.3 Employment of Civil Engineers

The development of Civil Engineering and construction in general resulted in the establishment of several major organisations, both in the Public and the Private sector.

7.2.3.1 The Private Sector

In the Private sector consulting firms of international reputation and major construction firms undertaking projects both in Cyprus and overseas were also established.

Traditionally Cyprus has had a large Private sector. According to the last Registration of Establishments, in 1989, 242 Architectural practices and 92 Civil Engineering practices were registered in Cyprus, employing 655 persons. They mainly employ 1 to 4 persons while 7 Architectural practices employ more than 15 persons.

In addition there were 2022 Building Construction companies with a total employment of 23037 persons comprising 11 per cent of the total employment. They were mostly small companies employing 1 to 4 persons. Only sixteen companies were employing more than 100 persons. There are about 10 companies which dominate the Cypriot construction industry. During the last twenty five years, and especially after the Turkish invasion, most of these companies have undertaken big projects in the Middle East and Africa.

In 1983, legislation was enacted, Law 97/1973 and 32/1982 titled 'Law for the Registration and Control of Contractors'. The primary objective of this legislation was to regulate and control Civil Engineering and Building Contractors and thus maintain quality in construction.

This legislation increased the demand for Civil Engineers. By 1992, the total number of Civil Engineering and Building Contractors covered by this legislation was 1,702.

7.2.3.2 The Public Sector

The Public sector includes the central government (government departments), local government (municipalities, improvement boards and other local authorities) and semi-government organisations (Cyprus Tourism Organisation, Cyprus Ports Authority, Cyprus Telecommunications, Electricity Authority of Cyprus etc).

Government related development work necessitated the establishment of large government departments and public corporations. Two government departments are mainly responsible for the public projects: The Public Works Department of the Ministry of Communications and Public Works and the Water Development Department of the Ministry of Agriculture and Natural Resources. They are responsible for the study, the design, the supervision, the maintenance and sometimes the construction of the works.

The Public Works Department undertakes the provision of infrastructure works such as: highways, airports, hospitals and buildings, while the Water Development Department is responsible for the major irrigation projects, for the conservation, development and effective use of water resources.

Furthermore, the Cyprus Ports Authority, a large semi-government organisation, under the control of the Ministry of Communications and Works, is responsible for the development of the ports of the island.

7.2.3.3 Distribution of Employed Civil Engineers in the Sectors of Employment

In 1989, Registration of Establishments[17] showed that 79 per cent (550) of the employed Civil Engineers (698) were employed by the Private sector and 21 per cent (148) by the Public sector. A proportion of 21 per cent (116) of the Civil Engineers in the Private sector were self employed.

Women comprised 15 per cent (104) of the total number of Civil Engineers employed. A proportion of 79 per cent (82) of women Civil Engineers were employed by the Private sector and 21 per cent (22) by the Public sector. Women comprised 12 per cent (14) of the total number of self employed Civil Engineers.

A comparison of the number of employed Civil Engineers to the number of Civil Engineers registered by the Council of Registration of Architects and Civil Engineers indicates that the total number of Civil Engineers registered exceeded the number of those shown in the Registration of Establishments.

The above difference may be explained as follows :

a. There are Civil Engineers registered by the Council of Registration of Architects and Civil Engineers who work abroad.

b. A large number of Civil Engineers may be classified under a different occupational category. e.g. Civil Engineers holding Administrative and Managerial posts or Teachers in secondary Technical and higher Technical education.

In addition, during the last 5 years there has been a considerable increase in the number of Civil Engineers and Civil Engineering Technicians, who are registered as Directors of construction companies. Their total number is estimated to be about 500, including 5 women.

c. A number of qualified Civil Engineers may be doing different jobs altogether.

d. The Turkish Cypriot Civil Engineers whose number, until 1974, was 34 are not included in the Registrations of Establishments.

In 1989, Registration of Establishments showed that 24 per cent (273) of the employed Civil Engineering Technicians (1,133) were employed by the Private sector and 76 per cent (860) by the Public sector.

Women comprised 20 per cent (229) of the total number of Civil Engineering Technicians employed. A proportion of 31 per cent (70) of women Civil Engineers were employed by the Private sector and 69 per cent (159) by the Public sector[18].

7.2.4 Remuneration of Civil Engineers

The occupational category of professionals are the second highest remunerated employees, after the category of Legislators, Senior Officials and Managers. In 1992 the mean monthly rate of pay of professionals was 908 Cy pounds while the total mean monthly rate of pay for wage and salary earners was 544 Cy Pounds[19].

The occupational category of Technicians and associate professionals ranked third in the ladder of highly paid employees. In 1992 their mean monthly rate of pay was 691 Cy pounds.

There are differences in the rates of pay of Civil Engineers and Civil Engineering Technicians in the Private and the Public establishments.

In the Public sector there are specific scales for Technical Posts in a structure agreed between the Government and the Employees' Unions. Although in the Public sector there is equal remuneration for men and women, the earnings of women Civil Engineers appear to be lower than for men. In 1992 the female to male percentage of monthly earnings was 90 per cent for Civil Engineers and 86 per cent for Civil Engineering Technicians.

The difference can be explained by the larger number of men employed, generally with longer work experience; this has resulted in more promotion posts and higher salaries for men. Women Civil Engineers entered the Public sector after 1970, contrary to men Civil Engineers who have been employed since 1945 in the sector. The vertical structure of Civil Engineers employed by the Public Works Department may be used as an example.

TABLE 7.1 : VERTICAL STRUCTURE OF CIVIL ENGINEERS EMPLOYED BY THE PUBLIC WORKS DEPARTMENT (1992)

POST	NUMBER	MALE	FEMALE	HIRED (Year)	PROMOTE (Year)
Director	01	01	00	1963	1990
Executive Engineer A	02	02	00	1964	1990/91
Senior Executive Engineer	09	09	00	1953/69	1983/92
Executive Eng. Grade I	45	37	08	1972/86	1977/90
Executive Eng. Grade II	08	03	05	1990/91	
Total	65	52	13	1953/91	1977/92

Source : Archives of Public Works Department, Nicosia, Cyprus.

In the Private sector there are conventions between the Employers and the Employees' Unions concerning the employment of Technicians. So far, there are no provisions about the salaries of Technician Engineers and Civil Engineers.

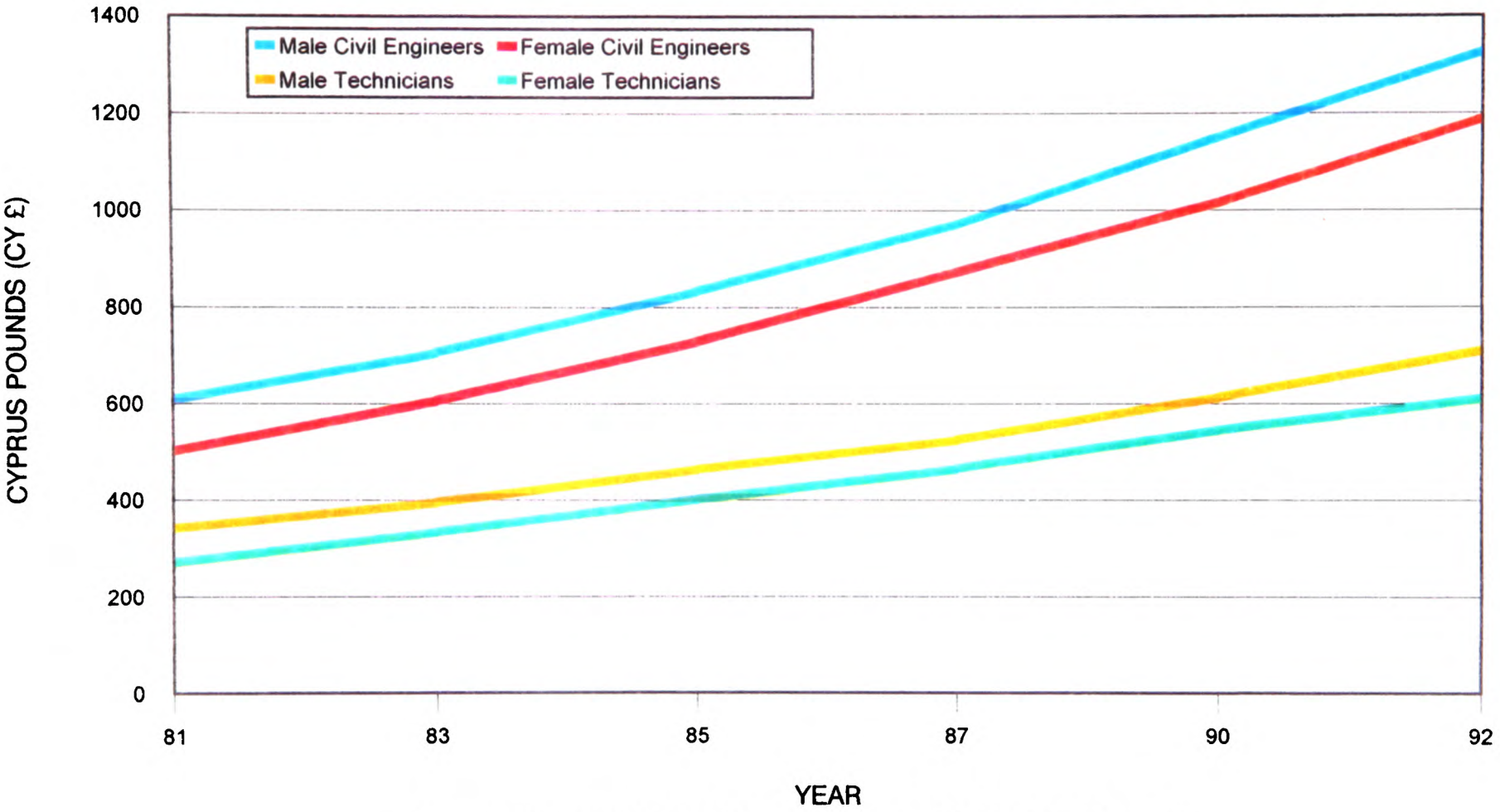
The earnings of Civil Engineers in the Private sector are much lower than in the Public sector. The gross average monthly salary of male and female Civil Engineers and Civil Engineering Technicians can be seen in figures 7.3 and 7.4, in pages 148 and 149.

In the Private sector the ratio of female to male monthly earnings is much lower than in the government; in 1992 it was 78 per cent for Civil Engineers and 68 per cent for Technicians.

Since the number of women Civil Engineers is much lower than men's number, it is natural that the reasons mentioned previously for the Public sector apply to the Private sector as well. In the Private sector there are no women Civil Engineers in managerial posts, in the major Private Construction companies and Consultancies.

It was noted that in the Private sector, the difference between the rates of pay of female Civil Engineers and male Civil Engineering Technicians was marginal. The rates of pay of female Civil Engineering Technicians was much lower than the coresponding of males.

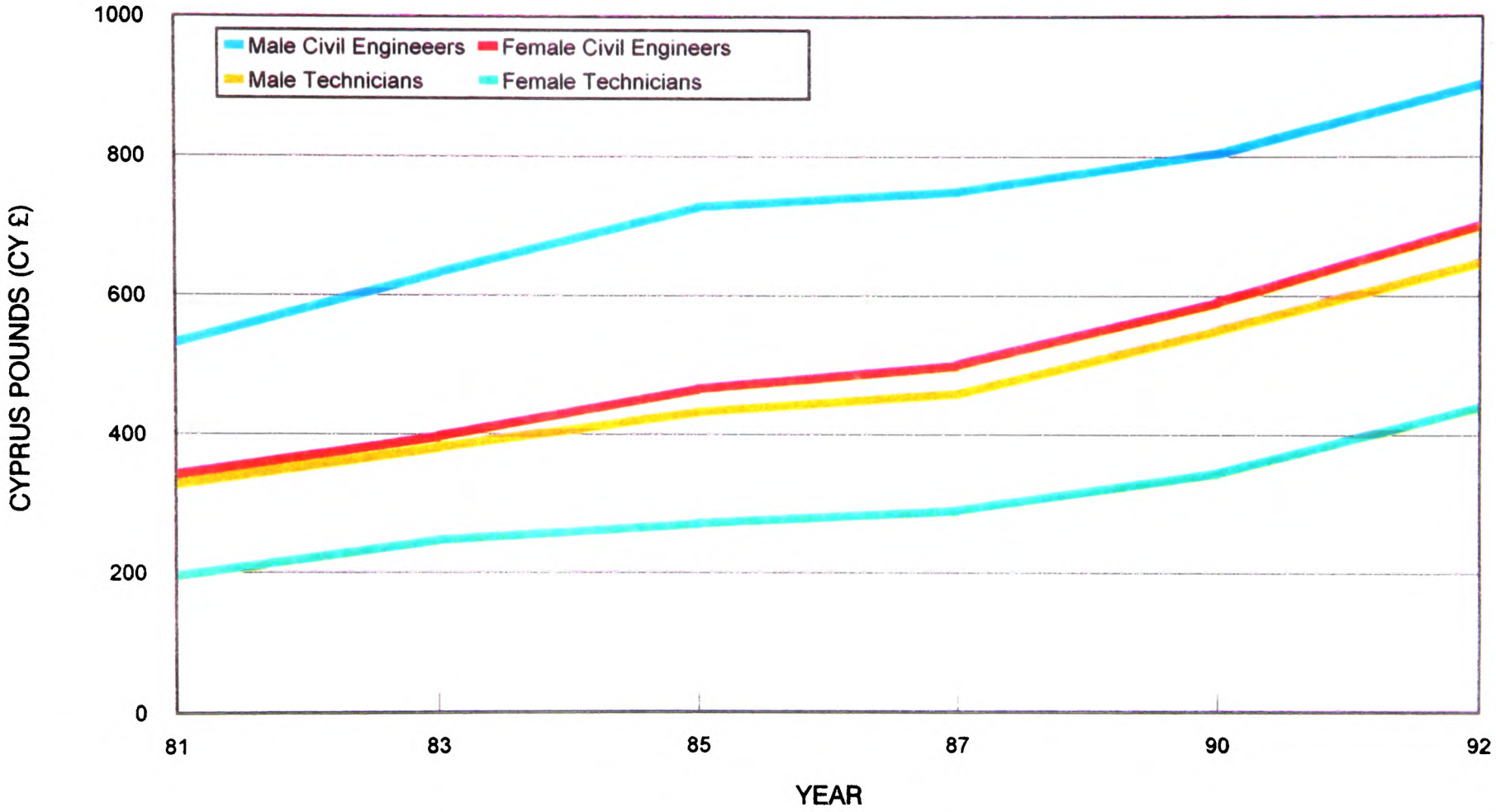
GROSS AVERAGE MONTHLY SALARY OF CIVIL ENGINEERS AND TECHNICIANS IN THE PUBLIC SECTOR



Source : Wages and Salaries Surveys, Department of Statistics and Research
Ministry of Finance, Nicosia, Cyprus

Figure 7.3

GROSS AVERAGE MONTHLY SALARY OF CIVIL ENGINEERS AND TECHNICIANS IN THE PRIVATE SECTOR



Source : Wages and Salaries Surveys, Department of Statistics and Research
Ministry of Finance, Nicosia, Cyprus

Figure 7.4

This is an indication of the low status of women Civil Engineers in the Cyprus market. Until recently the Engineering profession was dominated by men, since women were considered by Cypriot society as unable to deal with scientific problems and mathematical applications. In addition work on site was not approved as a task appropriate to a woman's nature.

Despite disapproval women entered the Civil Engineering profession and their number has gradually increased. The first woman Civil Engineer was registered in 1963 and the second in 1968. Since 1980 there has been a considerable increase in their number and by 1992 they constituted 18 per cent of all registered Civil Engineers.

The factors which influenced males and females to follow Civil Engineering specialisation as well as the participation and the status of Cypriot women in Civil Engineering is examined in the next two chapters.

NOTES AND REFERENCES

1. Technical Education, 30 years of Constructive Existence, published by the Public Information Office, Nicosia, 1990, p.6 (The first Apprentice Training Schemes were organised in 1946, while the first Technical schools were established in 1951.)

2. Everyman's Encyclopedia, 1978, Vol 7, p.222.

3. Census of Cyprus 1960, Department of Statistics and Research, Ministry of Finance, Nicosia, 1960.

4. The Third Five - Year Plan (1972-76) , Planning Bureau, Nicosia, pp.4-5.

5. The Third Five - Year Plan (1972-76), op.cit. pp.21, 175 and 254-343.

6. Data were taken from the Planning Bureau and the Department of Statistics and Research, Nicosia.

7. The Second Emergency Economic Action Plan (1977-78), Planning Bureau, Nicosia, 1977, pp.101-122.

8. Data were taken from the First Emergency Economic Action Plan 1975-76, pp.1-12, the Second Emergency Economic Action Plan 1977-78, pp.20, 63-78, and 101-156 and the Five Year Development Plan 1989-1993, pp.86-187, Nicosia.

9. Construction and Housing Statistics 1987, (pp.41-2) and Construction and Housing Statistics 1990, (p. 56) Dept of Statistics and Research, Ministry of Finance, Nicosia.

10. Economic Report 1989, Department of Statistics and Research, Ministry of Finance, Nicosia, 1991, p.91.

11. Construction and Housing Statistics 1990, op.cit. p.35.

12. Theodoros Fotiades, during his working experience, was undertaking the structural design as well as the architectural drawings of the buildings. He introduced the use of concrete in building construction as well as the neoclassical style in dwelling houses and other buildings. He designed most of the churches built in Cyprus between 1920 and 1930. (Information was received from Dr H. Stavrides, Head of the HTI Civil Engineering Department).

13. Register of Registration of Architects and Civil Engineers, Nicosia, 1963-1992. (In 1962, a Board was officially designated as Council of Registration of Architects and Civil Engineers by Law No. 41. This Board is responsible for registering and licensing Architects and Civil Engineers and prohibits unqualified people from practising Architecture and Civil Engineering.

14. Eleni Gioga, 'Women and TEE' in TEE bulletin, Athens, 1993, Vol.1751, pp.28-38. (TEE : Techniko Elliniko Epimelitirio, i.e. Technical Chamber of Greece). Until February 1993 women constituted 26 per cent of the Architects and 12.6 per cent of the Civil Engineers registered by the Technical Chamber of Greece.

15. Census of Cyprus, 1960, op.cit. (According to the Census, during the period 1946-1960, the standard of education improved considerably and the rate of illiteracy dropped from 33.1 per cent to 18.1 per cent.)

16. Information was drawn from an interview with Mr. Costas Hadjicostas, one of the Civil Engineers registered at the early years of the establishment of the Council of Registration of Architects and Civil Engineers, who was a Minister of Communications and Public Works between 1980 and 1982.

17. Data were obtained from interviews with Civil Engineers in the sample group. In addition, Architects and Civil Engineers registered before 1968, were interviewed, including the Director of the Higher Technical Institute.

18. Wages and Salaries Surveys, op.cit. p.90. The occupational category of Civil Engineering Technicians includes HNC and HND holders in Civil Engineering, as well as graduates of Technical and secondary education schools employed as Technicians in Civil Engineering.

19. Labour Statistics 1992, Department of Statistics and Research, Ministry of Finance, Nicosia, 1993, pp.18-9. The data cover both wage-and-salary earners and refer to October of each year. They refer to gross rates of pay for normal hours worked, excluding overtime.

    The ISCO (International Standard Classification of Occupations), used in the Labour Statistics of 1992 was based on the new ISCO 1988.

20. Data were obtained from the Archives of the Public Works Department, in Nicosia.

CHAPTER 8

ANALYSIS OF RESULTS

This chapter presents the data obtained from survey 1, survey 2 and survey 3 as defined in Chapter 6.

8.1 SURVEY 1

The data obtained from the questionnaires were analysed using the dBase IV computer package and are presented in tabular form under Appendix C. This Appendix contains the questions from each section of the questionnaire, together with the corresponding responses presented in a table format.

For example : Questions A1 (QA1) and A2 (QA2) under section A of the questionnaire are presented as shown below :

Table 1 : (QA1) Current Place of Residence
(QA2) Age of Respondent

Question Number	Total		Civil Engineers		Technicians	
	Male	Female	Male	Female	Male	Female
	n=50	n=50	n=25	n=25	n=25	n=25
A1 Residence :						
Nicosia	60	60	60	60	60	60
Limassol	20	20	20	20	20	20
Larnaca	10	10	08	08	12	12
Paphos	10	10	12	12	08	8
Total	100	100	100	100	100	100
A2 Age :						
20-24	04	08	00	08	08	08
25-29	34	36	32	32	36	40
30-34	36	36	40	40	32	32
35-39	18	16	20	16	16	16
40-44	08	04	08	04	08	04
Total	100	100	100	100	100	100

n = number of respondents in the sample group

Similarly all other questions and their respective replies are presented in Appendix C as Table numbers 2 to 29 inclusive.

8.1.1 Analysis of Questionnaires Addressed to Male and Female Civil Engineers and Technicians

In order to enable a more direct comparison between the responses of male and female Civil Engineers and Technicians the results to the questionnaires addressed to males and females were presented in a comparative tabular format, as shown in Table 1 (in page 153) and analysed accordingly.

From a detailed examination of the data obtained, the following salient issues arose. These issues are listed below on a section by section basis.

Section A

1) Marital status and family obligations.
2) Education.
3) Choice of specialisation and guidance from school.

Section B

1) Number of employers.
2) Main task.
3) Place of employment.
4) Promotions.
5) Over-time.

6) Travelling to other towns.

7) Remuneration.

8) Employment benefits.

9) Membership of Trade Unions and organisations.

Section C

1) Employment duties.

2) Discrimination at work.

3) Behaviour and general performance at work.

4) Supervisor choice.

5) Job satisfaction, problems at work and expectations.

6) Social status.

7) Different problems between men and women at work.

8) Greater participation of women in Civil Engineering.

9) Married women and employment difficulties.

Section D

1) Role-modelling in choosing Civil Engineering.

2) Problems faced by women Civil Engineers and Technicians.

3) Discrimination against women at the place of work.

8.1.1.1 Results from Section A of the Questionnaire

Each of the above issues is examined and discussed as follows:

1) Marital status and family obligations
(Table 2, Appendix C)

It is evident that 70 per cent of the male respondents were married as compared with 62 per cent of females. A proportion of 68 per cent of males had children as compared with 58 per cent of females.

2) Education
(Table 3, Appendix C)

The results of this table show that :

a) All persons employed as Civil Engineers had acquired a BSc/BEng degree and above. A proportion of 44 per cent acquired an MSc degree. It should be noted however that those who had studied in the Eastern countries obtained the MSc degree as their first degree.

b) A 20 per cent of Civil Engineers were HTI graduates who continued their studies abroad and obtained the relevant degree to enable them to practise as Civil Engineers in Cyprus.

c) Continuous professional development of both Civil Engineers and Technicians was apparent in all groups, who attended seminars and educational short courses.

3) Choice of Specialisation and Guidance from School (Table 4, Appendix C)

The results show the following:

a) Employment prospects was a major factor which influenced males (32%) and females (30%) to choose Civil Engineering as a profession.

b) The education opportunities offered by the HTI was given as a reason for choosing Civil Engineering by one fifth of male and one third of female Technicians.

c) Another reason given by male respondents for choosing Civil Engineering was their exposure to the construction industry either through employment or through graduating from Technical schools.

d) Approximately 25 per cent of females stated that although their initial preference was to study Architecture they ultimately decided to pursue a career in Civil Engineering.

e) Career guidance from schools towards the choice of profession appears to have been very poor.

8.1.1.2 Results from Section B of the Questionnaire

1) Number of employers
(Table 5, Appendix C)

Figure 8.1 overleaf, shows the number of employers Civil Engineers and Technicians worked for during their working experience.

It is noted that a higher percentage of females (42%) remained in the same employment as compared with 28 per cent of the males. The principal reasons given by the respondents for changing their employment are listed in Table 8.1 below.

TABLE 8.1: PRINCIPAL REASONS GIVEN BY CIVIL ENGINEERS AND TECHNICIANS FOR CHANGING THEIR EMPLOYMENT

Male Respondents	Female Respondents
1. Better job conditions 2. Repatriation 3. Higher salary 4. Firm redundancy	1. Better job conditions 2. Higher salary 3. Firm redundancy

The second reason given by male respondents, shows that a significant number of male Civil Engineers and Technicians were employed abroad and returned home to Cyprus.

THE NUMBER OF EMPLOYERS WORKED FOR BY CIVIL ENGINEERS & TECHNICIANS DURING THEIR CAREER

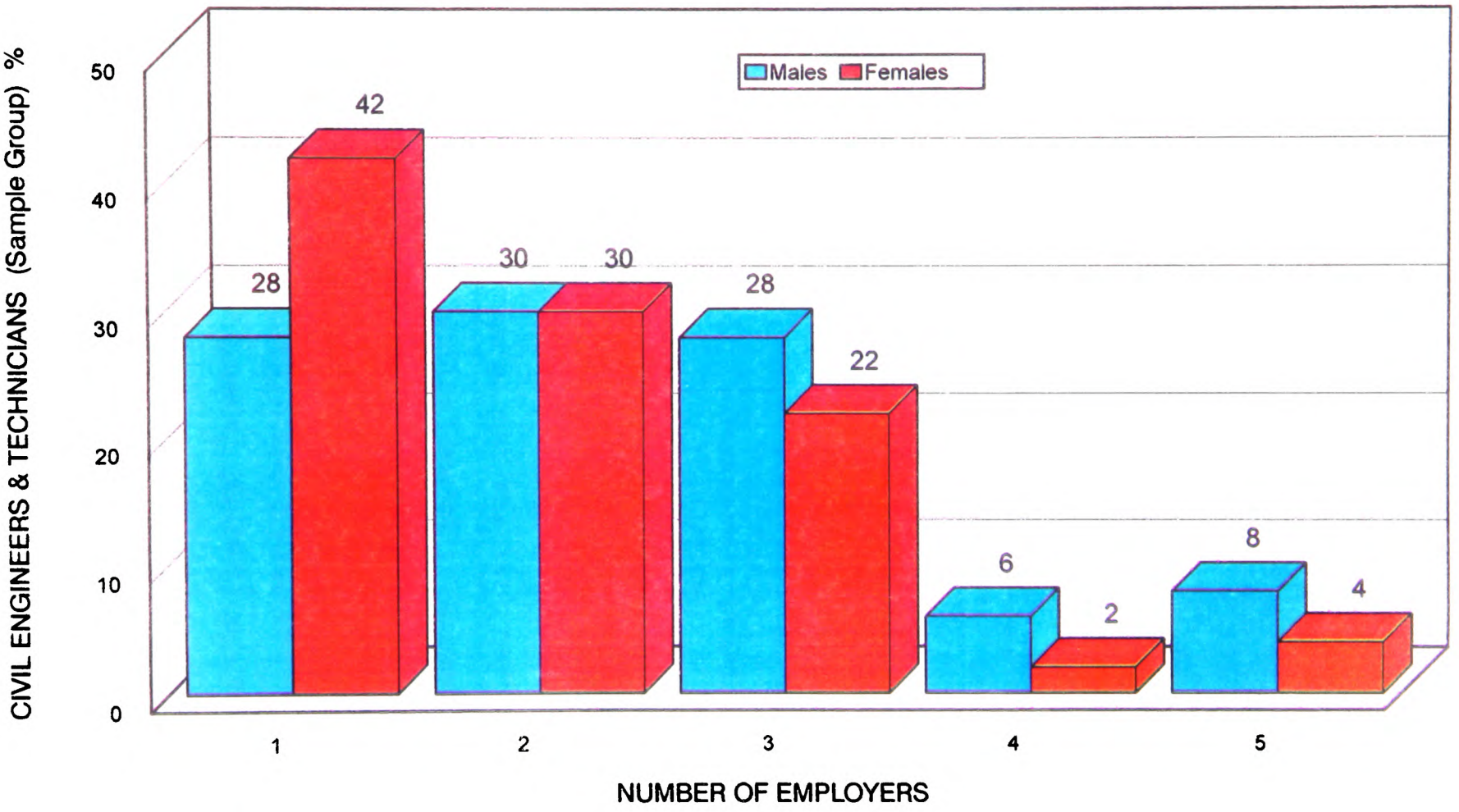


Figure 8.1

2) Main Employment Task
(Table 5 Appendix C)

The main employment tasks undertaken by the respondents are listed in Table 8.2 below.

TABLE 8.2: MAIN EMPLOYMENT TASKS UNDERTAKEN BY CIVIL ENGINEERS AND CIVIL ENGINEERING TECHNICIANS

Male Respondents	Female Respondents
Civil Engineers	Civil Engineers
1. Structural Design 2. Site Supervision and Site Management 3. Quantity Surveying and Office Duties	1. Structural Design 2. Quantity Surveying 3. Site Supervision 4. Office Duties
Technicians	Technicians
1. Quantity Surveying 2. Site Supervision and Site Management 3. Structural Design	1. Quantity Surveying 2. Technical Drawing 3. Structural Design and Site Supervision

It is understandable that different tasks were undertaken by Civil Engineers in comparison with those performed by Technicians. Structural Design was the main task of male and female Civil Engineers, whilst Quantity Surveying was the principal task of male and female Technicians.

With the exception of Site Management, where females were under-represented, there were no major differences in the tasks undertaken by male and female Civil Engineers. However, there were striking differences in the tasks undertaken by male and female Technicians. These are clarified in the next page.

a) More than 50 per cent of the female Technicians were involved with Quantity Surveying. Technical Drawing ranked second and their involvement with Site Supervision duties was negligible.

b) The opposite situation was the case with male Technicians who in addition to Quantity Surveying, were generally involved with Site Management and Site Supervision duties.

3) Place of employment
(Table 5, Appendix C)

The place of employment of each of the respondents is shown in Figure 8.2 overleaf. There were clear differences in the pattern of the place of employment between males and females. Females worked mostly in the office whilst males divided their time equally between office and Site Management duties.

The results also show that 56 per cent of female Technicians worked in an office environment compared to 8 per cent of male Technicians.

In addition, no female Technician was involved exclusively with site work whilst in the case of males 20 per cent were employed on site only.

PLACE OF EMPLOYMENT OF CIVIL ENGINEERS & TECHNICIANS DURING THEIR CAREER

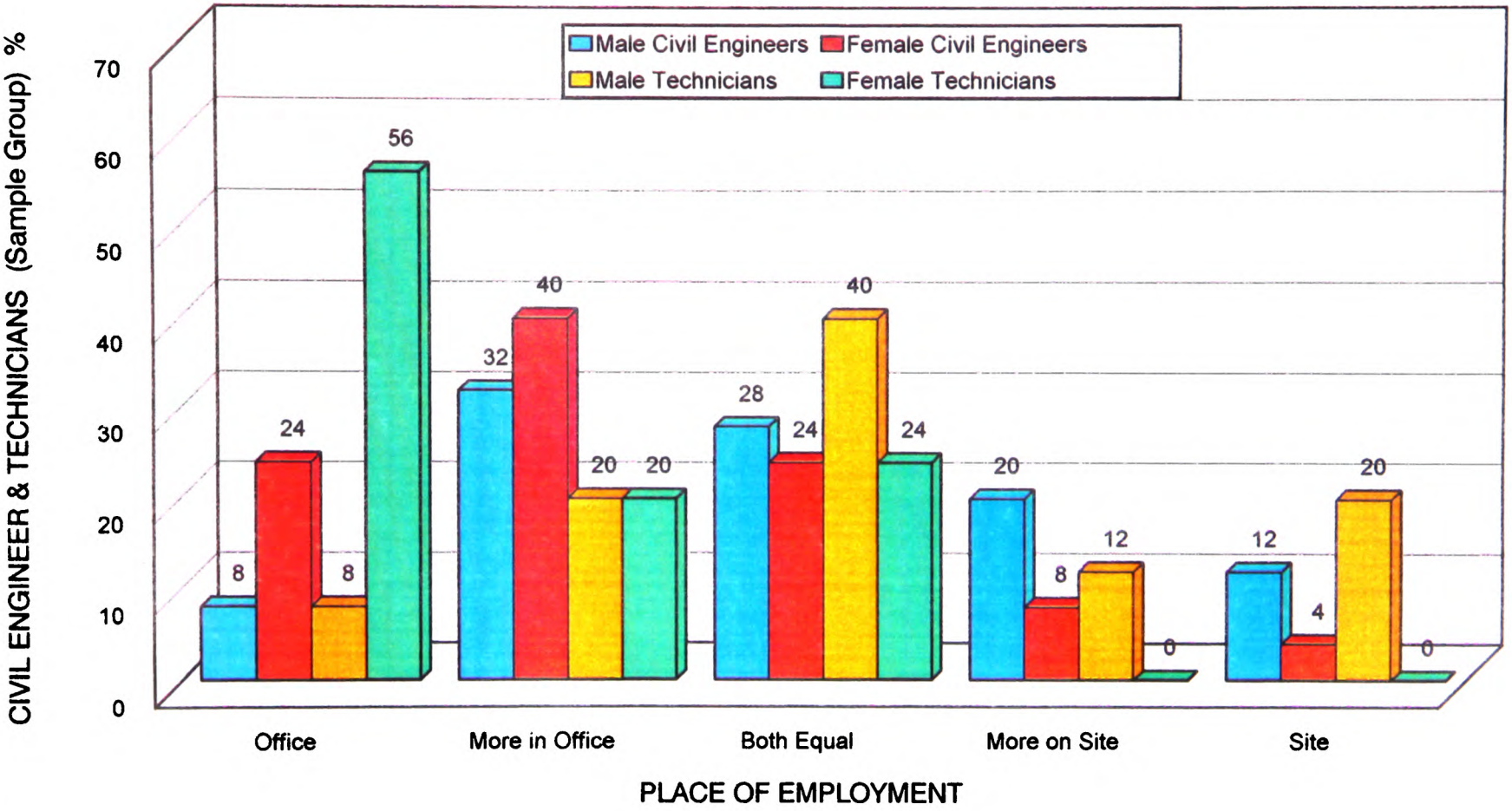


Figure 8.2

4) Remuneration
(Table 6, Appendix C)

According to The Annual Wages and Salaries Survey (1990), of the Department of Statistics and Research, the ratio of female to male gross monthly salary of Architects and Civil Engineers was 86% in the Public sector and 72 % in the Private sector. In the case of Technicians the corresponding ratio was 89% in the Public sector and 61% in the Private sector. Table 8.3 below compares the starting and current gross monthly salary between two groups of male and female Civil Engineers and Technicians in the Private sector.

Group A : Male or female Civil Engineers with a working experience of 1-5 years.

Group B : Male or female Civil Engineers with a working experience of 6-10 years.

TABLE 8.3 : STARTING AND CURRENT MONTHLY SALARY OF MALE AND FEMALE CIVIL ENGINEERS AND TECHNICIANS WITH 5 AND 10 YEARS OF EXPERIENCE IN THE PRIVATE SECTOR

Gross Monthly Salary	GROUP A				GROUP B			
	Civil Engineers		Technicians		Civil Engineers		Technicians	
	Male	Fem	Male	Fem	Male	Fem	Male	Fem
Starting Salary								
Average	273	200	199	158	243	189	180	139
Lower	220	160	150	120	200	160	150	120
Higher	350	280	280	200	300	200	250	180
Current Salary								
Average	503	385	375	274	695	535	525	380
Lower	330	300	300	230	500	400	400	280
Higher	700	500	500	350	900	700	700	500

From Table 8.3 the following conclusions may be drawn :

a) The average starting and current salary of female Civil Engineers and Technicians was generally lower than the corresponding salary of male Civil Engineers and Technicians.

b) The average starting salary of Civil Engineers in group A (273 Cy Pounds for males and 200 Cy Pounds for females) was similar to the average income of employed graduates in Engineering Technology, found in the Survey on Graduating Students Abroad 1986 (263.9 Cy Pounds for males and 185.5 Cy Pounds for females).

c) There was a marginal difference between the salaries of female Civil Engineers and male Technicians in both groups of the sample group.

d) The current average gross monthly salary of male (695 Cy Pounds) and female (535 Cy Pounds) Civil Engineers in group B, was lower than the average gross earnings found by the Annual Wages and Salaries survey of 1990 (804 Cy Pounds for males and 580 Cy Pounds for females).

e) In the case of the Technicians the current average salary in group B was 525 Cy Pounds for males and 380 Cy Pounds for females compared to 560 Cy Pounds for males and 343 Cy Pounds for females found by the Annual Wages and Salaries Survey of 1990.

This difference might be attributed to the fact that the sample group covers Civil Engineers and Technicians with a working experience of 6 to 10 years and is not representative of the whole number of male and female Civil Engineers and Technicians.

In the case of Technicians, it must be noted that the occupational category of Civil Engineering Technicians in the Annual Wages and Salaries Survey, includes HND holders, HNC holders as well as Technical school graduates.

5) Promotions
(Table 7, Appendix C)

The results show that with respect to promotion, female Technicians were in a disadvantageous position; 12 per cent were promoted as compared to 36 per cent of male Technicians. In the general case of both, Civil Engineers and Technicians, 38 per cent of males were promoted compared with 16 per cent of females. It should be noted that the majority of promotions were noticed in the Public sector.

6) Over-time
(Table 7, Appendix C)

A higher percentage of males (76%) than females (52%) worked over-time. It was also noted that the majority of male Civil Engineers worked unpaid over-time. Male Civil Engineers and Technicians employed by the Private sector, usually work above their contractual agreements at the expense of their family and social life.

7) Travelling to other towns
(Table 8, Appendix C)

A low percentage (12%) of female Technicians travelled to other towns in the execution of their duties compared to 40 per cent of male Technicians. In the case of Civil Engineers 72 per cent of males travelled to other towns compared to 48 per cent of females.

8) Employment benefits
(Table 8, Appendix C)

The results show the following:

Generally male and female Civil Engineers and Technicians enjoy the same employment benefits. These benefits are protected by labour agreements ratified either at an International level, or locally by Trade Unions.

There are however differences between males and females as regards employment benefits which are outside formal agreements with Trade Unions.

For example males have the benefit of a car as part of their employment together with bonuses. In the case of females such benefits are very rare.

9) Membership of Trade Unions and organisations (Table 9, Appendix C)

The results indicate the following:

a) Membership of a Trade Union in the Public sector, is a natural consequence of the conditions of employment. In the Private sector membership of a Trade Union is voluntary and certainly not encouraged by the employer.

b) In the Private sector more Technicians than Civil Engineers were members of Trade Unions.

c) A higher percentage of Civil Engineers than Technicians were members of professional organisations.

d) The participation of females in women's organisations is very low. More female Civil Engineers than female Technicians were members of political and women's organisations. According to a research study conducted in 1978, only women with higher education were more informed and involved with politics.

8.1.1.3 Results from Section C of the Questionnaire

1) Employment duties
(Table 10, Appendix C)

A considerable percentage of males (72%) and females (76%) responded that there were other persons of the opposite sex in their place of work, who had similar duties.

2) Discrimination at work
(Table 10, Appendix C)

A proportion of 38 per cent of females stated that they were treated different to men in their work place. This view was also supported by 16 per cent of males.

The main issues raised by males and females with respect to discrimination of women in the work place are listed in Table 8.4 below.

TABLE 8.4 : DIFFERENT TREATMENT OF MEN AND WOMEN CIVIL ENGINEERS AND TECHNICIANS AT WORK

Major Issues Raised by Males	Major Issues Raised by Females
1. Men work on site, whilst women do not. 2. More responsibilities to men. 3. Better jobs to men. 4. More promotions to men.	1. Men are better paid. 2. More responsibilities and more promotions to men. 3. Better jobs to men. 4. Men preferred for work on site.

Male respondents explained that the differences mentioned in Table 8.4 were the result of:

a) Prejudices.

b) The fact that Civil Engineering is a traditionally male dominated profession.

c) Women's lack of site experience or reluctance for outdoor work.

Female respondents supported the following points :

a) Employers feel more confident with men. They assign men to posts with high responsibilities and they prefer men to work on site.

b) Women are discriminated against: they are given low grade work and are not encouraged to work on site.

c) Newly employed women are generally viewed with suspicion as to whether they will be able to fulfil their obligations as Engineers. They therefore have to prove themselves in order to be accepted and respected as equal.

3) Behaviour and general performance at work (Tables 11 and 12, Appendix C)

The results show that:

a) The majority of males and females considered that female Civil Engineers and Technicians are equal to males in most of the areas of work defined in Tables 11 and 12.

b) Both males and females expressed the view that male Civil Engineers and Technicians are better than females in the areas of work listed in Table 8.5 below.

TABLE 8.5 : AREAS OF WORK WHERE MALE CIVIL ENGINEERS AND TECHNICIANS IN THE SAMPLE GROUP WERE CONSIDERED AS BETTER THAN FEMALES

Area of Work	Males' Responses	Females' Responses
	%	%
1. Willingness to work over-time	64	60
2. Travelling to other towns	60	60
3. Absenteeism	52	44
4, Work on Site	76	46
5. Contractor's approval	82	52
6. Self confidence	50	44
7. Ambitious	52	42
8. Priority to work	58	44

c) A limited number of male and female respondents considered female Civil Engineers and Technicians as better than males in the following two areas of employment, i.e. 'relations with clients' and 'relations with managers'.

d) A proportion of 28 per cent of males believed that males are harder workers than females.

e) One fifth of females supported that females are more organised (Office Duties) and more reliable than males.

f) With respect to management duties 42 per cent of males and 58 per cent of females considered males as equal to females. In addition, about 24 per cent of male and 20 per cent of female respondents answered 'don't know'.

Some of the views and explanations given by the respondents on the above issues are listed below.

1. Family Obligations

Women confirmed that their family obligations did not allow them to undertake more employment responsibilities. They were allotted with two jobs at the same time, since they were responsible for most family obligations as well as employment responsibilities. Generally women took time off to attend to sick children or other personal family matters.

The majority of men confirmed that women's family obligations were a barrier to their professional advancement. A few men (20%) supported that men must share family responsibilities with women since women often contributed to the financial security of the family.

2. Site Work

The majority of men and women supported the view that some contractors, especially the uneducated ones, were prejudiced against women working on site. Traditionally work on site has been considered as a male's domain and incompatible to a woman's nature. Women need to work hard to prove themselves and to be established in this new era of employment.

The following points were raised by almost 30 per cent of men and women respondents.

a) Women cannot assert their authority to subordinates.

b) Conditions on site can be hard and unsuitable for women to work.

c) Very few women can overcome difficult site conditions and perform their duties as well as men.

Women Civil Engineers involved with site work stressed the following :

a) Women working on site need to adopt behaviour and attitudes which are different from the feminine stereotype with which they have been brought up. They need to be properly dressed (to wear trousers and boots) in order to be able to supervise construction work.

b) Women's approach to subordinates is different to men's. They are more friendly and accessible, while men try to be bossy and distant.

c) The following are necessary prerequisites for successful site management : In depth knowledge of the theoretical and practical aspects of site work, to be positive, firm and to work hard.

3. Gender Role Expectations

a) A significant number of men and women responded that gender role socialisation was primarily responsible for giving priority to women's family obligations before employment duties. Men considered work as their first and ultimate priority. A woman Civil Engineer working at the same government Department as her husband stated :

> "Although we both go home the same time, I feel that it is not natural or ethical for my husband to help with domestic duties."

b) A small number of women supported the view that women are more tidy, more organised in office work and more reliable than men. They stated that women are careful and examine a situation thoroughly before making a decision, whilst men make quick decisions, often without considering all the factors.

4) Supervisor Choice
(Table 13, Appendix C)

The majority of male (66%) and female (76%) Civil Engineers and Technicians stated that they had no preference as to the sex of the supervisor. Males claimed that they prefer a man as their supervisor because they trust men more and they don't like to be subordinated to a woman. Females' comment on this aspect was that there is better working relationship between people of the opposite sex.

5) Job Satisfaction, Problems at Work and Expectations
(Table 13, Appendix C)

The majority of the sample seem to be satisfied with their employment (90% of males and 80% of females).

The respondents mentioned that their major problems were:

a) Low salary.
b) Pressure at work.
c) Long working hours.

The major expectations from work were:

a) Job satisfaction (68% of males and 72% of females).
b) High salary (32% of males and 14% of females).

6) Social Status
(Table 14, Appendix C)

A proportion of 62 per cent of the respondents took the view that the social status of men Civil Engineers was higher than that of women. Few women (8%) stated that the social status of women Civil Engineers was higher than that of men. The others considered that they were of equal status. Table 8.6 below lists the explanations given by the respondents with respect to the social status of men Civil Engineers being higher than that of women.

TABLE 8.6 : SOCIAL STATUS OF MEN CIVIL ENGINEERS BEING HIGHER THAN THAT OF WOMEN

Explanations Given by Male Respondents	Explanations Given by Female Respondents
1. Civil Engineering is a traditionally male dominated profession. 2. Men Civil Engineers are more reliable. 3. There are very few women Civil Engineers who are comparable to men.	1. Prejudices. 2. Men Civil Engineers are more appreciated and respected than women. 3. Women Civil Engineers did not actively pursue equality in the profession.

7) Different Problems between Men and Women at Work
(Table 14, Appendix C)

The majority of the respondents (90%) supported that women Civil Engineers and Technicians have more problems at work than men Civil Engineers and Technicians.

They expressed the opinion that women's professional advancement was hindered by the problems listed in Table 8.7 overleaf.

Table 8.7: PROBLEMS FACED BY WOMEN CIVIL ENGINEERS AND TECHNICIANS

Responses of Males	Responses of Females
1. Family responsibilities and obligations. 2. Women's nature. 3. Difficulty of acceptance of women's role on site.	1. Family responsibilities and obligations. 2. Prejudices. 3. Prejudicial treatment on site. 4. Women are required to prove themselves before they can be accepted professionally.

8) Greater Participation of Women in Civil Engineering (Table 14, Appendix C)

The sample group generally agreed that females' participation in Mechanical and Electrical Engineering professions was negligible, whilst there was significant participation in Civil Engineering.

The explanations given by the sample group for this variation were:

a) Civil Engineering in most cases requires less outdoor work than the other two specialisations.

b) Prejudices.

c) Civil Engineering is considered more compatible to a woman's nature.

d) The Mechanical and Electrical Engineering professions are male dominated.

Other reasons put forward by women were the poor employment opportunities offered to women in these professions and the misleading or poor career guidance given by the Ministry of Education.

9) Married Women and Employment Difficulties (Tables 15 and 16, Appendix C)

All women respondents and the majority of men (84%), were in favour of the employment of married women.

They supported the above opinion on the grounds that :

a) Employment helps towards the integration and social development of women.

b) Employed married women contribute to the family's financial security and they are useful and active members of the labour force.

c) Employment offers married women personal satisfaction and financial independence.

The employment of women with children less than 5 years old was considered as undesirable by 20 per cent of men and 4 per cent of women respondents. They felt that children need their mother and women should be employed only if the family needs financial support.

However, the majority of men (68%) and women (96%) agreed to the employment of women with children less than 5 years old provided the following conditions prevailed :

a) Maternity leave : A proportion of 40 per cent of women and 24 per cent of men were in favour of maternity leave of one or two years duration.

b) Day nurseries : 28 per cent of men and 26 per cent of women respondents suggested the provision of more and better organised State day nurseries in order to meet the needs and working hours of employed mothers.

c) Shorter or more flexible hours : 30 per cent of females and 16 per cent of males were in favour of shorter or more flexible hours for working mothers.

The sample group were asked to define their leisure activities and their spouse's occupation. In response to this question, the following issues surfaced :

a) Approximately 40 per cent of married men spend between 30 and 40 per cent of their leisure time in the care and development of their children. Some did the shopping and gardening.

b) Approximately thirty per cent of married men had second employment or over-time and could not therefore help in caring for the children or housework.

c) Another 29 per cent of the married men indicated that they help with children and housework because their wives had demanding occupations in terms of hours and responsibilities.

d) The majority of married women (67%) spend about 70 to 90 per cent of their leisure time doing housework and caring for children.

e) Approximately 25 per cent of married women work extra hours from 20 to 70 percent of their free time. They mentioned that they spend the rest of their free time with their children and housework.

8.1.1.4 Results from Section D of the Questionnaire

1) Role-modelling in choosing Civil Engineering (Table 17, Appendix C)

The majority of the women respondents (64%) stated that they were influenced in their choice of Civil Engineering profession by their knowledge of other women Civil Engineers.

2) Problems Faced by Women Civil Engineers and Technicians (Table 17, Appendix C)

Approximately half of the women respondents indicated that as women they faced specific problems. These are summarised as follows :

a) Family responsibilities and obligations prevent women devoting time for professional development.

b) Women are not normally appointed for site work. Employers prefer men for site work.

c) Male workers on site are prejudiced against women.

3) Discrimination against women at the place of work (Table 18, Appendix C)

a) Forty per cent of the women respondents believed that they had not been appointed for a job because they were women.

b) Half of the women respondents supported that they had been discriminated against in their working experience. They mainly were discriminated against by :

1. An employer (20%). The female respondents explained that they were discriminated by an employer with respect to work on site, assignment of responsibilities, promotions and salary.

2. By male workers (22%). Male workers employed on site as manual labour do not normally accept women as site supervisors.

3. By female workers (8%). Approximately 8 per cent of the respondents indicated that they had been discriminated against by women in subordinate positions who did not like to be managed by women.

8.1.2 Analysis of Questionnaires Addressed to the Employers of Civil Engineers and Technicians

From detailed examination of the findings of the questionnaires the following salient issues arose.

Section I

1) Characteristics of establishments.

2) Characteristics of person being interviewed.

Section II

1) Number of employees and senior posts.

2) Recruitment and promotion practices.

3) Family responsibilities.

4) Trade Unions.

Section III

1) Employment duties and basic wages.

2) Tasks and problems.

3) Behaviour and general performance at work.

4) Married women and employment difficulties.

8.1.2.1 Results from Section I of the Employer's Questionnaire

1) Characteristics of Establishments
(Table 19, Appendix C)

The sample group consists of five establishments in the Public sector, 10 Consultancy firms in Architecture and Civil Engineering and 10 Development Construction companies.

2) Characteristics of person being interviewed
(Table 20, Appendix C)

The majority (88%) of the persons interviewed under this category were males. The sample group consisted of 76 per cent Civil Engineers, 16 per cent Technicians (HTI graduates in Civil Engineering) and 8 per cent Secondary General and Technical School graduates. They were mainly in Managerial positions. More specifically, Head of Departments (40%), Owner Managers (28%), Assistant General Managers (8%) and Partners (24%).

8.1.2.2 Results from Section II of the Employer's Questionnaire

1) Number of employees and senior posts
(Table 21, Appendix C)

Since the number of women in Civil Engineering is smaller than that of men, it is natural that most of the surveyed establishments have a greater number of men than women in their Technical departments.

Few establishments employed more than 4 women Civil Engineers (16%) and Technicians (28%), compared to a considerable number of establishments which employed 5 to 60 Civil Engineers (48%) and Technicians (60%).

2) Recruitment and promotion practices (Tables 22 and 24, Appendix C)

a) Education, experience and personality appeared to be the three most important characteristics for the recruitment and promotion of employees to Civil Engineering posts.

b) The majority of the employers responded that they had male and female candidates with the same qualifications applying for the same post, but in more than 40 per cent of the cases women candidates were not considered. The main reasons given by the employers were :

1. Men are more experienced for site work.
2. Men are willing to work extra hours.
3. Men are willing to travel to other towns.

3) Family responsibilities (Table 23, Appendix C)

a) All respondents supported that they did not considered family responsibilities as a reason for precluding the appointment of married men in Civil Engineering posts in their organisation.

b) A small number of employees (20%) answered that family responsibilities influenced negatively the candidature of married women without children, whilst a greater proportion (40%) supported the above for married women with children.

c) All the employers agreed that family responsibilities did not influence the performance of married men with no children. In a few cases (30%) they supported that family obligations hindered the performance of married women with no children.

d) The majority of the employers (70%) responded that family responsibilities reduced the performance of married women with children (70%). A small proportion (20%) took this view for married men with children.

4) Trade Unions
(Table 25, Appendix C)

Trade Unions were represented in the majority of the establishments (80%) in the sample group.

8.1.2.3 Results from Section III of the Employer's Questionnaire

1) Employment Duties and Basic Salaries
(Table 26, Appendix C)

The majority of the respondents (64%) replied that men and women have similar responsibilities and duties. More than 50 per cent of the above mentioned respondents indicated that men working in their establishments achieved higher basic salaries than women.

The major reason given by the respondents were :

a) Women are reluctant to take responsibilities.

b) Women are willing to work for lower salaries.

c) Women do not normally work above their contractual commitments.

d) Women are unable to cope with the demands of site work.

2) Tasks and problems
(Table 27, Appendix C)

a) Over 70 per cent of the employers (72%) replied that there are tasks for which men are considered more suitable than women, such as: Contract Management and Personnel Management. The employers supported their contention that men are more suitable than women in certain tasks with the following explanations :

1. Women cannot normally withstand difficult conditions on site such as those arising from the construction of highways and dams.
2. Women find it difficult to direct and supervise site and other personnel effectively.

b) More than half of the employers (56%) indicated that tasks such as Structural Design and Quantity Surveying, are considered more suitable for women.

They further clarified this point by pointing out that for office work women are better than men, because they are more patient, more punctual and more reliable. They study a problem in depth before making a decision. Women are also considered to be more tidy and more organised.

c) Almost all respondents (92%) indicated that they had no difficulties with men in their employment. This was not the case with women, where 60 per cent of the employers stated that women presented the following problems :

1. Reduced performance due to family obligations.

2. Absence during maternity leave.

3) Behaviour and general performance at work (Table 28, Appendix C)

a) The majority of the employers considered women equal to men, in most of the areas of work defined in Table 28.

b) Women were considered to be inferior to men in the following areas listed in Table 8.8 below :

TABLE 8.8 : AREAS OF WORK WHERE MEN CIVIL ENGINEERS AND TECHNICIANS WERE CONSIDERED BY THE EMPLOYERS AS BETTER THAN WOMEN

Area of Work	Employers' Responses %
1. Willingness to work over-time	56
2. Travelling to other towns	60
3. Absenteeism	56
4, Work on site	64
5. Contractor's approval	60
6. Self confidence	52
7. Ambitious	60
8. Priority to work	64

The results are very similar to the answers of males and females, discussed in this chapter under Section C (item 3) of the Analysis of the Questionnaires addressed to male and female Civil Engineers and Technicians. The major reasons given by the employers for considering men better than women were :

1. Fewer family responsibilities.
2. Readiness to work on site.
3. More readily gain approval from contractors.

c) A small proportion of the employers considered women as being better than men in areas such as, organisation, reliability and relations with clients.

4) Married women and employment difficulties (Table 29, Appendix C)

Finally the employers were asked whether they approve of women having jobs at the same time as they have children less than five years old.

a) The majority of the respondents (80%) gave a positive answer, whilst (20%) supported that mothers should stay home and raise their children.

b) A considerable percentage (60%) approved the employment of women with small children with certain conditions. They mainly claimed that:

1. State run Day Nurseries should be more organised and extend their hours to meet the needs of working mothers.

2. New pre-elementary schools should be established in order to accept children of ages less than 4.5 years old.

c) Very few employers were in favour of maternity leave of one or two years.

8.2 SURVEY 2

8.2.1 Analysis of Data Obtained from the Telephone Survey

The sample group consisted of 155 Civil Engineers, 124 males (80%) and 31 females (20%). Information was only available on the employment location of 77 per cent of males and 81 per cent females. Figures 8.3 and 8.4 in pages 191 and 192 present the findings of the survey. Further analysis of the results obtained from this survey indicate that :

a) The majority of male Civil Engineers (36.4%) were self employed. A proportion of 28.2 per cent were employed by the Public sector and a smaller percentage of 16.6% were employed by the Private sector.

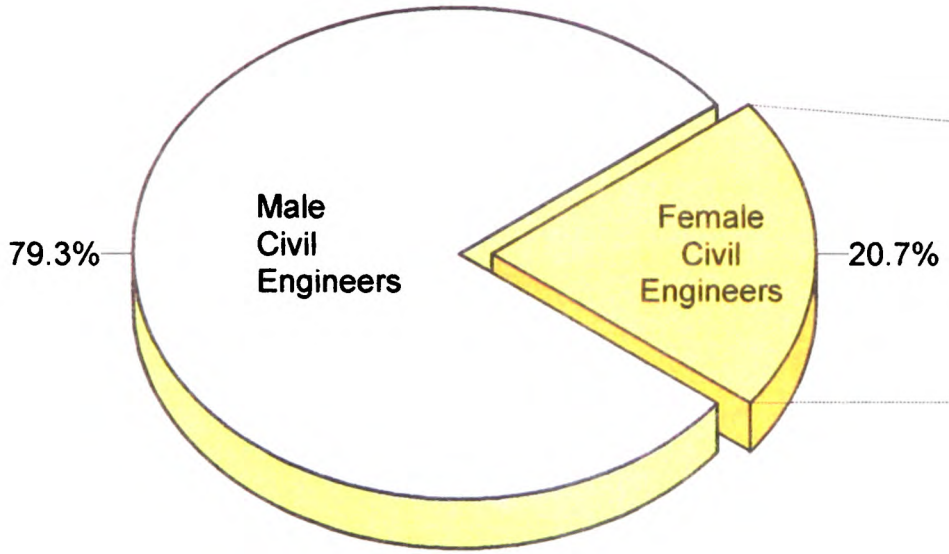
b) Female Civil Engineers constituted 20.7 per cent of the total number of male and female respondents. A significant percentage of 39.6% were employed by the Public sector and a percentage of 28% were employed by the Private sector. A small percentage of 15.9% were self employed.

c) A percentage of 14.5 per cent of the males and 8.2 per cent of females were employed abroad.

d) A small proportion of the respondents (4.2% of males and 8.2% of females), owing to various reasons, were not employed as Civil Engineers.

EMPLOYMENT SITUATION OF MALE & FEMALE CIVIL ENGINEERS REGISTERED DURING 1979 & 1980

Male and Female Civil Engineers



Female Civil Engineers

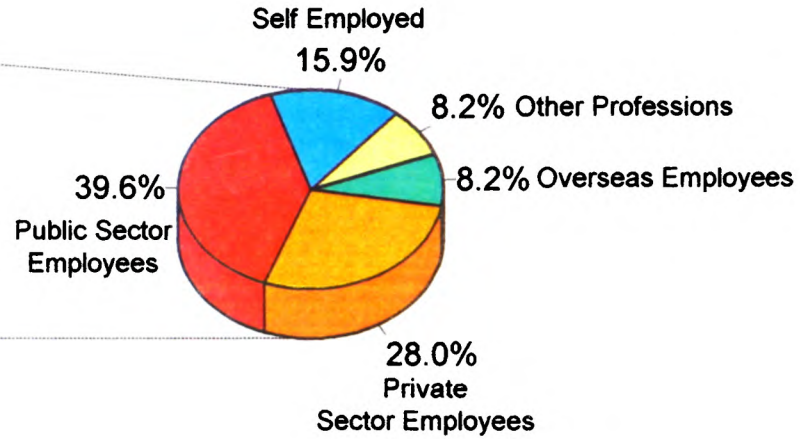


Figure 8.3

EMPLOYMENT SITUATION OF MALE & FEMALE CIVIL ENGINEERS REGISTERED DURING 1979 & 1980

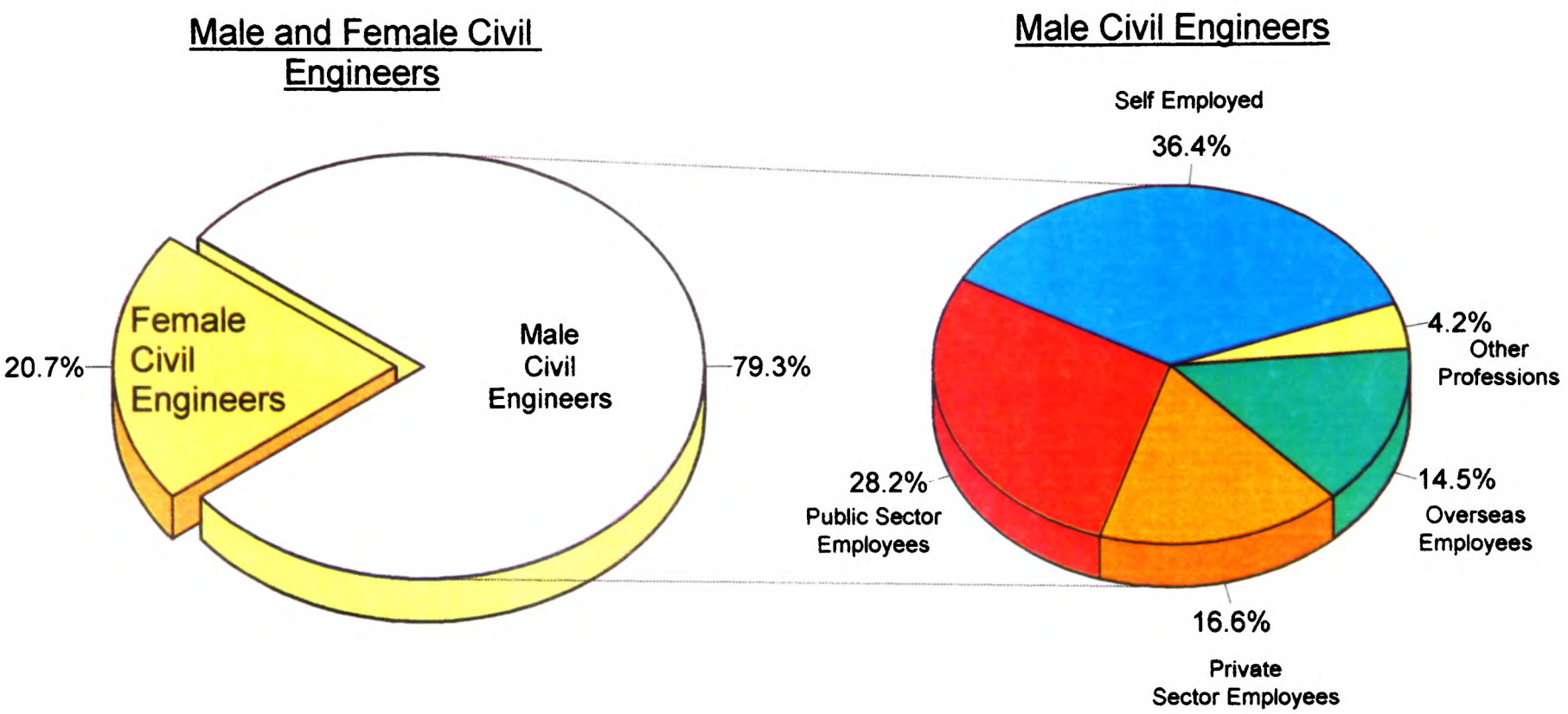


Figure 8.4

8.3 SURVEY 3

Informal interviews with the sample group obtained qualitative information on the following issues :

a. To establish the factors which account for the growth in the male and female participation in Civil Engineering.

b. To investigate the status of male and female Civil Engineers.

c. To explore the attitudes at work of women Civil Engineers involved with site work.

Information obtained on the above issues was presented in Chapter 7 (in the investigation of the position of the Civil Engineer in Cyprus) and Chapter 8 (in Survey 1).

In addition information obtained from females within the sample group is used in order to draw a brief sketch of the evolution of Cypriot women in the Civil Engineering profession.

8.3.1 The Evolution of Cypriot Women in Civil Engineering

The first Cypriot woman Civil Engineer (Ms Naede Charalabidou) graduated at the National Metsovio Polytechnio in Athens in 1960; only two females graduated in Civil Engineering from the Polytechnic. Her exposure to the construction of buildings, as her father was a Building Contractor, was influential on her decision to study Civil Engineering.

The second woman Civil Engineer (Ms Stella Laoure) graduated from Moscow University in 1968. She was among the first three women who attended the course in Civil Engineering.

By 1974, 13 women Civil Engineers were registered by the Council of Registration of Architects and Civil Engineers in Cyprus. (8 studied in the Eastern European, 4 studied in Greece and 1 in the United Kingdom). The majority of them are employed by the Public sector, (5 in the Secondary Technical Education and 4 in other Departments of the Public sector).

In 1971, 3 females were included among the first 24 graduates in Civil Engineering in the HTI. By 1974 their number came to 14. Most of them are employed by the Public sector.

After 1980 there was a rapid increase in the number of women graduating annually from Civil Engineering specialisations, locally and abroad.

The above increase was a consequence of the effects of the Turkish invasion which led to :

a. The socio-economic changes which resulted in an increase in the number of male and female secondary students attending tertiary education.

b. The construction boom, during the post invasion years.

Since 1987 there has been a reduction in the number of women in Civil Engineering, locally and abroad, which is attributed to the decline in the construction industry. In 1992, only 8 women Civil Engineers were registered while 11 women graduated in Civil Engineering in HTI.

By 1992, a total of 294 women Civil Engineers, compared to 1338 men, were registered by the Council of Registration of Architects and Civil Engineers. The total number of HTI women graduates in Civil Engineering was 361 compared to 547 men.

CHAPTER 9

DISCUSSION AND CONCLUSIONS

The conclusions drawn from this research study are summarised and described below on a chapter by chapter basis.

9.1 CYPRUS -ITS HISTORY DEMOGRAPHY AND ECONOMY

The chequered history of Cyprus shows that the Cypriot people have been subjected to cultural and political influences from many civilisations dating from the 11th century by the Achaean Greeks to the British colonial occupation of the island until 1960.

The most profound recent cultural political and economic impact was caused by the invasion and occupation of Cyprus by Turkey in 1974. One of the consequences of the invasion was the change in the demography of Cyprus by the enforced segregation of the two communities and the influx of Anatolian Turkish settlers in the occupied sector of Cyprus.

The study shows that the rate of growth of the population of Cyprus is decreasing and it is estimated at about one per cent per annum. This decline in population growth contributed to the involvement of women in the labour force of Cyprus.

The economy of Cyprus up to 1960 was based essentially on agriculture and light industry.

Since independence there has been a gradual transformation of the economy and it is now predominantly based on trade and services. Cyprus is considered an important financial centre.

9.2 THE POSITION OF WOMEN IN CYPRIOT SOCIETY

Historically in Cyprus, as indeed in other mediterranean countries there were different roles for men and women in society. The man was considered the public representative of the family and the woman's role was primarily in the house.

The social status and position of Cypriot women was influenced and to some extend determined by the religious beliefs of the people and the support of these beliefs by the church.

Sex role socialisation in Traditional Cypriot society was manifested in the different ideas as to what constituted proper behaviour for women and men. Popular sayings, defining the roles of men and women, are an indication of gender role behaviour expectations.

In traditional Cypriot society a man was regarded as socially independent, while a woman could be socially established through a man -a father or a husband; it was through marriage, that a woman could fulfil her gender role aspirations -that of mother and housewife.

Changes in the pattern of the Cypriot family reflect changes in the structure of Cypriot society. The consequences of the Turkish invasion and the subsequent enforced economic and social upheavals accelerated the change in the society and family model from traditional to transitional.

The contemporary Greek Cypriot family appears to be in a transitional stage where more democratic principles prevail. The autocratic right of the man, imposed by the traditional values and attitudes, is gradually being replaced by the participation of the wife and of the children as regards family matters.

In traditional as well as contemporary Cypriot society, a double standard has been used to evaluate male and female pre-marital sexual behaviour.

The involvement of women in education and their active participation in the labour force, contributed to their changing attitude towards certain social and economic institutions, such as marriage and dowry.

The Cypriot woman seems to be in a transitional stage towards her moral, psychological, social and economic liberation, while the Cypriot man appears to practise methods entailing more cooperation, equality and understanding towards women.

The participation of women in Cypriot public life is generally poor, because their attitude is influenced by their traditional gender role expectations.

In Cypriot society the man maintains the leadership within the family and society, with women confined to a secondary role. This is evident in all the aspects of relations between the two sexes, i.e. employment, education, membership of organisations, leisure activities.

9.3 EDUCATION

The education system of Cyprus was substantially improved after the independence of Cyprus in 1960. Education in Cyprus is highly respected and appreciated. Statistical information shows that Cypriot attendance in educational institutions at all levels is favourably compared to the corresponding figures in developed countries.

Illiteracy was higher among females and there has been a remarkable increase in the number of women attending education during the last thirty years. After 1970 a similar percentage of boys and girls proceeded to secondary schools. The number of girls in tertiary education is still less than that of boys despite its considerable and steady increase.

Education played a decisive role in the change of women's social status and position in society. Through education women acquire the means for their personal, cultural and professional improvement.

Although there are no written regulations implying gender differences in the system of education there is still a hidden curriculum for gender which permeates the entire system: i.e. the structuring of schools and teachers' gender expectations.

In secondary education the participation of girls in the Technical and Vocational courses is low. Girls are predominantly attending courses in the Commercial and Secretarial fields. At tertiary level different fields of education are followed by students of the two sexes.

Economic changes and their consequent effects on the employment opportunities offered in the developed sectors of the economy influenced the flow of enrolments of students in Engineering Technology.

During the 1980s, Engineering Technology ranked first in the preferences of students attending tertiary education abroad. Females constituted 10 per cent of the total enrolments in Engineering Technology, locally and abroad.

Although the distribution of males in the major specialisations of Engineering Technology was influenced by economic changes, it appears that the distribution of females was affected by other factors.

The number of female Civil Engineers has always been very high, while the corresponding number of males dropped considerably, especially after 1985. Female participation in Electrical and Mechanical Engineering has been very low whilst the male participation in these specialisations was significantly higher.

This variation was particularly apparent after 1985, when the decline in the construction boom and the increasing use of modern technology in industry offered employment opportunities to Electrical and Mechanical Engineering graduates.

9.4 EMPLOYMENT

During the last 30 years there has been a considerable increase in the participation of Cypriot women in the labour force. In 1992, women comprised 38.7 per cent of the total economically active population.

Before 1960, agriculture was the sector with the largest representation of women in employment, where women normally worked as unpaid family workers.

The decline of agriculture and the socio-economic changes brought about after the independence of Cyprus enabled the participation of women in other sectors of the developing economy.

The ratification of most of the United Nations and the International Labour Office conventions contributed to the increase of the participation of Cypriot women in the labour force.

Cypriot women are concentrated in female dominated occupations such as clerical, sales and services. There is a well defined occupational segregation of the sexes which is amongst the most marked in Southern European countries.

Market wage was the main incentive for women to enter the labour force, while caring for children and household work were the main constraints. In addition household duties were responsible for the low occupational expectations of women.

In Cyprus, the earnings of women are lower to the earnings of men in all occupational groups. In 1992, the ratio of the monthly female earnings as a percentage of male's , excluding over-time, was 66 per cent.

Gender role expectations as well as employers' prejudices seem to influence female lower earnings and status compared to that of males.

9.5 THE DEVELOPMENT OF CIVIL ENGINEERING IN CYPRUS

In Cyprus, the political and socio-economic changes had a direct effect on the development of the construction industry and increased the demand for Civil Engineers. From 1970, particularly during the early post invasion years in 1976, there has been a rapid growth in the construction industry and a significant increase in the number of active Civil Engineers.

The number of Civil Engineers continued to increase at a high rate until the early 1980s. However, subsequent decline of the construction industry created a disparity between supply and demand. This resulted in a noticeable reduction in the employment opportunities available to Civil Engineers.

Women Engineers entered the Civil Engineering profession in 1960, but their number has increased significantly in subsequent years. By 1992 women Civil Engineers comprised 18 per cent of the total number of Civil Engineers registered by the Council of Registration of Architects and Civil Engineers.

In Cyprus and indeed in many other countries the status of the Civil Engineer is high and consequently good employment prospects exist. Civil Engineers rank second in the ladder of highly paid employees with Engineering Technicians in the third place. The earnings of Civil Engineers and Technicians in the Private sector are lower than in the Public sector.

Women's earnings are lower than males in both sectors. In the Private sector the ratio of female to male monthly earnings is much lower than in the Public sector, while there is a marginal difference between the wages of female Civil Engineers and male Technicians. The late entry of women in the Civil Engineering profession and the consequent reduced promotion opportunities, is a basic factor for the difference in the wages of male and female Civil Engineers and Technicians. In the Public sector there is equal remuneration for males and females since 1960.

The development of the construction industry and the use of modern Technology contributed to the higher increase in the number of Civil Engineers compared to Architects. In Cypriot society there is no distinction between the duties of Architects and Civil Engineers.

In 1992, the Technical Chamber was established and supported by legislation with the objective of defining the duties, obligations and responsibilities of Architects, Civil Engineers and Engineers of other specialisations.

It is evident that during the last 20 years the Cypriot Civil Engineer acquired a high level of academic qualifications, professional development and wide ranging experience in the design and construction of major Civil Engineering and Building projects. These obviated the need for the appointment of foreign consultants which was previously the case.

9.6 ANALYSIS OF RESULTS

The following major issues arose from the analysis of Survey 1, (questionnaires addressed to male and female Civil Engineers and Technicians and their employers), Survey 2 (telephone survey) and Survey 3 (informal interviews).

a. Factors which accounted for the growth of male and female participation in Civil Engineering

The employment opportunities offered by the developing construction industry, was the major factor which influenced male and female secondary education students to choose Civil Engineering specialisation.

Another major factor was the education opportunities offered by HTI :

1. The HTI offers high quality tertiary education free.
2. The HTI graduates are highly respected by professionals within the Cyprus market. They are normally offered good employment terms with prospects.
3. Many parents prefer their children, particularly females to study in Cyprus in their own environment and within the relative control and protection of their parents.
4. Many prospective Civil Engineers consider the HTI as the first step towards higher education.

In addition, males' exposure to the construction industry (through employment or graduating from Technical schools), appears to influence their decision to pursue a career in Civil Engineering.

The fact that in Cyprus at present there is no clear distinction between the role of the Architect and the Civil Engineer, has influenced many women to follow Civil Engineering.

b. Status of Women Civil Engineers and the Factors which Accounted for any Differences

The majority of the men and women respondents believed that the social status and the position of men Civil Engineers is higher than women's. They mainly attributed this difference to the fact that Civil Engineering is a traditionally male dominated profession and men Civil Engineers are more appreciated and respected than women.

The earnings of women Civil Engineers and Technicians in the private sector are less than males. Women Civil Engineers are normally employed in posts of secondary importance and very few women actively pursue equality in the profession. This can be attributed to the employer's prejudices and to the fact that women seek employment with less responsibilities, in order to be able to fulfil their double role of family earners and family reproducers.

The results of the Survey on the employment location of Civil Engineers registered during 1979 and 1980, indicated that the majority of men Civil Engineers were self employed while the majority of women were employed by the Public sector.

There are no women holding managerial posts in any of the major Public and Private establishments of the Construction industry.

c. Behaviour and general performance at work

The majority of the respondents considered women Civil Engineers equal to men in areas of work like efficiency, office duties, reliability, hard work, lateness, change of employer and relations with managers, clients and other employees.

Men Civil Engineers were considered better than women in the following issues relating to employment : Over-time, travelling to other towns, absenteeism, work on site, contractor's approval, self confidence ambitious and priority to work.

The male and female respondents as well as their employers believed that family obligations hinder the professional evolution of female Civil Engineers and Technicians. The majority of the employers believed that family obligations reduce the performance of women Civil Engineers.

Although a considerable number of males appeared to help with the raising of children and to a certain extent with housework, women were mainly responsible for these duties. In addition, the respondents stressed the need for the provision of more day nurseries with extended working hours in order to meet the needs of employed mothers.

Males and females were influenced by their gender role expectations, in the execution of their employment duties. Females considered their family obligations as their first priority and they were mainly employed in less demanding positions in terms of hours and responsibilities.

On the contrary, males considered work as their first priority and they were willing to work above their contractual commitments and to travel to other towns, even to the detriment of their family and social life.

Women were considered inferior to men regarding work on site. The employers assigned work on site to men. They believed that hard conditions on site and the handling of subordinates was difficult and unsuitable for women. Very few women proved that they can perform their duties on site as well as men.

Women Civil Engineers and Technicians were preferred for office work duties where they were considered as equal and sometimes better than men.

About half of the female respondents were discriminated against in their work experience by their employers with respect to recruitment, work on site, promotions and salaries. Women Civil Engineers and Technicians were also discriminated by other employees, especially by uneducated craftsmen on site, who are reluctant to accept them.

There were more differences in the duties and work behaviour of men and women Technicians than men and women Civil Engineers. Apart from Site Management there were no differences between the tasks performed by men and women Civil Engineers. Women Technicians were mainly employed in the office and their duties were principally Quantity Surveying and Technical Drawing, while men Technicians mostly worked on site.

Women have a different approach towards subordinates than men. They are more friendly and more accessible.

The results of the survey indicated that traditional concepts, employers' prejudices and family obligations hinder women Civil Engineers to pursue professional equality with men Civil Engineers.

9.7 SUGGESTIONS FOR FURTHER RESEARCH

The survey carried out as a part of this research covers women Civil Engineers who are currently employed. According to the last Registration of Establishments, in 1989 the number of employed women Civil Engineers was 104 compared to a total of 255 women registered by the Council of Architects and Civil Engineers. Although a number of women Civil Engineers may be classified under a different occupational category, there may be cases of unemployed or part time employed women.

One proposal for further research could be the investigation of the employment situation of the total number of women Civil Engineers registered by the Council of Registration of Architects and Civil Engineers. In addition, to investigate the attitude of younger women Civil Engineers compared to the attitude of the older generation of women Civil Engineers in order to identify differences which could be attributed to changes in the family, education and the society of Cyprus in general.

The increase in the participation of women in the labour force resulted in a change in the definition of gender roles in the family, where a greater number of men appears to help with housework and especially in the rearing of children. In addition a higher proportion of children aged less than 5 years old are under the care of state and private Nursery schools.

A second aspect for further study would be the investigation of the positive and negative effects of women's increasing rates of employment on family relations, on the rearing of children and on men's and women's personal development.

Women are mainly employed in secondary and low-paid occupations. Women who enter high status occupations and traditionally male dominated areas of employment are considered as less important than men while they are remunerated less than men in the private sector. A third aspect for further research would be the investigation of the general effects of the supply of low paid labour by women on the economy.

BIBLIOGRAPHY

Antonis, B. et. al (The Cambridge Women's Study Group) (1981) *Women in Society*, Virago Press, London.

Apostolou, S. et al (1989) *Child Upbringing in Cyprus*, Department of Social Welfare Services Publications, Nicosia.

Attalides, M. (1981) *Social Change and Urbanization in Cyprus*, Social Research Centre Publications, Nicosia.

Balswick, J. (1973) *The Greek Cypriot Family in a Changing Society* (unpublished, Department of Social Welfare Services), Nicosia.

Beddoe, D. (1983) *Discovering Women's History*, Pandora Press, London.

Beddoe, D. (1989) *Back to Home and Duty*, Pandora Press, London.

Brannen J. and Wilson G. (1987) *Give and Take in Families*, London.

Bush M.D. et al (1987) Social Rights: Education, *The Trapped Woman*, Sage Publications, London.

Casley, J.D. and Lury, A.D. (1981) *Data Collection in Developing Countries*, Clarendon Press Oxford.

Delphy, Ch. (1983) *Close to Home*, ed. Leonard, D. London.

Dex, S. (1988) *Women's Attitudes Towards Work*, The MacMillan Press, Hong Kong.

de Vaus A.D. (1986) *Surveys in Social Research*, George Allen and Unwin Publishing Ltd. London.

Dixon R.B. et. al. (1987) *A Handbook of Social Science Research*, Oxford University Press, New York.

Eichler, M. (1980) *The Double Standard*, Croom Helm, London.

European Conference on Women (1986) *Women Challenge Technology*, University of Aalborg, Denmark.

European Community Parliament (1984) *The Position of Women in Europe*, Geneva.

Filippou, L. (1930) Greek *Education in Cyprus during the Ottoman Regime*, Mouson Press, Nicosia.

Fink, A. and Kosecoff, J. (1985) *How to Conduct Surveys*, Sage Publications, London.

Frazer, A. and Moutoux K. (1986) *Forward Looking Strategies for the Advancement of Women to the Year 2000,* (UN World Conference on Women held in Nairobi, 1985), University of Minnesota.

Greed, C. (1991) *Surveying Sisters : Women in a Traditional Male Profession,* Routledge, London.

House, J.W. (1985) *Cypriot Women in the Labour Market,* ILO Publications, Geneva.

IEEE Education Society (1985) Women in Engineering : A Decade of Progress, 1975-1985, *IEEE Transactions on Education,* Vol. E-28, New York.

ILO Publication (1986) *Women at Work : Women Workers and Development,* Geneva.

Ioannou, V.E. (1991) *The Exploitation of Economically Inactive Female Population of Cyprus,* ed. Industrial Training Authority of Cyprus, Nicosia,

Kaklamanaki, R. (1984) *The Position of the Greek Woman in the Family and Society,* Kastaniotes Press, Athens.

Macciochi, A.M. (1984) The position of Women in Decision Making Centres, *The Position of Women in Europe,* European Council Publications, Strasburg.

Markides, C.K. et al (1978) *LYSI, Social change in a Cypriot Village*, Social Research Centre Publications, Nicosia.

Mediterranean Women Study Institute, (1985) *Mediterranean Women in Development*, (Conference), Athens.

Merriam, E. et al (1966) *The Challenge to Women*, ed. Farber, M.S. & Wilson, R. New York.

Mousourou, M.L. (1985) *Women in Occupation and Family*, Hestia Press, Athens.

Mylona, L. et al (1982) *The Cypriot Woman*, Proodos Press, Nicosia.

National Committee of the International Child Committee of Cyprus (1982), *The Structure of the Cypriot Family and the Position of the Adolescent in the Family*, Nicosia.

New Technologies Work Group (1985) *Women and Technology*, Italy.

Nikita, S.E. (1975) *Cypriot Woman Rise and Downfall*, Cyprus Social Research Centre Publications, Nicosia.

Oakley, A. (1976) *Housewife*, Penguin Books, London.

Oakley, A. (1981) *Subject Women*, Fontana Press, London.

Papazoglou, M. (1984) *Family - School Relations*, Epikerotita Press, Athens.

Payne, G. et. al. (1981) *Sociology and Social Research*, London.

Peristiany, G.J. (1976), *Mediterranean Family Structures*, London.

Prodromou, G. (1986) Greek *Education in Cyprus during the British Regime*, Zavallis Press. Nicosia.

Pyrgou, M. *Matriarchy - Patriarchy*, Proodos Press, Nicosia.

Rangou, E. (1984) The Cypriot Woman during the 18th and 19th century, *Life in Cyprus during the 18th and 19th century Nicosia*, publication of Nicosia's Municipality, Nicosia.

Reeves, K.T. and Harper, D. *Surveys at Work*, McGraw-Hill, London.

Sharpe, S. (1976) *Just Like a Girl*, Penguin Books, London.

Spender, D. and Sarah, E. (1980) *Learning to Loose*, London.

Szinovacz, E.M. (1977) *The Situation of Women in Austria, Economic and Family Issues*, The Pennsylvania State University, Austria.

Taylor, K.B. (1970) *A Report on Three Community Studies in Cyprus*, (unpublished, Department of Social Welfare Services), Nicosia.

Walby, S. (1986) *Patriarchy at Work*, Polity Press, Oxford.

Xioutas, P. (1984) *Sayings of Cypriot People*, Archbishop Makarios III Foundation Publications, Nicosia.

Xiradaki, K. (1988) *The Feminist Movement in Greece*, Glaros Publications, Athens.

Zucconi, A. *(1968) The Responsibilities of Women in Social Life*, Council of Europe Publications, Strasbourg.

APPENDIX A

Appendix A includes a Map of Cyprus, prepared by the Department of Lands and Surveys Cyprus, in May 1975. It presents the distribution of population of Cyprus by ethnic group, in 1960 and explains the positions of the Turkish forces, when they invaded Cyprus, in July and August 1974.

From 1960 to the present day

THE CYPRUS REPUBLIC

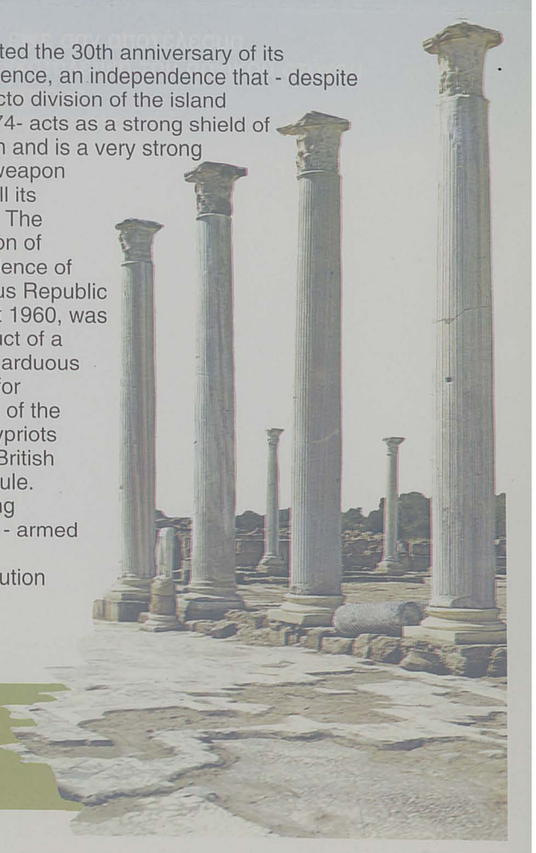
Cyprus, though comparatively small in relation to the surrounding countries, was destined to play a very important role in the history of mankind and more specifically in the history and civilization of the Eastern Mediterranean. Its advantageous geographic location - at the crossroads of three continents and at the meeting point of great civilizations - has been one of the reasons for the historically significant role that Cyprus has played throughout the centuries. At the same time this has also been the cause for many of the disasters and calamities that have befallen her. Situated at the north-eastern end of the Mediterranean, it has an area of 9.251 sq. kilometres and a population of about 718.000. According to the population census of 1960, 81,6% were Greek Cypriots, (including Maronites, Armenians, Latins) and 18,4% were Turkish Cypriots out of a total of 573.566 inhabitants.

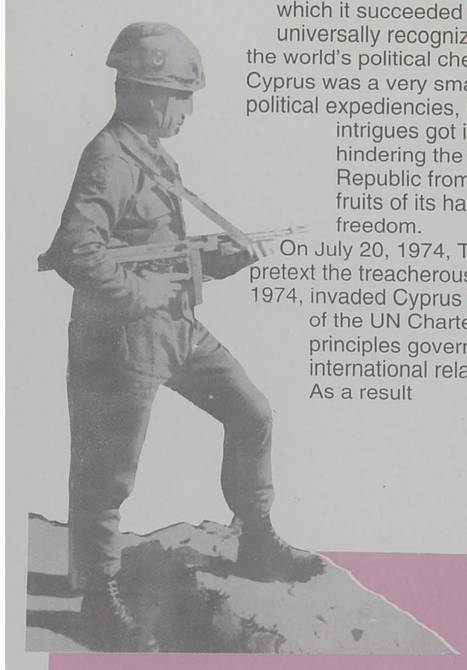
Its history is one of the oldest recorded in the world running back to the 7th millenium B.C. Settled by Mycenaean Greeks in the 12th century B.C. and later by the Achaeans, Cyprus evolved into a flourishing centre of Mycenaean-Achaean civilization. Because of its strategic position and natural wealth it became the pawn of various powers that held sway over the region at one time or another - the Assyrians, Egyptians, Persians, Ptolemies, Romans, Arabs, Francs, Venetians, Ottoman Turks and the British. Each of these conquerors left their mark. Nevertheless the island's character, history and culture have remained predominantly Greek to this day.

Throughout Cyprus' turbulent history the Cypriots have managed to assimilate in a most creative way the various influences they have received. Evidence of this is the magnificent pottery and artefacts admired all over the world, covering most historical periods. In fact the cultural heritage of Cyprus is truly impressive: there are ruins of ancient settlements, Greek temples and theatres all over the island. Also splendid monuments of the Hellenistic and Roman times, Byzantine monasteries and churches decorated with exquisite frescoes and mosaics and medieval monuments of great architectural value.

The fact that the ancient town of Paphos as well as nine Byzantine churches in the Troodos mountains are included in UNESCO's World Heritage List, is a recognition of the island's historic role and contribution to European culture and civilization. It is also a tribute to and a recognition of the Cyprus government's constant and painstaking efforts to preserve and maintain Cyprus' cultural heritage.

Cyprus is today an independent Republic. In 1990 it celebrated the 30th anniversary of its independence, an independence that - despite the de facto division of the island since 1974- acts as a strong shield of protection and is a very strong political weapon against all its enemies. The declaration of independence of the Cyprus Republic in August 1960, was the product of a long and arduous struggle for liberation of the Greek Cypriots against British colonial rule. The young Republic - armed with a Constitution characterized by experts as a «legal nightmare» - fought valiantly, sometimes against great odds, for the survival of its independence and for the achievement of progress and welfare for the new State; a task in which it succeeded as it is universally recognized. However, on the world's political chess-board Cyprus was a very small pawn. Foreign political expediencies, interests and intrigues got in the way, thus hindering the young Republic from enjoying the fruits of its hard-earned freedom.





On July 20, 1974, Turkey, using as a pretext the treacherous coup of 15 July 1974, invaded Cyprus in violation of the UN Charter and all principles governing international relations. As a result approximately 37% of the island was occupied (the wealthiest part, representing 70% of the economic potential), 40% of the Greek Cypriot population was displaced and thousands of people, including civilians were killed, ill-treated, or went missing.

The blow was heavy. In a matter of days the toil of so many years was destroyed. Byzantine churches, monuments and antiquities were destroyed or looted and many items were smuggled abroad. The destruction of the cultural heritage of Cyprus that reaches back to the 7th millenium B.C. and which sadly continues to this very day, is without precedent. Despite the strong protests of the Cyprus Goverment the history of millenia in the occupied part of Cyprus is being wiped out. After four centuries of coexistence in mixed villages, towns and places of work, the two main communities of the island - Greek Cypriots and Turkish Cypriots - were separated and alienated without any prospect of contact and cooperation.

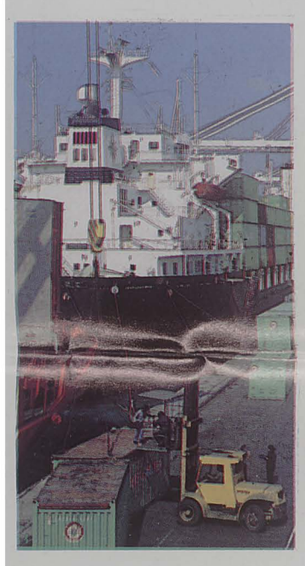
However, nineteen years after the invasion and despite the serious intercommunal problems and the continuing occupation, the Republic of Cyprus can boast significant achievements in all fields. Having to cope with the rigid provisions of its constitution, the Republic managed to organize a political pluralistic system based on modern European models, which, utilising the experiences gained, evolved into a system comparable to the most democratic systems of today. Presidential democracy has been established as the system of government while separation of powers between the Executive, the Legislative and the Judiciary has been consolidated.

In the economic sector the progress achieved during these years was impressive. In 1960 the Cyprus economy, which was mainly agricultural and underdeveloped, depended to a great extent on unstable exogenous factors, such as exports of minerals and the military expenditure of the colonial Government. The creative contribution of the governments which ruled the country since 1960, the indicative planning methods so successfully applied, the sense of responsibility of the social partners and above all the industriousness and toil of the Cypriot people, rapidly transformed the economic and social scene, so that the progress of Cyprus' competitive and export-oriented economy is based today on a broad spectrum of activities covering all economic sectors, such as tourism, professional and other services, industry and agriculture.

Nevertheless it is the services sectors in general which have grown most rapidly. Today about 66% of the national income is generated from the services sectors compared to about 51% in 1961.

Manufacturing also increased its contribution to the Gross Domestic Product from about 11% in 1961 to over 14% in 1992. While the share of agriculture decreased from 18% in 1961 to 6,2% in 1992, agriculture is considered as a vital economic sector.

Progress depended to a large extent on exports, basically due to the smallness of the domestic economy. The annual growth of exports of goods and services averaged 13,2% between 1961-1992 and as a percentage of the national income it has increased from 32% in 1961 to 50% in 1992.



Cyprus with a per capita income of nearly 11.812 US dollars in 1992 as compared with 500 US dollars in 1961 and an average annual rate of growth exceeding 5%, with virtually no unemployment (except for the period immediately after the Turkish invasion in 1974) and with a moderate level of inflation, compares quite favourably even with EC member-states.

In a few years' time, the successful integration of modern technology, the development of infrastructure in the sectors of transport and telecommunications and the high quality of work of the Cypriot people, have turned Cyprus into a centre of transit trade, international shipping and services, contributing actively to the economic life of the entire region.

To give but a few examples: It is widely accepted that Cyprus' telecommunications are the best in the Middle East and can compare favourably with European ones. Almost 100% of the world's telephones or 153 countries can today be accessed automatically from Cyprus, while the rest of the world can be reached through the operator. Automatic 24-hour telefax service is also available to those countries which have introduced this service and are accessed automatically from Cyprus. Furthermore 24-hour automatic telex and telegraph services are provided to virtually every country in the world.

Moreover in the field of shipping, Cyprus is the third country in the world in terms of number of ships registered under her flag and the seventh in terms of registered tonnage.

At the end of 1992, 2.316 ships were registered in the Cyprus registry with a gross 22.993.793 registered tonnage. In order to attract ships to the Cyprus registry the Government has enacted legislation containing very favourable provisions for shipping companies including tax exemption for the income derived from the operation of ships.

Ever since the declaration of independence in 1960, tourist development was accorded a very high degree of priority by the Cyprus government. Despite the disruption brought about by the Turkish invasion in 1974 (65% of the island's total bed capacity as well as the Nicosia International Airport were lost) growth in this sector was rapid and continuous with tourism now constituting one of the major sectors of the Cyprus economy. In 1992 1.991.000 tourists visited Cyprus generating C£694m in foreign exchange earnings, compared to 25.700 tourist arrivals in 1960 with C£1.8m in foreign exchange earnings. It is generally accepted that the healthy climate (according to Fodor's Guide to Europe it is «one of the best climates in the world») the natural beauties of Cyprus, its archaeological wealth and the traditional hospitality of its people accompanied by a well organized tourist back-up service industry, make the island an ideal and much sought-after holiday destination.

Significant progress was also made in the social sphere. Illiteracy is today almost non-existent from nearly 20%in 1961. In addition 14% of the population are university graduates. Infant mortality dropped from 40 per 1000 in 1961 to nearly 11 in 1992, the average life expentancy rose from 66 to 76 years, the number of persons per doctor decreased from nearly 1500 to less than 500. Medical treatment provided to citizens is high and is continuously improving so that in a short time it will not only fully cover the needs in all sectors, but it will also render Cyprus a regional medical services centre.

Similar progress is evident in other social areas such as housing. The fact that 7 out of 10 families live in their own home is characteristic of Cyprus' economic and social development.

During its brief but eventful history the Cyprus Republic has established its presence and made an impact on the international scene far beyond its geographical confines. Cyprus, an active member of the Commonwealth and the United Nations Organisation, is also a member of the Council of Europe, indicating thus its European orientation and character defined by its history and cultural traditions. In its wish to show its opposition to the bipolarisation of the world, Cyprus became one of the founding members and leaders of the Non-Aligned Movement, thanks to the personality and prestige of Archbishop Makarios.

Naturally foremost in the heart and mind of every Cypriot is the solution of the Cyprus problem and it is felt that the time is now ripe both internally and internationally for such a solution. The achievements in the social and economic fields and Cyprus' course towards Europe necessitate a solution based on modern principles and European standards.

A federal system meeting the concerns of each side and at the same time safeguarding the unity and security of the state is feasible. Such a system would safeguard the human rights of all citizens, principal among which is the right of the refugees to return to their homes. At the same time, it should guarantee the security of all, something which can be achieved only if the Turkish troops and settlers are withdrawn, if Cyprus is demilitarised and if the workability of the system is ensured.

The world community has shown great sensitivity over the Gulf War in general and the invasion of Kuwait in particular. Similar concern for the plight of Cyprus is to be expected if the world community is to preserve its credibility.

Freedom and solidarity and respect for human rights unite Europe and the world at large. As Cyprus is a vibrant part of Europe, it can face the future with confidence.

CYPRUS

DISTRIBUTION OF POPULATION
BY ETHNIC GROUP 1960.

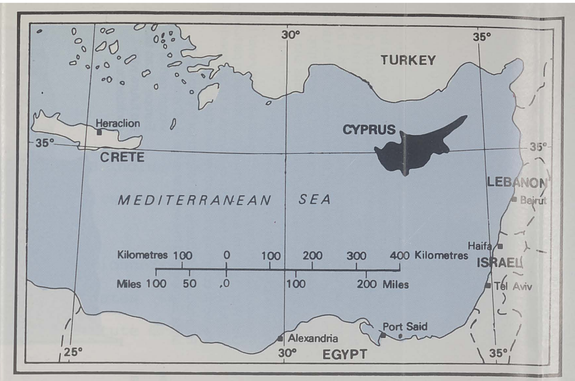
&

POSITIONS OF THE INVADING TURKISH FORCES

Scale

Kilometres 5 0 5,000 10,000 15,000 20,000 Metres

Miles 5 0 5 10 15 Miles



REFERENCE

Greeks	Blue
Turks	Brown
Maronites and Armenians	Green
Others	Black

POSITIONS OF THE INVADING TURKISH FORCES

- Position of invading forces on 22.7.1974 at 16.00 (Agreed time for the cease-fire in pursuance of Security Council Resolution No. 353 of 20.7.1974).
- Position of invading forces on 30.7.1974. (Date of the Geneva Declaration, signed by the Foreign Ministers of Greece, Turkey and the U. K. and providing *inter alia* for the cease-fire).
- Position of invading forces on 8.8.1974 (prior to the second round of the Geneva Conference).
- Position of invading forces as on 16.8.1974 at 18.00 (Security Council Resolutions Nos. 358 and 360 of 15 16 of August, respectively).
- Positions occupied by the invading forces after the agreed time for cease-fire (18.00 of 16.8.1974) and as on 18.00hrs, 27.7.1976
- District boundary
- Sovereign Base Area boundary
- Occupied Area

THE EXTENT OF CONTROL GAINED ON THE ECONOMY BY THE TURKISH INVASION FORCES

1. 70% of the gross output
2. 65% of the tourist accommodation capacity
3. 87% of hotel beds under construction
4. 83% of the general cargo handling (Famagusta)
5. 56% of mining and quarrying output
6. 41% of the livestock production
7. 48% of agricultural exports
8. 46% of the plant production

NOTE :

(a) Land ownership: Greeks 83.2%, Turks 16.8% (Distributed on the total area of Cyprus excluding the non-privately owned Land)

(b) 20% of the main state forest has been burnt out

Prepared by the Department of Lands and Surveys Cyprus, May 1975.
Statistical data provided by the Planning Bureau Planning Commission Nicosia.
Series D.L.S. 13 Second Edition 1976.

APPENDIX B

Appendix B includes the questionnaires related to Survey 1. The following two questionnaires were used :

1. Questionnaire for Male and Female University Degree Graduates in Civil Engineering and Higher Technical Institute Graduates in Civil Engineering.

2. Questionnaire for the Employers of Male and Female Civil Engineers and Civil Engineering Technicians.

1. **Questionnaire for Male and Female Civil Engineers and Civil Engineering Technicians**

Confidential

Serial No. [ ]

This questionnaire forms part of the research carried out by the Department of Civil Engineering and Building of the University of Glamorgan in collaboration with the Department of Civil Engineering of the Higher Technical Institute in Nicosia, Cyprus.

The questionnaires aim to obtain data on the employment behaviour, status and earnings of Cypriot women in Civil Engineering compared to that of men. To identify the differences if any and to establish the factors which account for these differences.

Questionnaires are directed to the following three groups :

1. Male University graduates in Civil Engineering and Higher Technical Institute graduates in Civil Engineering.
2. Female University graduates in Ciil Engineering and Higher Technical Institute graduates in Civil Engineering.
3. Employers of the above mentioned men and women.

The information provided will be treated in the strictest confidence and no information regarding any individual or establishment will be published.

Name of the Establishment :.....
.....

Address:.....

Tel. :.....

Name of Employee :.....
.....

Interview No :.....

Date of interview :.....

Section A

This section provides general information about the respondents.

A1
Current place of residence :.....

A2
Age of respondent :.....

A3
What is your marital status ?

1. Single [ ] Go to A4
2. Married [ ]
3. Separated [ ]
4. Widowed [ ]

A4
Do you have children ?

Yes [ ] No [ ] Go to A5
How many ? [ ]

A5
Higher Education :

1. Higher Technical Institute [ ]
2. University/Polytechnic [ ]
3. MSc/MA [ ]
4. MPhil [ ]
5. PhD [ ]

Other :.....
.....

A6
When did you complete your studies ?.....

A7
Have you attended any seminars/courses : (Please tick, column A seminars column B courses)

Yes [ ] No [ ] Go to A8

	A	B
1. Inside Firm	[ ]	[ ]
2. Outside Firm	[ ]	[ ]
3. In Cyprus	[ ]	[ ]
4. Abroad	[ ]	[ ]
5. Before marriage	[ ]	[ ]
6. After marriage	[ ]	[ ]

A8
Why have you chosen this particular specialisation ? (Please tick) :

1. Employment prospects [ ]
2. Construction Experience [ ]
3. HTI [ ]

Other :.....
.....

A9
Did you have any guidance from school on the choice of your career ?

Yes [ ] No [ ]

Section B

This section examines the history of employment as well as the current employment of the respondents.

B1
How many employers did you work for after your graduation ?
[ ]

B2
Why did you change work ? (Please tick)

1. Better job [ ]
2. Problems at work [ ]
3. Higher salary [ ]
4. Convenient hours [ ]
5. Invasion consequences [ ]

Other .....
.....

B3
When were you first employed ? [ ]

B4
What was your starting gross monthly pay ? [ ]

B5
What was your last gross monthly pay ? [ ]

B6
Work description : (Please tick in column A, up to three choices, and rank your choice in column B)

	A	B
1. Structural Design	[ ]	[ ]
2. Quantity Surveying	[ ]	[ ]
3. Site Supervision	[ ]	[ ]
4. Office Duties	[ ]	[ ]
5. Site Management	[ ]	[ ]
6. Technical Drawing	[ ]	[ ]

Other.....
.....

B7
Where do you work ? (Please tick):

1. Office	[ ]
2. More in office	[ ]
3. Both equally	[ ]
4. More on Site	[ ]
5. Site	[ ]

B8
Any promotions :

Yes [ ] No [ ] Go to QB11

Specify :.....
.....

B9
Normal hours per week [ ]

B10
Any over-time hours per week :

Yes [ ] No [ ] Go to B13

(Please tick, in column A paid over-time and in column B unpaid)

	A	B
1. Regular	[ ]	[ ]
2. Seldom	[ ]	[ ]

B11
Do you travel to another town as a part of your job ?

Yes [ ] Go to B15 No [ ]

B12
Does your employment provide for the following benefits ? (Please tick)

1. 13th Salary [ ]
2. Transport to work [ ]
3. Paid sick leave [ ]
4. Paid annual leave [ ]
5. Pension fund [ ]
6. Medical care [ ]

Any other benefits.....
.....

B13
Are you involved regularly in second employment ?

Yes [ ] No [ ]

B14
Are you a member of a Trade Union ?

Yes [ ] No [ ]

B15
Are you a member of any organisation ?

Yes [ ] No [ ] Go to Section C

(Please tick)
1. Professional [ ]
2. Political [ ]
3. Social [ ]

Other .....
.....

Section C

This section investigates the respondents' perceptions on the behaviour and attitudes at work of women Civil Engineers and Technicians compared to that of men.

C1
Are there persons of the opposite sex in your Engineering Department who do the same work as you and have similar duties and responsibilities ?

Yes [ ] No [ ] Go to C3

C2
Do you feel men Civil Engineers and Technicians are treated differently at your place of work ?

Yes [ ] No [ ] Go to C4

C3
How are they treated differently ? (Please tick)

1. Men are better paid [ ]
2. Better jobs to men [ ]
3. More promotions to men [ ]
4. Greater fringe benefits to men [ ]

Other:.....
.....

Why?.....
.....

C4
Would you please compare the following areas of work behaviour and the general performance of male and female Civil Engineers and Technicians : (Please insert the right number according to the following key index)

Key Index

1 : Men Better
2 : Women Better
3 : Equal
4 : Don't know

1. Efficiency [ ]
2. Personnel Supervision [ ]
3. Office duties [ ]
4. Management [ ]

Specify.....
.....

5. Willingness to work over-time [ ]
6. Travelling to other towns [ ]
7. Absenteeism [ ]
8. Lateness [ ]
9. Voluntary turnover (Quits) [ ]
10. Harder workers [ ]

Specify.....
.....

11. Work on site [ ]
12. Working with fellow employees [ ]
13. Working with opposite sex [ ]
14. Relations with clients [ ]
15. Relations with managers [ ]
16. Contractor's approval [ ]

Specify.....
.....

17. Self-confidence [ ]
18. Ambitious [ ]
19. Priority to work [ ]
20. Reliability [ ]

Specify.....
.....

C5
Whom would you prefer as your supervisor ? (Please tick)

1. A man [ ]
2. A woman [ ]
3. Either [ ]
4. Don't know [ ]

Why ?.....
.....

C6
Are you satisfied with your present employment ? (Please tick)

Yes [ ] No [ ]

Other :.....
.....

C7
What are your major problems related to your present employment?
(Please tick)

1. Low salary [ ]
2. Pressure at work [ ]
3. Long working hours [ ]

Other :.....
.....

C8
What expectations do you have from your work ? (Please tick in column A up to three choices and rank your choice in column B)

	A	B
1. High salary	[ ]	[ ]
2. High position	[ ]	[ ]
3. Less working hours	[ ]	[ ]
4. Responsibilities	[ ]	[ ]
5. No responsibilities	[ ]	[ ]
6. Social Status	[ ]	[ ]
7. Job satisfaction	[ ]	[ ]
8. Self development	[ ]	[ ]
9. Family Budget	[ ]	[ ]

Other (specify) :.....
.....

C9
How would you compare the Social Status of women Engineers and Technicians to that of men Engineers and Technicians ?
(Please tick)

1. Men's higher [ ]
2. Women's higher [ ]
3. Equal [ ]

Other:.....
.....

Explain.....
.....

C10
Do you feel that women Engineers and Technicians have equal problems at work compared to men Engineers and Technicians ?

Yes [ ] No [ ]

Why?.....
.....

C11
Current evidence indicates that the participation of women in Architecture and Civil Engineering is considerable while their participation in Electrical and Mechanical Engineering is negligible. Why do you think is this difference ?
.....
.....
.....

C12
How do you feel about married women being employed ?

1. Encourage/happy [ ]
2. Discourage [ ]
3. Don't Know [ ]

Other:.....
.....

C13
As an individual do you approve of working mothers of children less than 5 years old ? (Please tick)

1. Approve [ ]
2. Not approve [ ]
3. Don't know [ ]

Other:.....
.....

Why.....
.....

C14
How much of your leisure time do you spend on the following ? (Please indicate an approximate percentage of your leisure time opposite to the right activity)

1. Entertainment [ ]
2. Self development [ ]
3. Children [ ]
4. House [ ]
5. Family [ ]

Other.....
.....

C15
What is your spouse's occupation? .....

Note: Section D applies only to women Civil Engineers and Technicians.

Section D

This section is intended to examine cases of direct discrimination against women in Civil Engineering.

D1
Were you aware of women in the Civil Engineering field before choosing your career ?

Yes [ ] No [ ]

D2
Did you have any particular problems in your work experience because you are a woman ? (Please specify)

Yes [ ] No [ ]

Specify:.....
.....
.....
.....

D3
Have you ever been rejected from a job because you are a woman ?

Yes [ ] No [ ] Go to D4

Why?.....
.....
.....
.....

D4
Have you been discriminated against in your work experience because you are a woman ?

Yes [ ] No [ ]

(Please tick)
1. By an employer [ ]
2. By male workers [ ]
3. By female workers [ ]

Other :.....
.....

How?.....
.....
.....
.....

Thank you for your cooperation in the carrying out of this questionnaire. The participants interested may be briefed or have access to the research findings.

2. Questionnaire for the Employers of Male and Female Civil Engineers and Civil Engineering Technicians

Confidential

Serial No. [ ]

This questionnaire forms part of the research carried out by the Department of Civil Engineering and Building of the University of Glamorgan in collaboration with the Department of Civil Engineering of the Higher Technical Institute in Nicosia, Cyprus.

The questionnaires aim to obtain data on the employment behaviour, status and earnings of Cypriot women in Civil Engineering compared to that of men. To identify the differences if any and to establish the factors which account for these differences.

Questionnaires are directed to the following three groups :

1. Male University graduates in Civil Engineering and Higher Technical Institute graduates in Civil Engineering.

2. Female University graduates in Civil Engineering and Higher Technical Institute graduates in Civil Engineeering.

3. Employers of the above mentioned men and women.

The information provided will be treated in the strictest confidence and no information regarding any individual or establishment will be published.

Name of the Establishment :.....
.....

Address:.....
.....

Tel. :.....

Name of Employer :.....
.....

Interview No :.....

Date of interview :.....

Section I

This section provides general information about the establishment as well as the respondents.

I.1
Sector of employment : (Please tick)

1. Government [ ]
2. Semi-government [ ]
3. Private - Consultancy [ ]
4. Private - Development [ ]

Other:.....
.....

I.2
Number of Employees : [ ]

I.3
Sex of the person being interviewed : (Please tick)

1. Male [ ]
2. Female [ ]

I.4
Education of the person being interviewed : (Please tick)

1. Secondary education [ ]
2. College/Institute [ ]
3. University/Polytechnic [ ]

Other:.....
.....

I.5
Age of the person being interviewed : [ ]

I.6
Position in Firm : (Please tick)

1. Owner [ ]
2. Owner Manager [ ]
3. Partner [ ]
4. General Manager [ ]
5. Assistant General Manager [ ]
6. Head of Department [ ]

Other:.....
.....

Section II

This section examines the practices followed by the respondents on the recruitment and promotion of male and female Civil Engineers and Technicians.

II.1
Number of employees by Job Type and Sex :

1. Male Civil Engineers [ ]
2. Female Civil Engineers [ ]
3. Male Technicians [ ]
4. Female Technicians [ ]

II.2
How many seniors do you have ?

1. Male Civil Engineers [ ]
2. Female Civil Engineers [ ]
3. Male Technicians [ ]
4. Female Technicians [ ]

II.3
Which are the three most important characteristics you look for when choosing among available applicants ? (Please tick in column A and rank your choice in column B)

	A	B
1. Education	[ ]	[ ]
2. Previous Experience	[ ]	[ ]
3. Good References	[ ]	[ ]
4. Personality	[ ]	[ ]
5. Person's Sex	[ ]	[ ]
6. Person known to you	[ ]	[ ]

Other:.....
.....

II.4
Which are the three most important characteristics you look for when promoting your employees ? (Please tick in column A and rank your choice in column B)

	A	B
1. Education	[ ]	[ ]
2. Experience	[ ]	[ ]
3. Personality	[ ]	[ ]
4. Efficiency	[ ]	[ ]
5. Reliability	[ ]	[ ]
6. Consciousness	[ ]	[ ]

Other.....
.....

II.5
In general do the family responsibilities of a candidate e.g. marital status, number of children influence your choice of candidature of Engineer and Technician employees ? (Please insert the right number for each case according to the following key index)

Key Index

1 : They Help
2 : They Hinder
3 : They Hinder More
4 : They Hinder Less
5 : They Make no Difference

1. Married men without children [ ]
2. Married women without children [ ]
3. Married men with children [ ]
4. Married women with children [ ]

II.6
In general do the family responsibilities of a candidate e.g. marital status, number of children influence the performance of Engineer and Technician employees ? (Please insert the right number according to the above shown key index)

1. Married men without children [ ]
2. Married women without children [ ]
3. Married men with children [ ]
4. Married women with children [ ]

II.7
Did you ever have men and women candidates for the same post who had the same qualifications and abilities ?

Yes [ ] No [ ] Go to II.9

II.8
Which one had you chosen ? (Please tick)

1. Either male or female Civil Engineer [ ]
2. Female Civil Engineers were excluded [ ]
3. Male Civil Engineers were excluded [ ]
4. Either male or female Technician [ ]
5. Female Technicians were excluded [ ]
6. Male Technicians were excluded [ ]

Why?.....
.....

II.9
Are Trade Unions represented in the firm ?

Yes [ ] No [ ]

Section III

This section investigates the perceptions of the employers on the behaviour and attitudes at work of male and female Civil Engineers and Technicians.

III.1
Are the responsibilities and duties of men and women Civil Engineers and Technicians similar ?

Yes [ ] No [ ] Go to III.4

III.2
Are their basic wages and salaries different ? (Please tick)

1. Men paid more than women [ ]
2. Women paid more than men [ ]
3. Equal pay [ ]

III.3
Why is this ? (Please tick)

1. Women are of lower productivity [ ]
2. Women work fewer hours than men [ ]
3. Women are late more frequently [ ]
4. Women take no responsibilities [ ]
5. Women are willing to work for lower wages [ ]

Other reasons :.....
.....

III.4
Are there certain Civil Engineering tasks for which men are considered more suitable ?

Yes [ ] No [ ]

Specify.....
.....

III.5
Are there certain Civil Engineering tasks for which women are considered more suitable ?

Yes [ ] No [ ]

Specify.....
.....

III.6
Do you have any difficulties with :

a. Male Civil Engineers and Technicians :
Specify:.....
.....
.....

b. Female Civil Engineers and Technicians :
Specify:.....
.....
.....

III.7
Would you please compare the following areas of work behaviour and the general performance of male and female Civil Engineers and Technicians : (Please insert the right number according to the following key index)

Key Index

1 : Men Better
2 : Women Better
3 : Equal
4 : Don't know

1. Efficiency [ ]
2. Personnel supervision [ ]
3. Office duties [ ]
4. Management [ ]

Specify.....
.....

5. Willingness to work over-time [ ]
6. Travelling to other towns [ ]
7. Absenteeism [ ]
8. Lateness [ ]
9. Voluntary turnover (Quits) [ ]
10. Harder workers [ ]

Specify.....
.....

11. Work on site [ ]
12. Working with fellow employees [ ]
13. Working with opposite sex [ ]
14. Relations with clients [ ]
15. Relations with managers [ ]
16. Contractor's approval [ ]

Specify.....
.....

17. Self-confidence [ ]
18. Ambitious [ ]
19. Priority to work [ ]
20. Reliability [ ]

Specify.....
.....

III.8
As an individual do you approve of working mothers of children less than 5 years old ? (Please tick)

1. Approve [ ]
2. Not approve [ ]
3. Don't know [ ]
4. Other [ ]

Why.....
.....

Thank you for your cooperation in the carrying out of this questionnaire. The participants interested may be briefed or have access to the research findings.

APPENDIX C

Appendix C includes the Summary Tables number 1 to 29. In these Tables the findings of the Questionnaires are presented in a tabular format as indicated in Table 1 below:

TABLE 1 : (QA1) Current Place of Residence
(QA2) Age of Respondent

Question	Total		Civil Engineers		Technicians	
	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)
	n=50	n=50	n=25	n=25	n=25	n=25
A1 Residence						
Nicosia	60	60	60	60	60	60
Limassol	20	20	20	20	20	20
Larnaca	10	10	08	08	12	12
Paphos	10	10	12	12	08	08
Total	100	100	100	100	100	100
A2 Age						
20-24	04	08	00	08	08	08
25-29	34	36	32	32	36	40
30-34	36	36	40	40	32	32
35-39	18	16	20	16	16	16
40-44	08	04	08	04	08	04
Total	100	100	100	100	100	100

(QA1) and (QA2) on top of the Table, mean Question A1 and Question A2 under section A of the Questionnaire.

The results are given as a percentage of the number (n) of the sample group, where (n) represents the corresponding number of respondents in the sample group.

1. Questionnaire for Male and Female University Degree Graduates in Civil Engineering and HTI Graduates in Civil Engineering

Section A : This section includes nine questions providing general information about the respondents.

TABLE 1 : (QA1) Current Place of Residence
(QA2) Age of Respondent

Question	Total		Civil Engineers		Technicians	
	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)
	n=50	n=50	n=25	n=25	n=25	n=25
A1 Residence						
Nicosia	60	60	60	60	60	60
Limassol	20	20	20	20	20	20
Larnaca	10	10	08	08	12	12
Paphos	10	10	12	12	08	08
Total	100	100	100	100	100	100
A2 Age						
20-24	04	08	00	08	08	08
25-29	34	36	32	32	36	40
30-34	36	36	40	40	32	32
35-39	18	16	20	16	16	16
40-44	08	04	08	04	08	04
Total	100	100	100	100	100	100

TABLE 2 : (QA3) What is your marital status ?
(QA4) Do you have children ?

Question	Total		Civil Engineers		Technicians	
	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)
	n=50	n=50	n=25	n=25	n=25	n=25
A3 Marital Status						
1.Single	30	36	32	36	28	36
2.Married	70	62	68	60	72	64
3.Separated	00	02	00	04	00	00
4.Widow	00	00	00	00	00	00
Total	100	100	100	100	100	100
A4 Children						
Yes	68	58	68	60	68	56
No	32	42	32	40	32	44
Total	100	100	100	100	100	100

TABLE 3 : (QA5) Higher Education
(QA6) When did you complete your studies ?

Question	Total		Civil Engineers		Technicians	
	C. Eng. (%)	Techn. (%)	Male (%)	Female (%)	Male (%)	Female (%)
	n=50	n=50	n=25	n=25	n=25	n=25
A5 Higher Education						
1.HTI	(20)	100	(24)	(16)	100	100
2.BSc/BEng	52	00	48	56	00	00
3.MSc/MA	10	00	20	00	00	00
4.MPhil	02	00	00	04	00	00
5.PhD	02	00	04	00	00	00
6.MSc-East	34	00	28	40	00	00
Total	100	100	100	100	100	100
A6 Completion of studies						
1965-69	04	00	04	04	00	00
1970-74	04	08	04	04	08	08
1975-79	12	12	12	12	12	12
1980-84	40	40	40	40	40	40
1985-89	40	40	40	40	40	40
Total	100	100	100	100	100	100
A7 Seminars and courses						
Seminars	46	20	44	48	20	20
Courses	00	16	00	00	08	24
Sem & cours	42	38	44	40	40	36
No	12	26	12	12	32	20
Total	100	100	100	100	100	100

(20) : Means Civil Engineers who were graduates of HTI. They are not included in the total number of Civil Engineers.

TABLE 4 : (QA8) Why have you chosen this particular specialisation ?

(QA9) Did you have any guidance from school on the choice of your career ?

Question	Total		Male		Female	
	Male (%)	Fem. (%)	C.Eng. (%)	Tech. (%)	C.Eng. (%)	Tech. (%)
	n=50	n=50	n=25	n=25	n=25	n=25
A8 Choice of specialisation						
1.Employment prospects	32	30	36	28	36	24
2.Construction Experience	24	02	20	28	00	04
3.HTI	16	22	12	20	12	32
4.Architecture	04	24	08	00	28	20
5.Role Modelling	18	16	20	16	16	16
6.Other	06	06	04	08	08	04
Total	100	100	100	100	100	100
A9 Guidance from school						
Yes	22	26	20	24	24	28
No	78	74	80	76	76	72
Total	100	100	100	100	100	100

Section B : This section includes fifteen questions, examining the current employment of the respondents.

Certain questions are linked with qualitative questions, asking 'why'. The findings of these questions, are not listed in this Appendix; the major points raised are discussed under Chapter 8.

Question B2 (QB2), is considered as a qualitative question and it is analysed in Chapter 8.

TABLE 5 : (QB1) How many employers did you work for after your graduation ?
(QB6) Work description :
(QB7) Where do you work :

Question	Total		Civil Engineers		Technicians	
	C.Eng. (%)	Tech. (%)	Male (%)	Female (%)	Male (%)	Female (%)
	n=50	n=50	n=25	n=25	n=25	n=25
B1 Number of Employers						
1	40	30	32	48	24	36
2	30	30	40	20	20	40
3	22	28	20	24	36	20
4	00	08	00	00	12	04
more than 5	08	04	08	08	08	00
Total	100	100	100	100	100	100
B6 Main Task						
1. Structural Design	42	12	36	48	16	08
2. Quantity Surveying	16	44	12	20	36	52
3. Site Supervision	18	16	20	16	24	08
4. Office Duties	12	00	12	12	00	00
5. Site Management	12	12	20	04	24	00
6. Technical Drawing	00	16	00	00	00	32
Total	100	100	100	100	100	100
B7 Place of Employment						
1. Office	16	32	08	24	08	56
2. More in office	36	20	32	40	20	20
3. Both equally	26	32	28	24	40	24
4. More on site	14	06	20	08	12	00
5. Site	08	10	12	04	20	00
Total	100	100	100	100	100	100

TABLE 6 : (QB3) When were you first employed ?
(QB4) What was your starting gross monthly pay ?
(QB5) What was your last gross monthly pay ?

Question	GROUP A				GROUP B			
	Civil Engineers		Technicians		Civil Engineers		Technicians	
	Male	Fem	Male	Fem	Male	Fem	Male	Fem
	n=10	n=10	n=10	n=10	n=10	n=10	n=10	n=10
B4 Starting Salary								
100-199	00	40	40	90	00	50	30	100
200-299	70	50	60	10	80	50	70	00
300-399	30	10	00	00	20	00	00	00
Total	100	100	100	100	100	100	100	100
B5 Current salary								
200-299	00	00	00	60	00	00	00	00
300-399	20	50	60	40	00	00	00	50
400-499	30	40	30	00	00	30	40	40
500-599	20	10	10	00	10	40	30	10
600-699	20	00	00	00	40	20	20	00
700-799	10	00	00	00	20	10	10	00
800-899	00	00	00	00	20	00	00	00
900-999	00	00	00	00	10	00	00	00
TOTAL	100	100	100	100	100	100	100	100

Group A : Male or female Civil Engineers and Technicians with a working experience of 1-5 years (employed between 1985 and 1989).

Group B : Male or female Civil Engineers and Technicians with a working experience of 6-10 years (employed between 1980 and 1984).

TABLE 7 : (QB8) Any promotions
(QB9) Normal hours per week
(QB10) Any over-time hours per week ?

Question	Total		Civil Engineers		Technicians	
	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)
	n=50	n=50	n=25	n=25	n=25	n=25
B8 Promotions						
Yes	38	16	40	20	36	12
No	62	84	60	80	64	88
Total	100	100	100	100	100	100
B9 Hours per week						
38 hours	20	20	20	20	20	20
40 hours	80	80	80	80	80	80
Total	100	100	100	100	100	100
B10 Over-time						
Yes	76	52	72	52	80	52
No	24	48	28	48	20	48
Total	100	100	100	100	100	100
1.Regular	34	30	44	28	24	32
2.Seldom	42	22	28	24	56	20
No over-time	24	48	28	48	20	48
Total	100	100	100	100	100	100
A.Paid	30	34	20	32	40	36
B.Unpaid	46	18	52	20	40	16
No over-time	24	48	28	48	20	48
Total	100	100	100	100	100	100

TABLE 8 : (QB11) Do you travel to another town as a part of your job ?
(QB12) Does your employment provide for the following benefits ?
(QB13) Are you involved regularly in second employment ?

Question	Total		Civil Engineers		Technicians	
	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)
	n=50	n=50	n=25	n=25	n=25	n=25
B11 Travelling to other towns						
Yes	56	30	72	48	40	12
No	44	70	28	52	60	88
Total	100	100	100	100	100	100
B12 Employment benefits						
1. 13th salary	100	100	100	100	100	100
2. Transport	016	004	020	004	012	004
3. Paid sick leave	100	100	100	100	100	100
4. Paid annual leave	100	100	100	100	100	100
5. Pension fund	100	100	100	100	100	100
6. Medical care	086	084	080	076	092	092
7. Bonus	038	006	048	008	028	004
B13 Second employment						
Yes	24	22	32	20	16	24
No	76	78	68	80	84	76
Total	100	100	100	100	100	100

TABLE 9 : (QB14) Are you a member of a Trade Union ?
(QB15) Are you a member of any organisation?

Question	Total		Civil Engineers		Technicians	
	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)
	n=50	n=50	n=25	n=25	n=25	n=25
B14 Trade Union						
Yes	58	52	44	40	72	64
No	42	48	56	60	28	36
Total	100	100	100	100	100	100
B15 Other organisations						
Yes	80	70	88	84	72	56
No	20	30	12	16	28	44
Total	100	100	100	100	100	100
1. Professional (1)	74	70	84	84	64	56
2. Political	08	12	16	20	00	04
3. Social	14	10	12	16	16	04
4. Women's	00	14	00	24	00	04
5. Other	18	14	12	16	24	12
Total (2)	114	120	124	160	104	80

Notes : (1) In the case of Civil Engineers, membership in the Council of Registration of Architects and Civil Engineers was not considered.

(2) Some respondents gave more than one answer.

Section C : This section consists of fifteen questions investigating the perceptions of the respondents on the employment behaviour of male and female Civil Engineers and Technicians.

TABLE 10 : (QC1) Are there persons of the opposite sex in your Engineering Department who do the same work as you and have similar duties and responsibilities ?
(QC2) Do you feel men Engineers and Technicians are treated differently at your place of work ?
(QC3) How are they treated differently ?

Question	Total (%)	Male Civil Eng.& Technicians (%)	Female Civil Eng.& Technicians (%)
	n=100	n=50	n=50
C1 Similar Duties			
Yes	74	72	76
No	26	28	24
Total	100	100	100
C2 Different treatment of women			
Yes	27	16	38
No	47	56	38
Different duties	26	28	24
Total	100	100	100
C3 How treated differently			
1. Men are better paid	19	10	28
2. Better jobs to men	19	20	17
3. More promotions to men	17	15	19
4. Greater fringe benefits to men	03	00	06
5. Men work on site, women don't	20	30	11
6. More responsibilities to men	22	25	19
Total (1)	100	100	100

Notes :(1)Total number of respondents : 27 (8 males and 19 females)
Total number of answers : 56 (20 from male and 36 from female respondents; the respondents gave up to three answers).

TABLE 11 : (QC4) Would you please compare the following areas of work behaviour and the general performance of male and female Civil Engineers and Technicians ?

Question	Responses of Male Civil Engineers and Technicians				
	Total (%) n=50	Men Better (%)	Women Better (%)	Equal (%)	Don't know (%)
Area of Work					
1. Efficiency	100	16	00	84	00
2. Personnel supervision	100	36	00	64	00
3. Office duties	100	18	10	72	00
4. Management	100	34	00	42	24
5. Willingness to work over-time	100	64	00	30	06
6. Travelling to other towns	100	60	00	40	00
7. Absenteeism	100	52	00	46	02
8. Lateness	100	20	02	76	02
9. Voluntary turnover (Quits)	100	18	18	58	06
10. Harder workers	100	28	00	70	02
11. Work on site	100	76	00	20	04
12. Relations with employees	100	06	04	90	00
13. Working with opposite sex	100	02	04	92	02
14. Relations with clients	100	02	20	78	00
15. Relations with managers	100	12	26	60	02
16. Contractors' approval	100	82	00	12	06
17. Self- confidence	100	50	00	50	00
18. Ambitious	100	52	06	38	04
19. Priority to work	100	58	00	32	10
20. Reliability	100	32	00	68	00

TABLE 12 : (QC4) Would you please compare the following areas of work behaviour and the general performance of male and female Civil Engineers and Technicians ?

Question	Responses of Female Civil Engineers and Technicians				
	Total (%) n=50	Men Better (%)	Women Better (%)	Equal (%)	Don't know (%)
Area of Work					
1. Efficiency	100	02	04	94	00
2. Personnel supervision	100	24	00	76	00
3. Office duties	100	00	20	78	02
4. Management	100	14	08	58	20
5. Willingness to work over-time	100	60	02	38	00
6. Travelling to other towns	100	60	00	40	00
7. Absenteeism	100	44	00	56	00
8. Lateness	100	12	12	76	00
9. Voluntary turnover (Quits)	100	12	14	66	08
10. Harder workers	100	08	04	86	02
11. Work on site	100	46	02	48	04
12. Relations with employees	100	12	06	80	02
13. Working with opposite sex	100	02	02	96	00
14. Relations with clients	100	00	24	76	00
15. Relations with managers	100	14	26	60	00
16. Contractors' approval	100	52	04	34	10
17. Self- confidence	100	44	00	56	00
18. Ambitious	100	42	12	44	02
19. Priority to work	100	44	02	54	00
20. Reliability	100	04	20	76	00

TABLE 13 : (QC5) Whom would you prefer as your supervisor ?
(QC6) Are you satisfied with your present employment?
(QC7) What are your major problems related to your present employment ?
(QC8) What expectations do you have from your work?

Question	Total (%)	Male Civil Eng.& Technicians (%)	Female Civil Eng.& Technicians (%)
	n=100	n=50	n=50
C5 Supervisor			
1. A man	27	34	20
2. A woman	02	00	04
3. Either	71	66	76
4. Don't know	00	00	00
Total	100	100	100
C6 Satisfied with employment			
Yes	85	90	80
No	15	10	20
Total	100	100	100
C7 Major problems			
1. Low salary	28	31	25
2. Pressure at work	25	31	20
3. Long working hours	20	20	20
4. Distance	07	09	05
5. Not promoted	12	09	15
6. Under-employed	08	00	15
Total (1)	100	100	100
C8 Expectation ranked first			
1. Job satisfaction	70	68	72
2. High salary	23	32	14
3. High position	03	00	06
4. Self development	04	00	08
Total	100	100	100

Note : (1) Total number of answers 75 (35 answers from male respondents and 40 answers from female respondents.

TABLE 14 : (QC9) How would you compare the Social Status of women Engineers and Technicians to that of men Engineers and Technicians ?

(QC10) Do you feel that women Engineers and Technicians have equal problems at work compared to men Engineers and Technicians?

(QC11) Current evidence indicates that the participation of women in Architecture and Civil Engineering is considerable while their participation in Electrical and Mechanical Engineering is negligible. Why do you think is this difference ?

Question	Total (%)	Male Civil Eng.& Technicians (%)	Female Civil Eng.& Technicians (%)
	n=100	n=50	n=50
C9 Social Status			
1. Men's higher	62	64	60
2. Women's higher	04	00	08
3. Equal	34	36	32
Total	100	100	100
C10 Equal problems			
Yes	10	10	10
No	90	90	90
Total	100	100	100
C11 Greater participation of women in Civil Engineering			
1. Prejudices	20	16	24
2. Male dominated profession	15	18	12
3. Fits more to women	18	18	18
4. Less site work	23	34	12
5. Poor employment prospects	12	10	14
6. Women not aware	10	02	18
7. Other	02	02	02
Total	100	100	100

TABLE 15 : (QC12) How do you feel about married women being employed ?

(QC13) As an individual do you approve of working mothers of children less than 5 years old?

Question	Total (%)	Male Civil Eng.& Technicians (%)	Female Civil Eng.& Technicians (%)
	n=100	n=50	n=50
C12 Employment of married women			
1. Encourage/happy	92	84	100
2. Discourage	08	16	000
3. Don't know	00	00	000
Total	100	100	100
C13 Employment of mothers with children aged < 5 years old			
1. Approve (unconditioned)	06	12	00
2. Not approve	12	20	04
3. Don't know	00	00	00
4. Approve with conditions	82	68	96
Total	100	100	100
Conditions			
1. Day nurseries	27	28	26
2. Maternity leave 1-2 years	32	24	40
3. Shorter hours	15	10	20
4. More flexible hours	08	06	10
Total (1)	82	68	96

Note : (1) Total number of respondents : 82 (34 males and 48 females).

TABLE 16 : (QC14) How much of your leisure time do you spend on the following ?
1. Entertainment
2. Self development
3. Children
4. House
5. Family

(QC15) What is your spouse's occupation ?

Question	Total (%)	Male Civil Eng.& Technicians (%)	Female Civil Eng.& Technicians (%)
	n=66	n=35	n=31
C14 Distribution of leisure time of married respondents (%)			
1. Children (30-40)	20	40	00
2. Housework and children (30-70)	20	29	10
3. Housework and children (70-90)	33	00	67
4. Over-time and second employment (20-70)	27	31	23
Total	100	100	100
C15 Spouse's occupation			
1. Self employed or administrative	20	14	26
2. Engineer or Technician	42	29	55
3. Professional	16	14	19
4. Clerk and secretary	15	29	00
5. Housewife	07	14	00
Total	100	100	100

Section D: This section includes four questions aiming to investigate direct discrimination against women Civil Engineers and Technicians.

TABLE 17 : (QD1) Were you aware of women in the Civil Engineering field before choosing your career ?

(QD2) Did you have any particular problems in your work experience because you are a woman ?

Question	Total (%)	Female Civil Engineers (%)	Female Technicians (%)
	n=50	n=25	n=25
D1 Aware of women Civil Engineers			
Yes	64	60	68
No	36	40	32
Total	100	100	100
D2 Particular problems faced by women			
Yes	44	48	40
No	56	52	60
Total	100	100	100
Particular problems			
1. Family responsibilities	32	33	32
2. Not appointed for work on site	26	20	32
3. Managers promote men	14	20	08
4. Workers' prejudices	22	20	24
5. Difficulties with site work, when they were pregnant	06	07	04
Total (1)	100	100	100

Note : Some respondents gave more than one answer. Number of answers 55, 30 from female Civil Engineers and 25 from female Technicians.

TABLE 18 : (QD3) Have you ever been rejected from a job because you are a woman ?

(QD4) Have you been discriminated against in your work experience because you are a woman ?

Question	Total (%)	Female Civil Engineers (%)	Female Technicians (%)
	n=50	n=25	n=25
D3 Rejected from a job			
Yes	40	40	40
No	60	60	60
Total	100	100	100
D4 Discriminated at work place as women			
Yes	50	52	48
No	50	48	52
Total	100	100	100
Discriminated by :			
1. Employer	20	20	20
2. Male workers	22	24	20
3. Female workers	08	08	08
4. Other	00	00	00
5. No discrimination	50	48	52
Total	100	100	100

2. Questionnaire for the Employers of Male and Female Civil Engineers and Civil Engineering Technicians

Section I : This section includes six questions providing general information about the establishments and the respondents.

TABLE 19 : (QI.1) Sector of employment
(QI.2) Number of employees

Question	Employers (%)
	n=25
I.1 Sector	
1. Government	12
2. Semi-government	04
3. Private Consultancy	40
4. Private Development	40
5. Municipal	04
Total	100
I.2 Number of employees	
Less than 10	16
10-19	16
20-49	20
50-99	20
more than 100	28
Total	100

TABLE 20 : (QI.3) Sex of the person being interviewed
(QI.4) Education of the person being interviewed
(QI.5) Age of the person being interviewed
(QI.6) Position in firm

Question	Employers (%)
	n=25
I.3 Sex	
1. Male	88
2. Female	12
Total	100
I.4 Education	
1. Secondary	08
2. Institute (HTI)	16
3. University (BSc/BEng -Civil Engin.)	44
4. Post graduate (MSc)	32
Total	100
I.5 Age	
30-34	08
35-39	16
40-44	32
45-49	24
50-55	20
Total	100
I.6 Position	
1. Owner	00
2. Owner Manager	28
3. Partner	24
4. General Manager	00
5. Assistant General Manager	08
6. Head of Department	40
Total	100

Section II : This section consists of 9 questions examining the recruitment and promotion practices followed by the respondents.

TABLE 21 : (QII.1) Number of employees by job type and sex
(QII.2) How many seniors do you have ?

Question	Percentage of Establishments (number=25)			
	Civil Engineers		Technicians	
	Male	Female	Male	Female
II.1 Number of employees				
1-4	52	84	40	72
5-9	28	12	32	20
10-19	12	04	20	08
20-39	04	00	04	00
40-60	04	00	04	00
Total	100	100	100	100
Number of senior employees				
0	40	80	40	84
1-4	40	20	36	16
5-9	16	00	20	00
10-20	04	00	04	00
Total	100	100	100	100

Table 22 : (QII.3) Which are the three most important characteristics you look for when choosing among available applicants ?
(QII.4) Which are the three most important characteristics you look for when promoting your employees ?

Question	Employers (%)
	n=25
II.3 Recruitment (Factor ranked first)	
1. Education	28
2. Previous experience	24
3. Good references	16
4. Personality	24
5. Person's sex	08
6. Person Known to you	00
Total	100
II.4 Promotion (Factor ranked first)	
1. Education	20
2. Years of experience	20
3. Personality	28
4. Efficiency	16
5. Reliability	00
6. Consciousness	16
Total	100

TABLE 23 : (QII.5) In general do the family responsibilities of a candidate e.g. marital status, number of children influence your choice of candidature of Engineer and Technician employees ?

(QII.6) In general do the family responsibilities of a candidate e.g. marital status, number of children influence the performance of Engineer and Technician employees?

Question	Percentage Distribution of Employers' Responses (number=25)				
	Total	No Differ.	Hinder less	Hinder	Hinder more
II.5 Candidature					
1. Married men (no child.)	100	100	000	000	000
2. Married women (no child.)	100	080	000	020	000
3. Married men (child.)	100	100	000	000	000
4. Married women (child.)	100	060	000	040	000
II.6 Performance					
1. Married men (no child.)	100	100	000	000	000
2. Married women (no child.)	100	070	000	030	000
3. Married men (child.)	100	080	020	000	000
4. Married women (child.)	100	030	000	050	020

TABLE 24 : (QII.7) Did you ever have men and women candidates for the same post who had the same qualifications and abilities?
(QII.8) Which one had you chosen ?

Question	Male Civil Eng.& Technicians (%)	Female Civil Eng.& Technicians (%)
II.7 Men and women candidates		
Yes	60	72
No	40	28
Total	100 (n=25)	100 (n=25)
II.8 Candidate chosen		
1. Either	60	50
2. Females were excluded	40	50
3. Males were excluded	00	00
Total	100 (n=15)	100 (n=18)

TABLE 25 : (QII.9) Are Trade Unions represented in the firm ?

Question	Employers (%)
	n=25
II.7 Trade Unions	
Yes	80
No	20
Total	100

Section III : This section consists of eight questions, which investigate the employers' perceptions on the employment behaviour of male and female Civil Engineers and Technicians.

TABLE 26 : (QIII.1) : Are the responsibilities and duties of men and women Civil Engineers and Technicians similar ?
(QIII.2) : Are their basic wages and salaries different ?
(QIII.3) : Why is this ?

Question	Employers (%)
III.1 Similar duties	
Yes	64
No	36
Total	100 (n=25)
III.2 Different salaries	
1. Men paid more than women	56
2. Women paid more than men	00
3. Equal pay	44
Total	100 (n=16)
III.3 Why ?	
1. Women are of lower productivity	00
2. Women work fewer hours than men	20
3. Women are late more frequently	00
4. Women take no responsibilities	40
5. Women are willing to work for lower wages	20
6. Women are unable to work on site	20
Total (1)	100 (n=12)

Note : (1) Number of answers 12 and number of respondents 9.

TABLE 27 : (QIII.4) : Are there certain Civil Engineering tasks for which men are considered more suitable ?

(QIII.5) : Are there certain Civil Engineering tasks for which women are considered more suitable ?

(QIII.6) : Do you have any difficulties with :
a) Male Civil Engineers and Technicians
b) Female Civil Engineers and Technicians

Question	Employers (%)
	n=25
III.4 Men more suitable	
Yes	72
No	28
Total	100
III.5 Women more suitable	
Yes	56
No	44
Total	100
III.6 Biggest problems with men	
1. Frequent voluntary turnover	08
2. No problem	92
Total	100
III.6 Biggest problems with women	
1. Family priority	32
2. Absent when pregnant	48
3. Not willing to work extra hours	20
4. Women cannot overcome harsh work on site	08
5. No problem	40
Total (1)	148

Note : (1) Some respondents gave more than one answers.

TABLE 28 : (QII.5) Would you please compare the following areas of work behaviour and the general performance of male and female Civil Engineers and Technicians?

Question	Responses of Employers				
	Total (%) n=25	Men Better (%)	Women Better (%)	Equal (%)	Don't know (%)
Area of Work					
1. Efficiency	100	16	08	76	00
2. Personnel supervision	100	28	04	60	08
3. Office duties	100	08	32	60	00
4. Management	100	20	04	40	36
5. Willingness to work over-time	100	56	00	44	00
6. Travelling to other towns	100	60	00	40	00
7. Absenteeism	100	56	04	40	00
8. Lateness	100	16	08	76	00
9. Voluntary turnover (Quits)	100	12	16	68	04
10. Harder workers	100	28	08	60	04
11. Work on site	100	64	00	36	00
12. Relations with employees	100	24	04	72	00
13. Working with opposite sex	100	08	04	88	00
14. Relations with clients	100	04	24	72	00
15. Relations with managers	100	20	04	76	00
16. Contractors' approval	100	60	00	32	08
17. Self- confidence	100	52	00	48	00
18. Ambitious	100	60	00	40	00
19. Priority to work	100	64	00	32	04
20. Reliability	100	20	16	64	00

TABLE 29 : (QIII.9) : As an individual do you approve of working mothers of children less than 5 years old ?

Question	Employers (%)
	n=25
III.8 Approve of working mothers with child aged < 5 years old	
1. Approve (unconditional)	20
2. Not approve	20
3. Don't know	00
4. Approve with conditions	60
Total	100
Conditions	
More organised day nurseries	44
Maternity leave	16
Total	60