

THE STATUS OF WOMEN AND POPULATION CONTROL:  
THE RELATIONSHIP OF GROSS REPRODUCTION  
RATE AND SELECTED INDICATORS OF THE STATUS  
OF WOMEN IN DEVELOPED AND DEVELOPING  
COUNTRIES

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## ABSTRACT

# THE STATUS OF WOMEN AND POPULATION CONTROL: THE RELATIONSHIP OF GROSS REPRODUCTION RATE AND SELECTED INDICATORS OF THE STATUS OF WOMEN IN DEVELOPED AND DEVELOPING COUNTRIES

By

Therese Labih Bedwany

Population growth is a problem demanding the attention of all nations. Too rapid population growth hinders a nation's ability to progress and to satisfy the growing demands of its people for a better life. A diffused approach to changing social structure might have a more lasting impact on fertility than the direct approach implied in family planning. The role of women in social change is a most important one and no nation can ignore it. Legal position of the woman in the family, her rights under private law, and greater freedom from cultural and social constraints on her progress and development would tend to decrease fertility because with such independence and assurance of position, a woman is able to feel secure and satisfied with a small family. Therefore, limitations on the rights and roles of women abridge basic human liberties that might affect indirectly the

population growth.

This study examined the relationships between levels of fertility measured by the gross reproduction rate in ten developing and developed countries, and various indicators of the status of women. The indicators chosen were literacy, employment, civil laws (age at marriage, property rights, social security, polygamy and divorce), political rights (voting and election), cultural values, religion, and social factors that affect attitudes towards family size and the roles and status of women in the family.

Scales were developed to classify the two variables in this study: fertility, measured by gross reproduction rate, and the status of women, measured by the indicators selected. Graphic Distribution of the data was presented. Some of the indicators were statistically analyzed, and others qualitatively discussed. Correlation coefficients were calculated. As a check on reliability and variability of the correlation coefficients, Chi-Square and Standard Errors were calculated.

High fertility and low fertility countries differed greatly in every aspect of status of women represented by the indicators. The statistical analyses supported the existence of a relationship between status of women and fertility when all countries were considered. Qualitative differences were discussed. Recommendations for population programs and social policy were given.

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By

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## CHAPTER I

### INTRODUCTION

#### Statement of the Problem

Today, no problem is more urgently important to the well being of mankind than the limitation of population growth. It is a problem, the effects of which are worldwide, demanding the attention of all nations, East and West, large and small, developed and developing. In most nations of the developing world, population growth consumes much of their economic growth, condemning people to continuing poverty. Too rapid population growth hinders a nation's ability to progress and to satisfy the growing demands of its people for a better life.

The evaluation of long-term family planning programs suggests that a broader, diffused approach to changing social structure might have a more lasting impact on fertility than the direct approach implied in family planning. Women are particularly able to make major contribution in the development of their communities since, normally, such activity is compatible with the responsibilities that they have in their families. It was not until the nineteenth century that women, to any degree, began to question their limited role in society. The early birth control movement

was part of the feminist protest against being chained to the home by large families.

Acceptable nonfamilial substitute roles for women, to supply the satisfactions that they find in motherhood must be found. A world, faced with a population crises, cannot permit women to indulge their "child hunger." If women can be deflected from traditional familial roles, they may be satisfied with smaller families.

### Assumptions

The role of women in a community is a most important one and no nation can afford to ignore it. A nation's growth should not be dependent upon ignorance and misfortune of its citizenry or upon the unequal status of some elements of its people. The relationship of discrimination against women needs to be explored for a high degree of discrimination against women may increase fertility.

Voluntary family planning for women means controlling their own fertility voluntarily and the mere ability of women to control fertility can bring, when a couple has a wider choice of life styles, an improvement in the status of women.

Improvement in the quality of life means for women, greater access to education, progress in health and welfare, greater access to technical and professional training, to employment, and greater freedom from cultural and social constraints on her progress and development. Therefore, limitations on the rights and roles of women abridge basic

human liberties that might affect indirectly the population growth.

A revision of marriage laws, property rights, political rights, educational and employment, maintenance and inheritance laws would tend to decrease fertility because with such independence and assurance of position, a woman is able to feel content with a small family. In societies where a woman gains security through children on whom she can depend for support, the birth rate can be reduced only when other forms of security are assured and there are alternate activities in which women can become engaged.

### Objectives

This study deals with the need for family planning assistance which not only will help women to utilize their full potential, but enhance their position and their role in society.

The specific purposes of this study are:

1. To examine the relationship between levels of fertility as measured by the gross reproduction rate in developing and developed countries and various indicators of the Status of Women.
2. To develop a scale to test the correlation between fertility and the indicators of the Status of Women.
3. To assist country personnel with recommendations to be implemented beyond family planning programs.



### Definitions

The term status is defined by Linton as "a position in a particular pattern. Each individual has many statuses since each individual participates in the expression of a number of patterns. The status of individual means the sum total of all the statuses which he occupies. A status, as distinct from the individual who may occupy it, is a collection of rights and duties" [84:202-8].

The interpretation to be given the "Status of Women" for the purpose of this study may be found in the Charter, in the Universal Declaration of Human Rights, the International Covenants on Human Rights, and especially in the Declaration on the Elimination of Discrimination against Women, unanimously adopted by the General Assembly of the United Nations in 1967 (see Appendix A). The following indicators of the Status of Women have been selected for this purpose:

1. Female literacy
2. Women's employment
3. Civil laws (age of marriage, property rights, social security, polygamy and divorce)
4. Political rights (voting and election)
5. Traditions, cultural values and other social factors that affect attitudes towards family size and the roles and status of women in the family.

"Family planning" should not be limited to "contraceptive devices through health service programs," but for the purpose of this study, the concept of family planning is to be understood as encompassing a variety of measures aimed at enhancing the enjoyment of human rights and the improvement of living conditions, such as:

- a) Adequate social, economic, legal and educational conditions, and adequate social and medical measures for the care and protection of mothers and children, taking all appropriate national and international measures to advance such development.
- b) The availability of all necessary information, advice and means permitting individuals to decide freely on the number and spacing of their children, taking into account the right of every child to be a wanted child and the needs of the community as a whole.
- c) A proper education for young persons of both sexes to prepare them for responsible parenthood.

The countries included in this study will be defined as "Developed" or "Developing" based on the "level of fertility" of each and measured by the Gross Reproduction Rate (GRR). The Gross Reproduction Rate (GRR) is defined as the average number of daughters that would be born per woman surviving to the end of her reproductive period in accordance with the prevailing age-specific fertility rates. According to the Population Division of the United Nations, "No other

criterion, be it per capita income, urbanization, literacy, industrialization, etc., defines this dichotomy so sharply as the level of fertility. With exceedingly few exceptions, it can be said that where the gross reproduction rate is greater than 2.0, the country is a "developing" one, and where it is less, the country is "developed" [106:3].

#### Countries Selected and Sources of Data

The sources used to gather the data for this study were: United Nations Statistical and Demographic Yearbooks, United Nations Documents and Reports, Population Council and Country Profile Reports, individual and team research studies, national data reports, Embassies' documents, official and scientific journals and national and international conferences documents.

The selection of the countries was based on the judgement of region representation, culture diversity, population range in developing as well as developed groups, proper and better quality of available data and substantial size of country. Other than that the countries have been arbitrarily selected.

Countries selected and their GRR between 1960-1965:

<u>DEVELOPING</u>		<u>DEVELOPED</u>	
India	2.4	Japan	1.0
Taiwan	2.7	Sweden	1.1
Egypt	2.8	France	1.3
Brazil	3.0	U.S.S.R.	1.4
Ghana	3.0	U.S.A.	1.8

### Methodology

Descriptive data on population, status of women and fertility were summarized for each country selected in this study (Chapter 3-4). Six level scales, for measuring fertility and the status of women were developed. Graphic presentation and correlations between fertility level and the indicators of status of women were made (Chapter 5). A comparative analysis of the status of women in developing and developed countries and their GRR's was carried out (Chapter 6).

## CHAPTER II

### REVIEW OF THE LITERATURE

#### Population and Fertility Change

Population changes are but one element in an interwoven complex of various events. They are an integral part of an entire process of socioeconomic changes. If one factor changes others must change also [70: 509]. Population is treated quantitatively and qualitatively in terms of educational levels, cultural values, marital customs, etc. Interest is focused not merely on the increase or decrease in the size of the society over time, but on the quality of its human resources.

The desire to improve one's position in the social scale has been stressed as an important motive for family limitation. The argument is particularly associated with the name of Dumont [143], who in the latter half of the nineteenth century devoted an extensive series of studies to this phenomenon, which he termed "social capillarity" (*capillarité sociale*). Just as a column of liquid must be thin in order to rise under the force of capillarity, so also must a family be to rise in the social scale. Social mobility is thus more feasible with one or two children than with a large number. According to Hauser, "fertility behavior is in large measure dependent upon the social milieu, and that changes in

fertility behavior necessarily involve social change. Or, put it in another way, knowledge of the person's attitudes, values and motivation cannot be expected to account for differences in fertility behavior out of their cultural context; and, consequently, changes in fertility behavior cannot be produced through efforts to change attitudes, values or motivation except in the context of changes in the social order' [62: 464-5]. Coale [26: 168] shares with R. Freedman [46: 35-121], Podyachikh [104: 245-247], Sauvy [122: 131-132], and many others the view that aspects of modernization influencing fertility control include declining mortality, the rising status of women, an increase in the influence of secular rationality and a decline in the motivating influence of customs and traditions, and the spread of education and literacy. Bruce [18] suggests that legal position of the women in the family and her rights under private law will have an important effect on the part she can play in society as a whole. Legislation guaranteeing women equal political rights with men will mean little in practice if the woman is treated as a second-class citizen in her home. Moving beyond the concept of legal status alone, the Declaration on the Elimination of Discrimination against Women, demanded the eradication of prejudice against women and the abolition of all customs, regulations and practices in daily life that are based on the idea of the inferiority of women or that serve to discriminate against them [30]. These comprehensive goals are relevant not only

to the expansion and protection of basic human rights but to the analysis of the association between various aspects of the status of women and demographic patterns of fertility, mortality and migration. Fertility and the social processes associated with it are of special importance in this regard. The status of women may be seen as both a determinant and a consequence of variations in reproductive behavior: woman's health, educational opportunities, employment, political rights and role in marriage and the family affect and in turn are affected by the timing and number of her births and by her knowledge of how to plan them. The impact of birth planning on the individual woman's potential for personal autonomy and participation in all sectors of public life is clearly as important as the question of the impact on fertility of improvements in her status, which may be of greater interest from the demographic point of view.

According to some U.N. studies [143], in countries where fertility has declined, changes in the status and role of women have been advanced as a reason for the decrease in family size. Many changes are believed to be working against women's acceptance of their traditional role as homemaker and the bearer of children. Factors frequently mentioned as contributing to the changing attitude among women are the increased education and equality for women in many spheres of public life, the emphasis upon the woman's role as a companion with equality in marriage, and the opportunity for personal development and independence.





From the previous discussion it is concluded that the practice of family planning becomes a woman's human right. By making it possible for the woman to choose the time of conception and the size of her family, it enables her not only to protect her health and save her life, but also to maintain her status as a person instead of being a biological tool, a person who should be able to plan her life and shape her destiny and to have the opportunity to develop her talents and to advance and perhaps also to contribute to the cultural and economic life of her society.

#### Industrialization, Urbanization and Economic Development

The historical decline of fertility in the now developed, low-fertility countries is generally attributed to a complex of factors related to economic development and industrialization or to what is vaguely described as the process of modernization.

The Soviet scholars are critical of the opinions and assessments of Western demographers as regards the situation in the developing countries. The Soviet view is that "it is not correct to credit the difficulties of the former colonial and underdeveloped nations to the uncontrolled growth of their population. In particular Soviet scholars are scornful of the opinion that efforts to modernize the economy of the underdeveloped nations creates surplus of labor and consequently overpopulation, and that in order to prevent unemployment and low standards of living in the underdeveloped

countries, the rate of their industrialization should be slowed down and more primitive forms and techniques of production preserved. Soviet scholars claim that the purpose of such teaching is to preserve the economic dependence of the primitive countries on the industrial economy of the former controlling nations and continued exploitation of the former colonies by the more advanced nations" [59: 288].

Freedman [47: 41], Sauvy [121: 212-3], and others stress that in a modern, industrialized society changes in the structure and function of the family make the large family a liability rather than an asset as it is regarded in many traditional cultures. Podyachikh [104: 246] also notes the effect of urbanization upon fertility through the influence of that process on marriage age, the duration of formal education and the changing function of the family. Freedman has speculated that "family planning is unlikely to be widely adopted in any country until there has been a significant mortality decline and until there has been enough social and economic development to lessen dependence on local and familial institutions and to make smaller families more rewarding than larger families: [47: 45]. He proposes further, that once the threshold stage of development is reached, family planning programs could be successfully implemented in high fertility countries. According to the "threshold" hypothesis,

. . . in a developing country when fertility is initially high, improving economic and social conditions are likely to have little, if any, effect on fertility until a certain economic level is achieved, fertility is likely to enter a decided decline and to continue downward until it again stabilizes on a much lower plane (107: 143).

However, we must consider that the high fertility of low-income countries usually produces a large proportion of children and a small proportion of adults in the economically most productive ages. According to Coale (27: 126), the developing countries have forty to forty-five percent of their population under age fifteen, in contrast with a maximum of twenty-five to thirty percent in the highly industrialized countries. The age composition in developing countries, therefore, is unfavorable to economic development. According to Bourgeois-Pichat (17: 67-68), the nonproductive segment of the population constitutes a greater burden in the developing countries than in the developed ones. For every 100 productive adults in the developing countries there are 85 nonproductive persons (79 children and 6 aged persons), the corresponding figure for the developed countries is only 57 (36 children and 21 aged persons). Because the nonproductive period is customarily extended to the age of twenty in developed countries, it might be more accurate to put the number of nonproductive persons at 76 (53 children and 23 aged persons). "In either case, the unfavorable age composition of the population of developing countries is apparent. This is not a new phenomenon. It derives from the dichotomy

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between developing and developed countries with respect to fertility. This compounds the problems created by the rapid rise in annual population growth rates--a phenomenon of recent decades" [17: 67-68].

The relationship between industrialization and urbanization is complicated by the fact that there is not necessarily a suitable, appropriate, or optimum timing in the rate of urbanization and the rate of industrialization, even assuming that they proceed at equivalent levels. One of the prime development questions is, when it may be possible for industrialization, in terms of producing jobs, to catch up with urbanization. In Egypt for example, the nature of rapid urbanization, in relation to fertility and population growth, shows a pattern which deviates from the experience of industrialized countries. According to Abu-Lughod [3], rural migrants move to the sections of the city where their own country folk live, reinforcing their own traditional outlooks, instead of absorbing new modern cultural values. Rural families still foster favorable attitudes toward large families.

#### Family Allowances

Family allowances can be broadly defined as "systematic payments made to families with dependent children; either by employers or by the government for the primary purpose of promoting welfare of such children" [147: 1]. As of early 1967, 64 countries had introduced family allowances programs.

Theoretically, where family income and fertility are known to be correlated, family allowance payments (as a form of family income) should also be correlated with fertility in the same way. Traditionally, higher income families have been observed to have fewer children than lower income families, although in many developed countries there has been a tendency over the past several decades for differences in fertility by economic status to diminish [71: 59-75]. Some studies have reported evidence of a reversal of this relationship [45: 414-426]. According to results obtained from a regression analysis of data for over 100 countries, the direction of the relationship between income and family size varies with the level of development: it tends to be positive in the more developed countries and negative in those where economic progress has been much slower [51: 44]. Some scholars have concluded that family allowances would encourage smaller families by "creating the desire and possibility for a better standard" [88: 5]. However, since under a family allowance system gross family income necessarily increases with family size, it is generally believed that especially in developed countries, family allowances will reduce the incentive to limit family size in order to achieve a better standard of living. According to Sauvy [124: 508-509], it is believed that family allowances have had their greatest effect in increasing the frequency of births of second and third parity, since it is among

middle-class families with only one or two children that the economic constraint plays an important role in the decision about family size. The view is held that the advent of family allowances has not created the desire for more children, it has, however, reduced the financial barriers against having the number of children already desired. Allowances to non-working wives are also believed to have increased fertility, in that they have reduced the amount that the wife would gain by going to work and have therefore reduced the costs to her (in terms of lost opportunities) of raising a family.

#### Cultural Values, Attitudes and Behavior in Fertility

Considerable emphasis has been placed upon the tenacity of the social structure and values in the face of the introduction of fertility control. It is possible that the stress laid upon the role of the family and other social institutions as perpetuators of customs that regulate attitudes and behavior with respect to family size may have diverted attention from changes in these and other segments of society. Hauser suggested that,

Another decade or two of the present type of family planning programs may turn out to have relatively little impact compared with other forces that are accelerating social change in general and, as part of such change, a change in attitudes, values and behavior in respect to fertility control [61: 413].

The powers of procreation are held in different degrees of restraint in the developing countries by differences in behavior pertaining to marriage, sexual relations, and

birth of children. Among the cultural traits which may be important in this connection are not only specific customs and behavioral norms (such as the moral disapproval of "artificial" birth-control in Roman Catholic societies or the traditional customs in many African societies of prolonging lactation and suspending sexual intercourse during rather long periods after child-birth), but also more general and more fundamental characteristics of culture, relating to such matters as the values attached to family life and children as opposed to competing interests and activities, the spirit of thrift, prudence, and self-discipline, rationality, and the disposition to attempt control of one's destiny.

While it may be true that men and women in the less developed regions of the world are generally motivated to have numerous children, this does not mean that they necessarily desire to have as many as they are able to produce, nor that there are no important differences between countries in attitudes and aspirations in this respect.

If we examine the patterns of attitudes and behaviors in fertility, we can see that they are regulated by complicated economic, social and cultural factors. Possible obstacles impeding the adoption of family planning are: (1) economic underdevelopment with prevalence of rudimentary agriculture, (2) low degree of urbanization, (3) social system (joined or extended family or patriarchal





family system), (4) value system; traditionalism, lack of ambition for higher social stratum, taboo attitude toward sexual matters, lack of urban way of life, (5) lack of education or illiteracy, (6) religious objection, (7) unconsciousness of government, (8) unawareness of the general public, (9) inadequate spreading of information on family planning, (10) lack of communication between husband and wife on sexual matters and family planning, (11) lack of effective transportation, (12) shortage of midwives and nurses, (13) shortage of qualified leaders, (14) difficulty in getting contraceptives, (15) lack of proper housing conditions (lack of privacy, water, shortage of facilities, etc.).

According to the "cultural lag" [107: 143] theory of fertility differentials in countries where fertility has been declining, attitudes and practices conducive to diminishing fertility have been adopted first by the better educated, wealthier, and socially more favored groups of the city population and transmitted in the course of time to intermediate and lower status groups and to the rural populations. The fertility of most highly educated groups in the population may be diminished merely because so many of their years of early adult life are spent in school and so their marriage is delayed.

It is agreed that national fertility decreases in response to an alternation of values relative to children

and childbearing among a sufficiently large number of couples capable of reproduction. There is also agreement that such changes in values and supporting actions to restrict the number of progeny occur in a milieu in which a certain measure of economic and social development has been achieved. Thus, the question becomes, in what circumstances will individuals consciously control fertility? Noting the difficulty of making valid and useful generalizations, Coale points out that, although "the principal change responsible for the development of controlled fertility has been a change in attitude or motivation" [26: 168], the factor influencing the motivation is not known. He notes that all modernized societies have low fertility, but that none of the indicators of modernization (urbanization, communication, education and patterns of employment) is self-evidently related to controlled fertility. It is also held that shifts in values with respect to children occur because in an urban industrial society children become economically more of a burden than an asset, child labor restrictions, compulsory education and higher legal minimum ages for marriage being characteristic of such societies.

The preceding discussion deals with factors that have tended to render old values inappropriate or obsolete under changing social and economic conditions. A related question concerns the process whereby new values tend to become effective in actual behavior and to result in the reduction

of fertility. Sauvy [121: 212-213] pointed out that this process occurs in three stages. First, a positive desire for many children exists, then, a desire to limit the number of children but when the motivation is insufficient. Later, the motivation is strong to cause couples to limit the number of children that they have. Davis points out, however, that birth control was only one of the means whereby the people of Japan and north-western Europe reduced fertility. In what he has called the "theory of multiphasic response," Davis points out that these people reacted to the persistent excess of births over deaths with virtually the entire range of possible response. "Each industrializing nation tended to postpone marriage, to increase celibacy, to resort to abortion, to practice contraception in some form and to emigrate overseas" [29: 350-2]. He maintains that "an understanding of this process in population theory has been hindered by a failure to see the multiphasic character of the response and by an interpretation of demographic behavior as a response either to absolute need or to some cultural idiosyncrasy such as a particular "value system" or "custom" [29: 350-2].

The question is often posed as to whether the experiences of western developed countries and of Japan are likely to be repeated within a reasonable time without "interference" in countries where fertility is still high. Since the factors underlying the decline in western countries

are not fully understood, and since the time element is crucial, the question of immediate interest is whether small family normative values and supportive action, in other words, fertility regulations can be introduced into these societies in the absence of some or all of the modernization changes that preceded or accompanied fertility declines in the now advanced nations.

#### Women's Education

It is usually believed that one of the reasons for fertility decline in developed countries was the advance in education for the general population. Even at present, as the level of education rises, fertility usually declines in both economically developed and underdeveloped countries. The ability to delay marriage or a first birth does become salient as higher education for women becomes more generally accepted and valued. But education itself may be the very precondition necessary for motivated birth planning.

How can literacy and broad educational gains affect fertility? One indirect way is by helping to reduce mortality which will later reduce fertility. Obviously, literacy also will facilitate the dissemination of information about the idea and means of family limitation. With increased education and literacy the population becomes involved with the ideas and institutions of a larger modern culture. It is relevant that Taiwan, a high fertility country in which significant fertility decline seems great, has a relatively

high literacy rate.

The author does not believe that education about fertility and family planning alone, completely in advance of other changes in the society, can be very effective for changing fertility norms and behavior. Such a single specialized educational program alone does not affect linkage of the local population to the larger units in the broad and continuing way which can lead to the essential growing dependence on nonlocal familial institutions. General education and literacy probably are required to do this.

On the other side, education can deter early marriage and childbearing or postpone it beyond the average age of family formation as long as the woman stays in school. From a demographic point of view the effect of education on reproductive behavior is the more interesting aspect of the association. Fertility is affected by factors related to education such as openness to new ideas, higher standard of living, exposure to urban environment, and a greater range of options and interests outside the home. Bogue [15] analyzed childlessness among all United States women over 15 years of age who had been married at least once. The analysis of this more restricted category eliminated the factor of childlessness due to spinsterhood. Comparing the percentages of women who were childless at various educational attainment levels, Bogue found that being childless was highly related

to education. For every age group, among Whites and non-Whites, those women with the most education had a much higher rate of childlessness than those at the lower educational levels. While not conclusive evidence, this consistent relationship between education and childlessness suggested that not bearing children is often a matter of choice, not infecundity. Nevertheless, most studies show that the educational level of the wife is more strongly correlated with a couple's fertility than the educational level of the husband, suggesting that however the causal mechanism works, investment in female education may have a greater impact on fertility than the same investment in schooling for men.

The educational factor affects the labor input. A comparison of the percentages of illiterate population shows that the percentage reaches 89 for developing countries while it does not, as a rule, exceed 4 percent in the developed ones [144]. There is a close interrelation between the provisions laid down by labor laws for the protection of children and young persons, on the one hand, and school regulations providing for compulsory education on the other. Without compulsory education laws, a minimum age for admission to employment is difficult to enforce. At the same time, without a minimum age for admission to employment parents may be tempted to disregard compulsory education laws so as to benefit from their children's earning power at an early age.

The existence of compulsory education laws, however, does not ensure that all children within the stipulated age range will be found in school. Developing countries, caught between scarce resources and a high birth rate, often find it difficult to provide free public education to all children that are required by law to attend school. Even when school facilities are available, poor transportation facilities, inadequate enforcement of compulsory school attendance, and other factors often make it difficult to ensure that children will make use of them [141]. But the main reason for the failure of children to attend school is poverty. Where children must work to support themselves or their families, compulsory education imposes a severe cost on parents even when provided free by the State [127: 7-8]. However, if this barrier can be avoided, even the transition from illiteracy to literacy resulting from very low levels of schooling is shown to have some influence on family size in many areas, unlike the situation in industrialized countries where significant reduction in family size may not appear until much higher levels of schooling are reached. Sauvy [123: 111-113] emphasizes particularly the education of women as an aspect of social development that is fundamental to changes in reproductive behavior leading to lower fertility, but maintains that an increase in the standard of living is a prerequisite to changes in values regarding family size.



Women's Employment

Various reasons have been suggested as to why an increase in income alone should produce a decline of fertility. One theory is that the balance between competing sources of pleasure changes as wealth increases. Greater income makes possible a wider selection of leisure-time activities. Child care may be considered an interference with the satisfaction of other desires, and hence the incurring of such responsibility may be limited.

Spencer argued that as societies develop and become more complex, there is a natural decline in the fecundity of the population. The reduced capacity for reproduction, according to Spencer, was directly attributable to the amount of energy expended upon "mental labour carried to excess." Spencer was particularly sensitive to the women of modern society, about whom he wrote scoldingly, "the deficiency of reproduction power among them may be reasonably attributed to the overtaxing of their brains, an overtaxing which produces a serious reaction of the physique" [132: 485-486]. So, for Spencer, the working woman, especially one who did mental work, was diminishing her capacity to reproduce children. Interestingly, it is true that there is a distinct tendency for women who are employed, particularly in managerial or professional occupations, to bear fewer children than women who are not employed, but this is likely to be due much more to personal choice than to infecundity.

The findings of an Egyptian research group [14] suggest that fertility patterns are the results and not the cause of socio-economic structure. In particular, low fertility is brought about by socioeconomic changes resulting from industrialization and urbanization. Furthermore, the involvement of women in the labor force creates a conflict between women's work and childbearing which offers the potential for the socioeconomic change that would alter fertility patterns. The Growth of American Families study [58] reveals that working wives, especially those in their late thirties who have worked five years or more, expect to have fewer children than most of the other wives.

In most developing countries the employment-fertility relationship is less clear, although a distinction must be made between urban and rural areas and between the modern and traditional sectors of the society. In rural areas, paid employment usually has little impact on fertility, partly because the value of large numbers of children often remains strong, and partly because the employment is likely to be of an agricultural or marketing type in which a woman may either keep her young children with her while she works or leave them with other family members. In urban areas women's paid employment is more likely to be incompatible with raising a family if it takes her out of the home and if she has difficulty in finding ways to care for her children. Some studies in urban centers of developing countries have shown

that women in the professions and in white-collar occupations are more favorably disposed towards the use of contraceptives and have fewer live births than skilled manual workers, who in turn have smaller families than women in sales, trade or the service sector.

Conditions vary greatly from country to country according to their culture, socioeconomic structure and level of development. In general, however, one finds that women are less likely to be gainfully employed outside the home than are men, although they may be engaged in equally heavy unpaid domestic or agricultural labor. Working women are mostly concentrated in the lower status and lower paying jobs. Child-care facilities in most countries are inadequate to meet the needs of working parents. Therefore, high level of education may not motivate a woman to want a smaller family if her training does not lead to the right active participation in employment outside the home. Female employment itself may not influence fertility significantly unless a woman's education has prepared her for other than subsistence agricultural labor, unpaid work in a family enterprise or low-status, low-paying jobs.

#### Civil Law and Status of Women

In many countries equality within the family has not yet been recognized in civil law, and, upon marriage, women may be deprived of many rights such as the independent ownership of property or the right to work without their

husband's consent. But even in countries where legislation favors equal rights, traditional cultural patterns of male dominance in private life are slow to change.

### Age at Marriage

The United Nations [31] has declared that child marriage and the betrothal of young girls before puberty is to be prohibited and that women shall have the same right as men to free choice of a spouse and to enter into marriage only with their free and full consent. Minimum standards for age at marriage are to be set in every country at not less than 15 years, with all marriages being officially registered.

What impact would the timing of marriage have on spacing and limiting births and the exercise of the woman's rights at this crucial transition period in the life cycle? Raising the average age at marriage will: a) place women in a far better position to choose a husband and give time for education; b) may be essential to effective communication between husband and wife about family size desires; c) decrease the reproductive period in a woman's life cycle; d) delay the first birth; e) reduce the birth rate. However, at any rate, raising the minimum from 12 to 14 years, or from 14 to 16 may have no effect at all on the average age of the woman at the time of her first birth. Indian studies [4: 172] suggest that marriages would have to be pushed up over 19 or 20 years to have a significant demographic impact in that country.

In most countries the average age at first marriage for women tends to be higher among educated and employed women and higher in urban than rural areas. Social pressures to marry girls off while they are very young remain strong in many regions. An unmarried daughter past a certain age may be considered a disgrace to the family. There are also those situations in which a woman's status is defined almost entirely by the number of children she bears, or by the number of her sons, so that the more fertile she is, the greater is her authority. A woman's prestige in the eyes of her husband, her relatives and the community at large may depend solely on the number of children she bears. In the context of such beliefs it would be detrimental to the status of the woman to practice contraception as long as no alternative roles were possible under existing economic and social conditions.

### Property Rights

How does the denial of certain civil rights, such as the right to own or inherit property affect a woman's desired family size? Where only male children inherit property, does fertility increase until a desired number of sons are born? Is a woman who bears no children or who bears only one or two, or only daughters, disadvantaged under some legal systems more than others?

Property rights, maintenance and inheritance laws tend to decrease fertility because with such independence and

assurance of position, a woman is able to feel content with a small family. In societies where a woman gains security through children on whom she can depend for support, the birth rate can be reduced only when other forms of security are assured and there are alternate activities in which women can become engaged.

### Social Security

Social security programs might be expected to have a negative effect on fertility, the strength of the effect varying with the scope of the program and the size of the benefits. With social insurance, parents no longer have to rely solely on their children to provide for them in case of sickness, unemployment or old age. Therefore, some of the motivation to have large families is reduced [64: 429-430].

Testing the effect of social security participation on fertility, Friedlander and Silver [52: 429-430] found the expected negative regression coefficient bordering on statistical significance for all countries combined. It was observed that the association was negative for developed countries but positive for developing countries, and that the former was clearly more significant than the latter. The authors suggest that the effects of social security measures upon fertility may be destroyed by the differences between existence and effectiveness of established laws, particularly in developing countries.

### Polygamy

Most countries do not permit plural marriages. However, Islamic law permits a man to be married to a maximum of four wives at any time [75: 137]. The laws of Moslem countries seek to conform with the Koran's instruction that four wives are permissible if they are treated equally, but they may have different interpretations. Except in some African regions and among Arab Bedouins, polygamy, however legal, is not so widely practiced as previously, and in the more progressive Moslem countries, it appears to be falling into disrepute [78: 151].

Several studies comparing the fertility of monogamous and polygamous marriages have found that polygamy reduced fertility. In a study of fertility among Bedouin women, Muhsam [93: 11-16] concluded that women living in polygamous marriage have fewer children than wives of monogamous husbands. The depressing effect on fertility may result from lower average frequency of coitus for wives in polygamous marriages than would occur under monogamy [107: 22].

However, despite its acknowledged effect on fertility, polygamy is probably not sufficiently widespread in any country to exert an appreciable effect on the overall birth rate. In a society where an important number of women would not have the opportunity to marry under a monogamous system, polygamy will increase the number of married women. Therefore, the effect of reduced fertility per married woman on the

birth rate in a polygamous society might be counteracted to some extent by the effect of an increased number of married women.

### Divorce

The right to divorce is not universally granted and the permissible grounds for divorce vary among those countries where it is legal. In European countries where divorce is possible, it is generally permitted by judicial decision only on the grounds of adultery, desertion, cruelty or imprisonment [112: 16]. Divorce, easily obtained under Moslem law, is particularly common in cases of sterile marriages and unions which produce only daughters [107: 19].

It is unclear in what ways divorce may affect fertility. One consequence of divorce may be that a childless marriage is replaced by a marriage which results in children. On the other hand, divorce may not be followed by another marriage at all. Alternatively, it could be said that the relaxation of divorce laws may encourage the disposition to marry while at the same time reducing the stability of marriage [36: 18-26]. In societies where the husband has unilateral power to divorce his wife and take another, the fear of repudiation can motivate women to have many children as a form of protective insurance. Thus where sterility or the absence of sons is frequently used to justify divorce, the women with the most children may feel the safest in her marriage. Eliminating the husband's



power to divorce his wife at will could lighten the pressure on a wife to reproduce many children.

### Political Rights

The United Nations has declared the right of women to participate in public life and political decision-making on equal terms with men, specifically the right to vote in all elections, to be eligible for all publicly elected bodies, to hold public office and to exercise all public functions.

Women involved in public life, national activities or political areas find themselves taken out of the home and into a world of wider interests and rewards. Therefore, they may desire to have smaller families to reduce their domestic responsibilities and to be free for such participation. Such women can be a powerful force toward changing attitudes regarding female roles and responsibilities. Even the simple act of voting is symbolic in manifesting a belief in women's capabilities of independent thought and action. The exercise of civic responsibilities in this area would convince women about their active rather than passive participation in the life of their communities. As women acquire greater awareness of and confidence in their ability to make autonomous decisions, such exercise could be carried on into their private life.

## Religion

A program to reduce births cannot appeal to the masses unless it gains support from the religious institution.

Lorimer [86: 183] has pointed out that the history of religious followers as a social group may affect that religion's position on fertility and its readiness for social change.

Religious opinions differ widely on the fertility subject. The two religions, often quoted as encouraging natality, are Islam and Roman Catholic.

Kirk [79] maintains that the Islamic religion partakes of the pro-natalist social forces that exist generally in peasant and pastoral societies. High mortality rates, especially of infants and children, have in the past called for unrestricted reproduction. Sons are valued for many purposes: for continuity of family line and land-ownership; for contribution to agricultural labor; to strengthen family numbers in village rivalry and strife; for support in old age; for religious intervention at and after death. Freedman [48] pointed out that emphasis in the religious system on the importance of a male heir for ritual purposes probably produces pressures over time in a high mortality society for at least two sons to guarantee the survival of at least one. This means that on the average each family will want at least four children.

Moslem doctrine does not prohibit the voluntary

restriction of births, though as militant religion Islam historically put pressure on men to produce numerous children and especially sons. Nevertheless there are clear authoritative statements, for example by the highly respected medieval theologian Al-Ghazzali, that would permit the practice of birth control (coitus interruptus) under certain conditions [76]. The conviction that a large family is encouraged by the Islamic religion is supported by verses of the Koran such as: "Wealth and sons are the allurements of the life of this world" [6]. However, Sheik Sharabasy [129: 122-3] maintains in his interpretation of the Koran that the word "Wealth" precedes "sons" and is therefore a precondition to it. It is those who can afford raising them who may have as many children as they desire. Another Koranic verse often quoted as encouraging fertility is: "Multiply and get married because I will boast by thee over other nations in the Day of Resurrection" [6]. Sheik Sharabasy asserts that the time factor has to be taken in consideration. It was essential, at the time of the prophet, to encourage population growth to promote Islam. But that was proclaimed fourteen centuries ago when the total number of Moslems did not exceed 10,000. As the number of Moslems throughout the world is now approximately 600 million, growth is no longer necessary to propagate Islam.

The Islamic religion forbids abortion after the creation of the soul. However, according to El Kammash

[38: 313] most of the Moslem jurists agree that the soul is created in 120 days after conception. Therefore, Sheik Ibrahim clarified that abortion is sanctioned within the first hundred and twenty days before the child is gifted with a soul [68: 67-86].

The institution of polygamy has been justified in the Islamic religion under the following Koranic verse: "If ye fear that ye shall not be able to deal justly with the orphans, marry women of your choice, two, or three or four. But if ye fear that ye shall not be able to deal justly, then only one, or that your right hands possess" [38: 315]. El Kammash maintains therefore that polygamy is conditioned on the ability of the husband to treat the various wives equally in all respects--which is impossible--as well as avoid the consequence of poverty. Ungor [142] explains that the woman in Islamic religion is to be the equal of man as a human being. And, since this principle of spiritual equality is basic, the discrimination against women in the Islamic family structure can only be explained by the customs and social conditions of the community.

The Christian religion shares with other religions injunctions to marry and multiply. The Catholic Church in particular forbids contraception. Pope Paul's Encyclical *Humanae Vitae* of July 1968, had a great influence upon the Catholics. All contraceptive devices, except the rhythm method, were prohibited. At the same time, however, there

are countervailing forces at work, even within the Church hierarchy, which make a final assessment of the Papal Encyclical difficult. One of the documents opposing the Encyclical was an open letter dispatched by a group of Catholic laymen. They criticized the following points:

1. The rejection of contraception is in contradiction to the general doctrine of the Church which sets as a norm the respect of the human person and of the values of the conjugal community.
2. If each individual sexual act must, according to the Encyclical, respect the double significance of sexuality, namely conjugal unity and procreation, methods of birth control considered moral by the Church, such as the rhythm method, must be condemned.
3. Any technical advance may be used for good or evil. If the practice of contraception brings risks of licentiousness all methods including the so-called natural ones, as soon as they obtain the efficiency the Encyclical explicitly wishes, present the same risks.
4. Moral integrity is not a question of meticulous differentiation between one contraceptive method and another, the true problems are at a deeper level.
5. Finally, whoever takes seriously responsible paternity and the value of conjugal intimacy will not be able to do so without the efficient birth control devices [100].

From all the above, it appears that the faithful openly assert the right to think for themselves and to discuss the teachings of the religions. It seems clear that formal religious considerations are of greater importance to the elite than to the masses. Major studies in Latin America, have concluded that Catholic belief is not a substantial barrier to the use of modern contraception. "We may

conclude . . . that (the Catholic) religion is no real impediment to realization of low-fertility ideals" [65: 202]. Also, most experts believe that Moslem fertility is based less on theological doctrine than on the traditional subordination of women in Moslem culture [80: 561-79]. Similarly, any inhibition to family planning among Hindus in India is probably attributable more to philosophical fatalism than to religious doctrine.

### Summary

Change in fertility behavior necessarily involves social change. Attitudes, cultural values and behavior are forces accelerating social change in general. Industrialization, urbanization and economic development have an effect upon fertility through the influence of that process on the size of the family. Women's education and employment, on the other hand, tend to decrease fertility. The exercise of women's civil rights concerning age at marriage, property rights and social security is important in controlling fertility. It is unclear in what way polygamy and divorce affect fertility. Women's involvement in political activities might create the desire for smaller families in order to be free for such participation. Religious institutions have variable influences in supporting family planning programs.

## CHAPTER III

### FACTORS RELATED TO THE STATUS OF WOMEN AND FERTILITY IN THE DEVELOPING COUNTRIES

This chapter includes descriptive data on population, status of women and fertility for each of the five developing countries selected for this study. However, some data were not available in certain cases.

#### Egypt

Egypt is located in the northeast corner of the African continent and its total area is 386,000 square miles. Only 3.5 percent of the land is inhabited, and 2.5 percent is capable of producing crops. The population of Egypt has doubled in the last thirty years [21: 3]. By August 1971 it had grown to an estimated 34,900,000. The population density of the inhabited area is almost 2,400 per square mile.

#### Growth Patterns in Egypt

The recorded crude birth rate\* has fluctuated between 39.3 and 44 per 1,000 over the past 60 years, with 44 the estimated rate for 1971. During the same period the death rate dropped, almost steadily, from 26 to 14.3 with a corresponding increase in the growth rate from 17 to 25.4

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\*Number of live births per 1,000 total population.

per thousand [20: 7]. This was due mainly to the expansion of free medical services. The government figure for population growth is 2.8 percent but it is likely that the actual growth rate is closer to 3.0 percent (there is still a high percentage of under-registration of births which is most acute in villages located far from the city or from Health Bureau areas). Egypt fits into Dorn's description of a country with a medieval birth rate and a twentieth century death rate [34: 18]. It is hoped that the rate can be reduced to 1.7 percent by 1975. The life expectancy at birth for men rose from 35.65 in 1936-38 to 51.6 in 1960; for women it rose from 41.48 to 53.8 [145: 708].

#### Status of Egyptian Women

Like many developing societies, Egypt has inherited a tradition of male domination in society. Education for girls was initiated by missionaries about 1840 but it was not until after the first World War (1917) that women gained the right to university study and began to enter the world of work [32: 159].

In 1919, for the first time in the history of modern Egypt, a women's political committee was organized. "Women veiled and unveiled participated in the revolt of 1919 and four lost their lives. Girl students joined the nationalists" [1: 207]. Several women's organizations have been established. Their activities dealt primarily with the improvement of women's education, laws of marriage and divorce, and



unveiling. "The veil and seclusion of women are said to have been introduced from Byzantium. The veil was used to differentiate the free woman from the slave girl who was exposed in the market for public scrutiny. Men believed they were honoring slave girls who were moving in and out among them. Hence, the veil, contrary to western reaction to it, became the mark of respectability. With the abolition of slavery and with the changing values of the world, the veil had no *raison d'être*" [66]. In 1922 the society of the "goutte de lait" was established. Its main activity was the instruction of their mothers in child care [138: 71].

In 1952, the jurists of Al-Azhar issued a judicial promulgation (*fetwa*) which formally condemned the granting of political right to women. In the same year, after the revolution, the Official Studies Commission decided to grant the vote to every woman capable of reading and writing. But the law did not pass and in 1954 a group of women under the leadership of Doreya Shafiq went on a hunger strike demanding the right to vote. The vote was granted in 1956, and the Constitution, issued the same year, recognized women's rights to employment and charged the State to assure to the woman the "harmony between her role in society and her duties in the bosom of her family" [140: 38-39].

At the time, Tomiche analyzed the status of Egyptian women noting:

The largest body of women in Egypt belong to the peasantry: 4,000,000 in number, but largely unorganized, uneducated and neglected. A 1956 decree fixed the daily wage of a male agricultural worker at 180 millimes, and that of a female worker at 100 millimes. Thus the peasant woman is discriminated against by law. True she has been given the right to vote, but as most peasant women are illiterate and thus are ineligible to vote, this right is a very limited one [140: 43].

However, the espousal of "Arab Socialism" by the Revolutionary government has implied an ideological commitment to equality for women. The emphasis on equality takes explicit form in the National Charter 1962, a document that forms the basic statement of principle for the nation and is widely studied in the schools:

Woman must be regarded as equal to man and she must therefore shed the remaining shackles that impede her free movement, so that she may play a constructive and a profoundly important part in shaping the life of the country [35: 159].

A small number of women are members of the National Assembly. The first woman minister was appointed in 1962.

#### Factors Affecting Fertility in Egypt

Shultz [128: 31] pointed out that urbanization alone may not have as direct effect upon fertility as two other variables. He finds that Egypt's fertility varies directly with infant and child mortality and inversely with level of education. Nearly 60 percent of all deaths annually registered occur in the range 0-5 years. As in many other countries where the male offspring are more highly prized than the female, infant mortality afflicts girls

disproportionately. The rural family needs to have a large number of children to insure the survival of more than one male child into adulthood. Thus families will wait until a large number of children have survived beyond the earlier precarious years before the notion of family planning can be entertained.

Rural communities in Egypt foster a high fertility culture. The importance of early marriage and the building of a family is an important factor to a young male peasant. The peasant's family is mainly a working group, and it needs children to work the soil. The wife is a valuable asset as a helper in all activities necessary for obtaining a livelihood. Children are important for providing extra hands and, when they can be hired out, extra cash. The more children, the more free labor and the less chance that the high mortality rate will result in too few hands [10: 126]. Children also relieve their parents from part of the hard work and make it possible for them to enjoy some leisure time and to participate in the social life of the village. As boys are particularly important in helping their fathers in the field, girls are important in taking care of younger children. Both boys and girls start carrying work responsibilities very early. A very small boy walking behind a loaded donkey or attending the water wheel or a tiny girl carrying a newborn infant are familiar sights in rural Egypt. In his region of research, Ammar [7: 56]

demonstrated that a 13 year old boy is capable of performing two-thirds of the tasks involved in the cultivation of crops. That shows that at a very young age the child produces more than he consumes. A son is also the main security for his parents, and even his sisters, in illness and old age.

Early marriage and divorce are factors often considered in relation to high fertility in Egypt. The virginity of the girls and their morality are highly esteemed. The family therefore, encourages early marriage of the daughter saving her honor [95]. Childlessness, has been a reason for divorce or the taking of a second wife among Moslem Egyptians. The presence of children acts as a deterrent and prevents divorce in many cases. This fact may not occur when the wife has achieved high educational status and is no longer judged primarily in terms of her fecundity.

### Civil Laws in Egypt

The Egyptian woman has the right to possess property and to dispose of it freely, without the intermediary of husband or male guardian. She also has the right to become a guardian over minors. She is allowed to keep her family name after marriage and establish her independent legal personality. "She is permitted to work in trade and in professions and has the right to sue others in court without having first to secure her husband's approval" [67: 3].

### Marriage, Divorce and Polygamy in Egypt

Early marriage is discouraged in Egypt by some legislation which fixed the marriage age at 16 for women and 18 for men. But in the country and certainly in the poor districts of the big cities this law has been widely violated. The "loss" of birth certificates is a common reason given in those cases. Birth registration has been compulsory in Egypt since 1912, and birth certificates are required for many purposes, including school enrollment, army service and employment. Nevertheless, some births escape registration. Although there is the tendency to disregard the marriage law now, there is a decline in marriage ratio which might be attributed to postponement of marriage among the educated.

There has been some interest in social change as a means of lowering the growth rate and a new marriage law was drafted to raise the minimum age for marriage from 18 to 21 for men and from 16 to 18 for women. This law has not passed yet. The marriage law in Egypt should go side by side with a change in social and traditional behaviors which lead to its violation. It is suggested that this violation will be corrected, especially in the rural area, only when: (1) daughters no longer run the risk of bringing shame to the family by loss of virginity out of wedlock, (2) when the cost of additional children outweighs the labor income they may bring into the family at an early age, (3) when women enter the labor force and cease to be an economic liability

to the family, (4) and when mothers-in-law are banished from their role of family manager and advisor on how best to hold a husband (give him sons).

In 1929, a family law was passed in Egypt. It rectified the glaring abuses of polygamy and divorce and gave the state control over more or less equalized divorce rights [2: 208]. However, marriage and divorce rates in Egypt are high relative to more developed countries. Islam facilitates the first by permitting polygamy and makes the second easy through simple divorce procedures. Anderson pointed out that "It was far from uncommon in most of these countries (Islamic), moreover, for a husband who wished to discourage his wife, let us say, from buying anymore jewelry to pronounce a suspended divorce should she do so, and the divorce would at once become valid" [8: 227]. According to the new reforms this type of divorce is no longer valid in Egypt and should only be granted by a judge who tries first to reconcile the couple. However, the divorce procedure is considered to be an easy one compared to other countries.

Changing conceptions of marriage on the one hand and economic constraints on the other have held the overwhelming bulk of Egyptian husbands to one wife at a time. Namiq [96: 29] pointed out that despite the permissibility of polygamy, 96.8 percent of all Egyptian marriages were monogamous, 2.92 percent of Egyptian husbands had two wives, 0.17 percent had three and 0.2 percent had four. The small

number involved in polygamy is mostly from the rural area where traditions help to support more than one wife. Serial polygamy is more common in Egypt. A man may take several wives successively in his lifetime. The easy divorce procedures encourage this practice.

### Education in Egypt

In Egypt there has been improvement in the educational level, but the pace of progress has been slow. Girls go to school about half as frequently as boys and once in school their dropout rate tends to be much higher than for boys [5]. Education was made compulsory for all children between the ages of 6 and 12 in 1933; primary education was made free in 1944, secondary and technical education in 1950. There are 8 universities in Egypt, Cairo University founded in 1908 is the largest. Teachers' training colleges in 1964-65 numbered 71 with 41,259 students, including 17,732 women. Although education is free at all stages and compulsory from age 6 to 12, the school dropout in rural areas is high. El - Kammash [37: 130] points out that the educational structure shows marked regional and sex differentials. He maintains that "this difference occurs largely for the generally accepted hypothesis that the level of income is considerably lower in rural areas, and schools are fewer than in the cities. These variables go together. Moreover, villages in rural areas are scattered, and roads are lacking, a fact making it difficult to attend school in an area where a school may be

located."

Schultz [128: 31], Rizk [114: 70-71], and Zikri [151: 194-6] in three different studies reported a clear pattern of inverse relation between the level of education and fertility performance. The later age of marriage among the university and secondary school educated women and the practice of family limitation were direct causes contributing to the observed fertility differential. On the basis of the 1960 UAR census, Schultz determined that a woman with a secondary education had "on the average, 3.1 births in urban and 3.4 births in rural areas after 20-29 years of marriage. Illiterate women on the other hand, reported 7.4 and 6.7 births, on the average, with the same years of marriage in urban and rural areas of Egypt respectively."

The Egyptian woman acquires education for several reasons. First of all she gains a degree of freedom and independence and holds the prestigious status of an educated woman while maintaining her traditional dependence on her family for moral and financial support. Secondly, she can use her education as a tool to enter the labor market. Thirdly, her education may be used as a source of security later in life in case she is divorced or is widowed.

### Employment in Egypt

Women wage-earners in Egypt represented only 2 percent in 1960. But in general the working-woman is found in steadily increasing numbers in office and factory with the



gradual spread of industrialization and growth of the modern sectors of the economy [69: 13]. Her welfare is, in a measure, safeguarded by modern national and international labor laws [2: 209].

Studies suggest that the involvement of women in the labor force creates a conflict between women's work and childbearing which would alter fertility patterns. Hatata [60:2] ascertained in his study of Egyptian women working in a pharmaceutical industry, that the average number of children per married woman of fertility age was 2.8 whereas among a sample of nonworking wives of industrial laborers, the average was 5.9 children.

The female worker in Egypt may have pre- and post-natal leave of 50 days and receive 70 percent of her wages provided she has completed 7 consecutive months in the service at the time she starts her leave of absence. Marriage and child allowances are given to income earners in Egypt in the form of tax exemption. The largest exemption is given for the first child with no additional exemption for any children after the third [39: 365]. Social insurance enacted in 1955 covers employment injuries, old age and disability benefits.

### Religion in Egypt

In Egypt there are no legal or religious barriers to impede couples in planning their families. Contraceptives of all kind are available at reasonable cost. Abortion is legal

if the mother's life might be endangered through continued pregnancy and if approved by a team of doctors. However, records of two university hospitals show that there is one abortion for every two births [39: 365].

The Islamic authorities of Egypt have come out in principle for family planning. They gave evidence from the Koran and the Hadith that God wants Moslems to have happy healthy families, above all else, and if numbers get in the way of happiness and health, the numbers should be held in check.

In two different studies comparing fertility between Moslems and Christians in Egypt (91 percent Moslems and 8 percent Christians) Zikri [151: 194-6] and Rizk [113: 48-106] showed that the total fertility of Christians is markedly below the Moslems in urban areas but differential is absent in rural areas. They attributed the differences to later age of marriage, a higher socioeconomic level, and practice of birth control among the Christian women. Rizk added that a higher divorce rate among the Moslem women could be a factor. Since Moslem and Christian women showed no differential fertility in rural communities, Rizk could not account for the differential fertility by religion alone.

#### Ghana

Ghana lies in the hot, moist lowlands of West Africa. Population estimate for 1970 is 9.5 million. Ghana's crude birth rate is estimated to be between 47 and 52 per 1,000, as

compared with 15 to 25 in the more developed areas. The crude death rate and infant mortality rate were estimated at 23 per 1,000 and 160 per 1,000 live births respectively in 1960. This rate has been declining rapidly as a result of the widespread application of preventive and curative medicine. Preliminary data from a national fertility survey completed in 1970 suggest that by 1968 the crude death rate had fallen to about 17 per 1,000 representing an average decline of three-quarters of a point each year since 1960 [53: 1]. Mortality is likely to continue to decline, particularly in rural areas where preventive health measures are being introduced as quickly as facilities and personnel become available.

#### Fertility in Ghana

Ghanian women, on the average, produce between six and seven children during their reproductive years, and there are some estimates that place the number at even higher than seven. This ranks the Ghanian female as among the most fertile in the world. The number of daughters born is enough to average more than two for every woman completing her childbearing period. This fact, even with high infant and child mortality, assures for the next generation at least twice as many potential mothers [54: 5].

The basis of concern about Ghana's population is not that the country is presently over-populated but that the growth rate is so high that it is already retarding economic

progress thus frustrating national development aspirations and producing a demographic situation that could have serious social, economic, and perhaps political consequences.

### The Population Policy in Ghana

On Human Rights Day in 1967, Ghana became the first sub-Sahara African nation to sign the World Leaders Declaration on Population and to join 30 other nations in affirming these convictions:

. . . that the population problem must be recognized as a principal element in long-range national planning if governments are to achieve their economic goals and fulfill the aspirations of their people;

. . . that the great majority of parents desire to have the knowledge and the means to plan their families; that the opportunity to decide the number and spacing of children is a basic human right;

. . . that the objective of family planning is the enrichment of human life, not its restriction; that family planning by assuring greater opportunity to each person, frees man to attain his individual dignity and reach his full potential [53: 5].

But it was not until January 1970 that the Ghanaian government gave its approval to the establishment of the family planning program and the cabinet authorized the necessary funds to finance it.

### Factors Affecting Fertility in Ghana

Certain African tribal societies are much concerned with the spacing of births. After confinement, women are not permitted to have sexual relations until the infant is able to walk, or is weaned. Observance of this prohibition may be facilitated by the institution of polygamy where it is

prevalent. Prolongation of lactation seems to be a common practice in many parts of Africa, possibly made necessary by lack of fit food for infants, other than the mother's milk, and this is concerned to have the effect of lengthening the intervals between pregnancies. In still other areas, tribal traditions impose no such restrictions on sexual intercourse following childbirth and there is no disapproval of pregnancies occurring at short intervals. The Ashanti of Ghana are an example of the latter case--a tribe which has been found to have uniformly high fertility [86: 72]. Generalizing for rural areas of Southern Ashanti, it was observed: "To be childless is the greatest personal tragedy and humiliation for both men and women and the larger the family the prouder is the parent. In Southern Ashanti a public ceremony of congratulation is performed for a couple who have 10 living children. . . Ashanti wives say they expect to have a pregnancy every two or three years" [41: 265].

In the opinion of some experts, ill health and the life of hard labor which is the case for most African women, are the principal factors limiting fertility in this part of the world [77: 35-51]. Malnutrition due to dietary deficiencies and seasonal or year-round under-nourishment may depress fecundity. Diseases such as malaria, influenza, tuberculosis may have the same effect. Venereal diseases, wide-spread in large parts of Africa, have a still more direct effect on fecundity.

Education in Ghana

Ghana's educational establishment has expanded at a spectacular rate, more rapidly than the economy and at great cost. Literacy rates are above 50 percent in the major towns, about 33 percent in the rural South, and less than 10 percent in the North. The population in the South is better educated, subject to lower mortality, more likely to live in towns, more likely to know about contraception, and less likely to be predominantly concerned with the growing of subsistence crops, than the population in the North.

In 1960, 21 percent of the population over ten years of age had been to school. In 1966-67 school year, only about 60 percent of the children of appropriate age were attending school. Male school enrollments and literacy rates are about twice those of females but fall to under one-and-a-half times the female rates in the youngest age groups [53: 2].

Compulsory, fee-free primary and middle school education was introduced in 1961. Secondary and technical education became free in 1965. But from 1967 pupils began to pay an annual nominal fee for the supply of textbooks and school materials. Ghana has 3 universities which had a combined enrollment of 4,729 in 1970-71, and 71 teacher-training colleges with 18,814 trainees [102: 311].

### Employment in Ghana

In 1960, 83 percent of the males and 54 percent of the females over 15 years of age were working. Of the employed, 64 percent of the males and 58 percent of the females were in agriculture or fishing.

In 1969, to discourage the unrestricted growth of families, the government has decided to modify employment policies as follows:

1. Paid maternity leave will be granted only when the applicant has served for not less than one year.
2. The number of paid maternity leaves will be limited to three during the entire working life of those affected and no payment will be made in respect to any number of leaves beyond this limit.
3. Child allowances paid to Government officers will be limited to three only, and this will apply to all officers irrespective of whether they reside in or out Ghana.
4. The Government's responsibility for payment of traveling expenses of officer's children will be limited to three [54: 6].

The annual per capita income in 1972 was \$272.

### Abortion in Ghana

As in other countries, abortion is still the most widely practiced form of fertility limitation around the world. Ghanaian women frequently resort to abortion which is not difficult to obtain, particularly in the urban centers. Opposition to it is principally moral rather than technical.

The Ghanaian abortion law states that "any act which

is done, in good faith and without negligence, for the purpose of medical or surgical treatment of a pregnant woman is justifiable, although it causes or is intended to cause abortion or miscarriage, or premature delivery, or the death of the child" [53: 8]. In 1969, the abortion crime was reduced from first degree felony with a minimum of 10 years prison sentence to a second degree felony with a fine or an indeterminate sentence not to exceed ten years.

### Civil Law in Ghana

Women in Ghana have limited rights under civil laws. A surviving widow and her children do not have inheritance rights and they are expected to live in the late husband's home that is maintained by his successor who is usually a member of his kinship group. The wife is expected to marry one of her late husband's relatives. Women's property is ordinarily passed on to daughters, sister, sisters' daughter or daughters-in-law. If women own cattle and land, these possessions are usually passed onto their sons.

### Age at Marriage, Divorce and Polygamy

Girls in Ghana marry when they attain nubility or shortly after. Divorce is frequent, either the husband or the wife can initiate the divorce, but the husband usually does so. Divorce is made final by a decree of a court. Polygamous marriage is permitted, but in response to economic pressure, polygamy in urban areas has declined since 1960.



### Political Rights in Ghana

Any Ghanaian citizen having reached 21 years of age and able to speak and read English with a degree of proficiency is eligible for election to public office. All citizens are guaranteed the right to vote at age 21. Because many qualified voters cannot read or write, pictorial symbols or colors are used to denote candidates [73: 114-229].

### Religion in Ghana

There are three main religions in Ghana, indigenous, Moslem, and Christian. It is strongly believed by the illiterate in the traditional society of Ghana that there is an intimate relationship between supernatural powers and the daily life of the individual, therefore, the belief that high fertility is "God's will," prevails.

### India

India's population constitutes about 14 percent of the total world population. Every year 13 million persons are added to the population. With its population number of 515 million in 1969, India ranks second in the world, Mainland China tops the list. India has only 2.4 percent of the world land area and about 1.5 percent of the world income. The high growth rate of this large population poses tremendous socioeconomic developmental problems not only for maintenance of minimal standards of living but also for raising them. The persons who seek to put across massive programs of

development are faced with gigantic barriers that include wide-spread illiteracy, inadequate transportation, diversity of cultures and languages, and a frustrating lack of channels of mass communication to the rural areas where 80 percent of the population lives [12]. The manifold expansion of employment, housing, educational and other facilities has been almost entirely swallowed by the fast growing population [97]. Despite twenty years of planned development, India still faces distressing shortages and serious economic and social shortcomings. Some 10 million people whose labor could contribute to the rapid build-up of a developing economy are out of jobs. Per capita food consumption has decreased. In spite of ambitious housing programs, India is still short of about 750,000 houses.

#### Factors Affecting Fertility in India

Children form an essential part of recreation in the Indian family life. Indian people have a strong and natural love for children and believe that their presence makes the home happier. In joint families, parents are not solely responsible for the care and maintenance of their children, rather there is a large number of relatives who indiscriminately look after all the family children [115: 55].

In the Mysore [139] study, it was found that wanting three or four living children in a high mortality country is quite consistent with the much higher average number of births. Even if mortality is declining, the peasant who has

learned from his culture to depend on his children for labor on the farm, for old-age security, and for other essentials cannot be expected to extrapolate declining mortality with the demographer and to calculate a long-range need for fewer children. Significantly, several studies indicate that favorable attitudes to the practice of family limitation are much more common among those who already have three or four living children. This is consistent with the view that the availability of means for birth control is largely irrelevant until what is regarded as the essential minimum number of children is secure.

On the other hand, India is considered to have a relatively moderate level of fertility. However, it has the highest percentage of females married in the age group 15-19. Widowhood has a lowering effect on fertility when the widow is of childbearing age and does not remarry promptly. This factor has been considered to be especially important in India because the high mortality rates are still prevailing and the traditional disapproval of widows' remarriage in Hindu society still exists. The possible increase in fertility in India might be a consequence of decreased mortality of men and therefore less frequent widowhood. Life expectancy has risen from 32 years in 1950 to 50 in 1966. Other customs accounting for the relatively moderate level of fertility include prolonged lactation, avoidance of sexual relations for a period after childbirth and departure of the mother

with a new-born child on a lengthy visit to the home of her parents. Other explanations indicate that in the Hindu customs the young wife is absent from her husband's home for considerable periods of time during the early years of marriage and the first birth has been found to be relatively long in the case of girls marrying at a very early age. Also, frequent adolescent sterility is linked with poor living conditions and ill health [110: 273-4].

### Civil Rights in India

The right to vote is granted to every citizen who is not less than 21 years of age on a fixed date and is not otherwise disqualified.

Since 1971, many changes have resulted from the legislature's efforts to guarantee equal rights to women, in conformity with the Indian Constitution. Male and female heirs are treated as equal and without distinction. Marriage as an Indian institution, has undergone great changes: intercaste marriages, the abolition of the dowry system in certain states, the remarriage of widows, the enactment of divorce laws. But these changes are all essentially formal. They have had no substantial impact upon the traditional Indian attitudes towards marriage and the propagation of children.

Age at Marriage, Polygamy, and Divorce in India

Children are the central purpose of the Indian marriage. In the beginning of the present century, marriage of children between the ages of 8 and 12 was very common among all castes and in all parts of India [90: 143]. Over the last few decades the legislature has acted twice to prohibit the child marriages. But, for one reason or another, the law could not be enforced strictly and so it failed to achieve its purpose. Consequently, early marriage is still widely practiced in India. About 87 percent of the women in the age group 15-44 are married. According to 1961 census, the average age of brides at marriage was only 16. The National Sample Survey indicates that more than 8 percent of the girls aged fourteen and below are married. Legal minimum age for Hindu marriage is 18 for boys and 15 for girls. There is no provision for requiring the registration of marriages and if there was, it would be impossible to enforce in the 560,000 villages where neither vital statistics nor the memory of the parents is reliable enough to prove the ages of young couples.

There are proposals for raising the minimum age of marriage from 15 years to 18 in the case of girls and from 18 to 21 years in the case of boys. This measure is under active consideration in consultation with the State governments [97: 12]. Agarwala calculated that raising the age at marriage of females in India to 19 would yield a 29.2

percent decrease in the birth rate over the course of 30 years [4: 173].

Prior to its codification, the Hindu Law of marriage permitted polygamy. By the middle of the present century, however, the practice of polygamy was disappearing from Hindu society. There is an apparent conflict between the Hindu Marriage Act and the Moslem Personal Law which permits polygamy.

Divorce is not favored or encouraged, hence not available by consent. Even though no statistical evidence is available, the rate of marriage dissolution in India appears to be comparatively low [130: 116].

### Education in India

In 1971, 29.34 percent of the population aged five and above were literate in the sense of being both able to read and write with understanding [24: 9-10]. Primary education is compulsory and free but compulsion is not enforced. School attendance is more often ensured by incentives. Nearly 63 million children of school age are out of school. Serious problems have arisen from the rapid extension of educational facilities, overcrowding and school dropouts. In spite of the efforts to increase adult education the majority of the adult population remains illiterate [126: 217].

### Fertility Planning in India

In 1930, the Mysore Government opened the first government-operated birth control clinic in the world. Through the next two decades, a number of social welfare and political organizations as well as numerous Indian intellectuals and reformers favored and widely fostered the planning movement [23: 39]. Narain [97: 2] pointed out that although the Indian Government was the first in the world to adopt a comprehensive national family planning policy as an integral part of its developmental plans in 1952, the program gathered real momentum only from 1965 onwards.

Since passage in the summer of 1971 by the Indian Parliament of a liberalized abortion law, the Indian Government has taken steps to make abortion services available in its medical facilities. India's budget allocations for family planning have increased considerably, from less than \$2 million equivalent in fiscal 1964 to \$80 million equivalent in fiscal 1972.

### Employment in India

Labor legislation has a constitutional and statutory basis of equality such as equal pay for the same work for both men and women, minimum age requirements, and decent wage and working conditions. High unemployment is a consequence of lack of correlation between educational training and job opportunities [126: 581]. This is also related to other factors including the very large population.

### Religion and Fertility in India

Studies in India have shown the Moslems in India to be more fertile than the Hindus, but the Catholics in India, at least in Mysore State have been found to have lower fertility than the Hindus. Buddhism, with its emphasis on monastic celibacy, might be thought to have a lowering effect on fertility [150: 144].

### Brazil

Brazil is the largest country in the Latin American region. Estimated population for 1972 was 93,204,379. The Brazilian population is an ethnically diverse one, but fertility differences among the various ethnic groups do not appear very great. The lowest rate was found in the urbanized Federal District, where there is a high proportion of single women and marriage is at a later age. Also family limitation is practiced in Federal District by contraception among the well-to-do people and by induced abortion among the poorer classes [86: 499].

### Factors Affecting Fertility in Brazil

Legal policy in Brazil is pronatalist. Brazil's response to population growth has always been conditioned by awareness that the areas of the country are lightly populated and there is an urging desire to fill them by a larger population and incorporate them to the rest of the country. There is a desire to promote the use of natural resources and



to guarantee the national security.

According to Sanders [118: 84], the women in Brazil continue to have high rates of fertility despite modernizing processes that might be expected to lead to reductions. Although Brazil is rapidly urbanizing, women in the cities produce about two-thirds as many children as those in rural areas.

Very high fertility within marriage and relatively high fertility of women not legally married are factors which combine to produce the high birth rate in Brazil [92: 287-96]. The comparatively low rate for Negro women is believed to be due partly to some restrictions of their opportunities for marriage and to high mortality among the Negroes, which causes a comparatively high incidence of widowhood.

#### Political Rights in Brazil

Voting is compulsory for men and women between the ages of 18 and 65 and optional for persons over 65. Enlisted men and illiterates (who comprise 40% of the adult population) may not vote [102: 779].

#### Education in Brazil

According to the 1972 census, literacy in Brazil was 67 percent. But Sanders points out that a problem of self-definition exists in literacy, which is politically important because only literates can vote. "In Brazil the criterion for literacy is ability to write one's name. Although by

this standard illiteracy has steadily declined with each decade to less than 40 percent of the population, this does not accurately define the capacity of the population to read and interpret the world around them. Educated people are clearly a minority concentrated in urban cities" [118: 85]. However, the educational level is improving, and there seems to be a clear inverse correlation between years of education and fertility. Elementary education is compulsory in Brazil. The government undertakes to provide, in part, for higher education or university instruction, but some institutions are maintained by the states and some by private associations. There were 44 official universities with a total of 561,397 students in 1971 [102: 781].

#### Employment in Brazil

Women in Brazil represent a substantial manpower potential. In the late 1960's, the inflation forced most of the lower class women into the labor force to increase family income. Liberal attitudes toward working women allowed many middle and upper class women to seek employment. International Labor Organization data indicate that the female portion of the working population was 18 percent in 1960 [149: 288]. Per capita income in Brazil is between \$350 and \$400 a year. Since the government is encouraging population increase, the Ministry of Labor gives a supplement to families with more than six children. Federal and state governments, as well as the National Social Security Institute, give

employee bonuses for each new birth. Abortion and propaganda for contraception are illegal, but the prevalence of abortion makes the law unenforceable. Only medical schools and universities in Brazil have been supporting, sponsoring or establishing private birth control associations or "associations for the protection of the family" [103: 180-3].

### Religion in Brazil

The Catholic church to which about 90 percent of Brazilians belong is ambivalent. The official position of the hierarchy is the support of the norms outlined in *Humanae Vitae*, but in practice the Brazilian church is probably the most open to family planning among churches in any Latin American country. Theologians criticized the Pope's position and justified the idea of spacing and limiting the number of children as a personal decision. The moral teaching of the Church influence only a minority of Brazilians attending mass in churches acquainted with the official positions [119].

### Taiwan

Taiwan is a small island about 90 miles off the Southeast coast of the mainland China. The island has one of the highest population densities in the world; about 970 persons per square mile in a 14,000 square mile area. Half the island is mountainous with few inhabitants, the other half, to the west, is fertile with more than 2,000 people per square mile. The estimated population in 1972 was 15,159,000.

The family structure is changing in favor of smaller families, especially in cities, which are under the pressure of modernization. The average family is larger in the rural areas. A sample survey in 1965-1966 indicated that family size was 4.8 in the cities, 5.9 in the rural townships, and 6.3 in the aboriginal townships [74: 1].

The economic growth in Taiwan during the past two decades has been most remarkable. Since 1952 per capita income has risen by 85 percent to nearly \$210.

#### Fertility in Taiwan

Taiwan has a history of high birth rates. In addition, the post-World War II "baby boom" has produced a very large number of young persons, and there will be a large increase of population in the 20-34 age group in the next few decades. The rapid population growth in Taiwan has resulted in an unfavorable age composition, with a high dependency burden. In 1968 the population under 15 years of age was 42 percent.

The fertility rate began to decline in 1952. In terms of the total fertility rate, the reduction from 1963 to 1968 was 19 percent. Taiwan's birth rate fell from 42 in 1958 to 28 in 1968. In the same period the net reproduction rate fell from over 2.6 to 2.0 [9]. In 1967 the infant mortality rate was 22.6. The family planning program began on a significant scale only in 1962. Induced abortion, which, although illegal, has long been widely and openly practiced.

Taiwan is one of the healthiest areas in Asia: the life expectancy at birth is 65.1 years for males and 69.8 for females.

#### Factors Affecting Fertility in Taiwan

A study carried out in the early 1950's led to the conclusion that, to bring about a decline of fertility through the economic and social developments then present, it would be necessary to overcome strong Chinese traditions. Those traditions favor the maintenance of high fertility reinforced by the organization of economic enterprises in small family units where child labor could be used with profit and encouraged by the practice of early schooling of children within the home [11: 3-10]. However, the birth registration statistics since 1956 have shown a declining trend of the birth rate, which was the beginning of a transition to low fertility.

Although Taiwan's birth rate has already fallen considerably and its family planning program is among the most successful in the world, drawing upon their experiences in Taiwan, Freedman and Takeshita maintain that family planning programs should aim to reach those who want no more children, rather than to try to change values about family size. They state, moreover, that "it is very unlikely that any verbal messages or education programs on the part of the family planning programs would be successful in changing

values regarding family size. This requires structural changes in the roles of the family, of women, and of children that are desirable but are outside of the purpose of the family planning programs in their health contexts" [49: 364].

### Education in Taiwan

Education has been free since 1968. The literacy rate in Taiwan is one of the highest in Asia. In 1968-69 the school population accounted for 26 percent of the total population. About 85 percent of the male population and 60 percent of the female population over twelve years of age are literate and 97.5 percent of the children of primary school age were enrolled in the 1967-68 classes. Compulsory education was extended from six to nine years at the beginning of the 1968 school year [25: 35].

In Taiwan, data for 1965 showed that, among younger women, the proportion of married women is negatively correlated with educational attainment. Among women aged 20-24 who graduated from senior high schools, 26.4 percent were married, whereas 72.3 percent of illiterates in this age group were reported as married. [50: 15]. The eagerness for education is perhaps generating an awareness that large family size may be a handicap to obtaining such education.

### Civil Law in Taiwan

Women in Taiwan have equal rights of inheritance. Female status has increased for urban and rural educated women. Due to low socioeconomic environment, the traditional status of poor farm women remains unchanged [22: 11].

### Age at Marriage, Divorce and Polygamy

Women in Taiwan are marrying later than previously. In 1940 the average age at marriage was 19.0; in 1967 statistics indicated that average age at marriage was 22.6 years.

From 1959 to 1965 the proportions of women aged 15 to 19 and 20 to 24 who were married decreased from 12.4 to 9.2 and from 63.5 to 58.3 percent respectively [50: 5].

Marriage is often delayed because of financial problems or conscription into military service. Divorce is not a serious problem in Taiwan; second marriages for women are looked down upon because of the old value attached to chastity. Monogamous marriage is now the rule [22: 79].

### Employment in Taiwan

About one-third of all girls and women 12 years of age and older are economically active in Taiwan. This includes half of all unmarried girls and 30 percent of married women. Together, they form one-fourth of the active labor force in Taiwan. Eight out of ten working women are illiterate or have completed only six years of primary

school or less. Wages for women are roughly one-half of those paid to men [22: 311].

#### Political Rights in Taiwan

Any citizen over 20 years of age has the right to vote, and any citizen over 23 years of age has the right to be elected to office [22: 176].

#### Religion and its Relation to Fertility in Taiwan

It is difficult to identify religious denominations in Taiwan. Most people believe in a mixture of Buddhism, Taoism and Confusianism, including ancestor worship. Although Confusian teaching values a larger family, with at least one son, it has no specific doctrine against family planning. In general, religious opposition to family planning is slight in Taiwan.

#### Summary

Geographical location for each of the five selected developing countries was described. Cultural behavior, social and economic development are factors affecting fertility in each country. Larger family size tends to be related to women's illiteracy or lower level of education and non-participation in the labor force on their part. The exercise of civil laws and political rights of women is very limited in the developing countries where the communities are predominantly male oriented. In general, people in developing



countries practice their religion closely and the interpretation of high fertility is believed to be a part of "God's will." Table 1 summarizes demographic data about the five developing countries.

Table 1: Demographic data for five developing countries.

Demographic Information	Egypt	Taiwan	India	Brazil	Ghana
Estimated population, January 1, 1972 (x 1,000)	34,473	15,159	583,000	99,988	9,528
Births per 1,000 population, 1971	37	27	38	37	48
Death per 1,000 population, 1971	17	5	16	9	18
Infant death per 1,000 births, 1971	120	18	128	94	122
Expectation of life at birth, 1971	52	70	51	63	48
Percent of population under age 15, 1970	42	41	45	42	47
Rate of natural increase, 1971 (%)	2.0	2.2	2.2	2.8	3.0
Percent urban, 1971	41	65	20	56	32
Percent of labor force in agriculture, 1965	55	34*	70	44	56
Per capita gross national product, 1970	\$200	\$373	\$93	\$364	\$272
Percent literate	26	85	29	67	25

Source: Data selected from the Population Program Assistance. Agency for International Development.  
 Bureau for Population and Humanitarian Assistance. Office of Population. Washington, D.C.  
 December, 1972.

\*1970

## CHAPTER IV

### FACTORS RELATED TO THE STATUS OF WOMEN AND FERTILITY IN THE DEVELOPED COUNTRIES

This chapter includes descriptive data on population, status of women and fertility for each of the five developed countries selected for this study.

#### Sweden

Sweden experienced some fifty years ago a poverty level comparable to that existing in the developing countries today. That was the motivation for starting the family planning movement in the early thirties. The facts that Sweden has had peace since 1914 and that emigration provided an outlet for the population pressure that had been built up by about 1850 may explain the peaceful nature of the transition to an industrial society. Today, contrary to the situation obtained in most countries, the population crisis in Sweden is marked by too slow, rather than too rapid, a population increase. Now, there is no official population policy as such in Sweden, but the government makes it economically possible for those who want children to have them, and it helps those who want to limit their families to learn how to do so. Modern family planning is the social adaptation to the psychological well-being of the individual within the framework of his

membership in his family and nation. Policy is based on social and humanitarian rather than demographic grounds.

### Fertility in Sweden

Sweden has the highest life expectancy at birth in the world: 71.85 for men and 76.54 for women in 1967. It also has the lowest infant mortality in the world: only 11.7 infant deaths per 1,000 live births in 1969 [134].

There is a large percentage of unmarried women in Sweden. One reason is that Swedish women marry relatively late. The marriage rate exhibited a sharp decline: in 1965 it was 7.75 percent and in 1971, 4.94 percent. "The low marriage rate and the high out-of-wedlock birth rate are probably in part related in that a large and increasing number of young people do not register their relationships in the form of marriage" [134: 3].

In the late 1930s and middle 1940s the parliament repealed the prohibition against dissemination of contraceptive information, liberalized the abortion law and introduced sex education into schools. While some programs, such as child allowance and maternity benefits, may have a pronatalist effect, others, emphasize the principle of voluntary parenthood. The abolition of legal bars to the sale of contraception [55: 188], the requirement that all pharmacies stock contraceptives (1946), the liberalization of abortion and the introduction of sex education in the school system, have an antinatalist character, but, they are not promoted on

demographic grounds.

### Civil Law and Political Rights in Sweden

In 1919 women in Sweden were given the right to vote. Women's participation in general election is almost as high as men's. In the municipal elective bodies, the proportion of women is relatively high in the bodies concerned with child care, social welfare and educational questions, low in bodies dealing with town planning, housing administration and roads. The smaller proportion of women who stand for election in government authorities and in party politics can be due to traditional attitudes among men and women [133]. In 1920, women were given economic rights and responsibilities equal to their husbands. In 1938 women employed in the government obtained equal pay, and in 1965 the same principle was established for the general labor market. Even if full equality has not been achieved, Sweden should be among the furthest among the countries in this respect.

### Age at Marriage, Divorce and Polygamy

Under the marriage code, 1920, the minimum marriage age was 21 for men and 18 for women. As of July 1969, however, the minimum marriage age for both sexes was set at 18. Dispensation to marry before 18 can be granted by the county authorities. Yet Swedish men and women still marry late by world standards. In 1968 the average age at first marriage was 25.9 for males and 23.6 for females [134: 3].

Marriages are dissolved by courts of law; in practice divorce petitions are seldom rejected. Polygamy is prohibited in Sweden.

#### Abortion and Illegitimacy in Sweden

A liberal abortion law was adopted in 1938 with subsequent amendments in 1946 and 1963. The main purpose of this law was to reduce the number of illegal abortions. The number of abortions has grown steadily from 2,800 in 1960 to 16,000 in 1970 which equals 145 per 1,000 live births [134: 13]. A recent trend, in public discussion about abortion, has been to allow women, with their increased freedom, to decide for themselves whether their pregnancies should be interrupted or not.

In Sweden there is an increasing number of young people who do not register their relationship in the form of marriage. But even if the parents do not wed, the child is given legally the same rights as a wedlock child. "The word illegitimate was removed from the statutes in 1917, and in 1970 the last legal obstacle to equality was overcome when the right of an out-of-wedlock child to inherit the property of the father and his family gained legal force" [134: 3]. The fact of having an out-of-wedlock child does not carry as great a stigma as it does in other countries and hence, does not lower the status of women.

### Social Security and Medical Care System

The traditional role of the large family as an insurance against old age, sickness and unemployment has been replaced by the State. Thus, the State Compulsory Pension System has provided economic independence for the aged. Parents do not need to rely on their children during their declining years.

The Swedish system for social insurance is based on compulsory national insurance covering sickness, childbirth, disablement, old age and loss of breadwinner. The pensionable age for male and female workers employed by the State is 65 and 67 for both sexes [133]. The pension system guarantees the security of the woman in the event of her husband's death.

Health and medical care in Sweden are financed mainly by the county councils from taxes, funds from state subsidies and supplementary contributions provided by the national compulsory health insurance. Hospital stays are free as are medicines provided to an inpatient in a hospital.

### Education in Sweden

According to the 1930 census, 99.9 percent of persons over 15 years of age were literate. In recent years with an estimated few thousand illiterate immigrants the present literacy is probably not as high, but there is no inclusion about literacy in the censuses since 1930.

In 1960 a nine year compulsory school system was

established throughout the country. School starts at age seven. Three out of four students continue their studies beyond the ninth year.

Primary and secondary schooling, college and universities are free of charge. In the compulsory schools, students are provided with free textbooks and school materials as well as free meals. In many cases the young leave their homes to build their own families while going to school [135: 180].

Sweden is the first and so far the only country to have compulsory sex education in public schools. It was introduced into the curriculum in 1944 and made compulsory in 1956.

In secondary schools a few more men than women are enrolled but in universities men outnumber women two to one. In 1971-72, Sweden had six state universities.

#### Employment in Sweden

There is an increasing number of married women becoming wage earners in Sweden. For the total population in 1970 for people aged 15 to 64, it was estimated that 85.7 percent of the men, 62.3 of the unmarried women and 54.8 of the married women were in the labor force [134: 8]. About 55 percent of all women between 15 and 64 are today employed, although many work only a few hours a week.

The objectives of labor market policy are the same for male and female labor. But "typically male jobs are better



paid than the typically female ones, regardless of whether the latter require the same degree of education. Not until men and women are employed on the same tasks within the same sector does it become possible to give real weight to the demand for equal pay" [133]. Although at present the differences in salaries and wages between men and women are decreasing, the gap existing is due to the concentration of women in low paid jobs where their chances of promotion are much smaller.

Legislation in Sweden protects the working married woman. She cannot be dismissed from her job for pregnancy or childbirth reasons. She is given the right to six months' leave of absence at the time of delivery and she is paid by the national insurance out of a supplementary sickness benefit. In order to facilitate and encourage married women to enter the labor market, day nurseries and youth centers were built, and income tax rates were revised.

Studies have shown that working wives have fewer children than housewives. Labor force participation and the average working hours are declining with the number of children.

In 1969, Sweden had a per capita national product of \$3,510, the third highest in the world. It was exceeded only by Kuwait and the United States.

### Maternity Benefits and Child Allowances in Sweden

Confinement and treatment given by midwives are free of charge at maternity hospitals. Cost of transportation to the nearest hospital is fully refunded. If confinement takes place at home with the requirement of a doctor's help, three-quarters of the expenditure are refunded. Every woman is entitled to a maternity allowance of \$216 paid by the national insurance for her first child, then \$108 for each additional child.

Each child under 16 is entitled to an allowance of \$240 per year given to his mother or guardian. Children of preschool and school age are given free medical checkups as well as preventive medicines and vaccinations. In order to decrease the economic burden of large families, students are given free school meals to ensure that each child receives at least one nutritious meal a day.

### Japan

Japan is composed of four main islands, with many smaller adjacent islands off the each coast of Asia. The population density is quite high, 719 persons per square mile. The rapid spread of industrialization in this century brought Japan from the status of developing country to that of a developed one. In 1969, the population of Japan was 102,648,000. The average life expectancy in 1968 was 69 for men and 74 for women.

### Factors Affecting Fertility in Japan

The population problem in relation to food supply and standard of living motivated the Japanese people to limit their own family size. Japan's gross reproduction rate was cut in half in eight years, falling from 2.1 in 1949 to 1.0 in 1957. The death rate is about 7 per 1,000 population and the rate of natural increase is one percent per year.

Japan has no official government policy on population growth. However, the government facilitated family limitation practice by the Eugenic Protection Law passed in 1948 permitting abortion and the establishment of a national family planning program in 1952 [94: 10].

Nevertheless, Rettie maintains that the Japanese for over 100 years had resorted to illegal abortion and even infanticide as a means for limiting their family size, as no contraceptives were available [111]. Furthermore, the author concludes that what the Japanese government did in 1948 was a revision of the law to bring under medical care the many abortions already taking place, and starting, at the same time, a campaign for contraception.

The traditions of Japanese culture should also be taken into account. Taeuber cautioned that the resort to abortion would not, in her view, have been so widespread without a cultural base in which "post-conception limitation of fertility was accepted and practiced" [136: 278]. Japanese fertility had been relatively moderate in comparison

with some other Asian countries, for at least a century and perhaps for many centuries before the drastic reduction began in the 1950s [91: 36-56]. Lee pointed out that "Abortion and infanticide were regarded as parents' self inflicted punishment rather than a sin against God or a crime against humanity. In ancient Japan after delivering babies of poor families, midwives would ask the families whether to let the infant remain or have them returned. In the latter event, the midwives would manage the death of those for whom there was no room" [82: 29]. Traditional attitudes and behavior in this respect may have been adapted in the course of centuries by the pressure of population in a crowded island country with severely restricted land resources.

One of the main factors which brought about the fertility decline in Japan was the change in the value system since World War II. The pre-war stem family system shifted to nuclear families. Dependence on children in old age became very rare. The attitude of having numerous children to inherit or continue the family line has disappeared. Pressure of educational expenses and inadequacy of housing conditions increased the tendency to raise the living standard of the family rather than raising a large number of children [72].

### Women and Civil Law in Japan

In 1947 the Civil Code was revised based on the 1946 Constitution. The new legislation provided women with property rights, parental rights, right of marriage and divorce, and inheritance rights. All the lineal descendants of a deceased person became successors. The descent of property is not limited to male heirs [137].

Japanese women of 20 years of age and above were first granted the right to vote in 1956. But they exercised their right to vote for the first time in April 1946. From the total number, 60 to 70 percent of eligible women voted. After the war the Election Law for Public Offices granted women of 25 years of age and above the right to be elected in all elections [137].

### Marriage, Divorce, Abortion and Polygamy

Under Japanese law, the minimum marriage age is 18 for a man and 16 for a woman. But in 1965, the average age at first marriage was 27.2 and 24.5, respectively, which indicates that, in general, Japanese people marry late [94: 1].

In Japan there is the "Judicial Divorce" permitted by court and "Divorce by Agreement" under which a divorce can be obtained when notification of mutual agreement of both parties is formally brought to the registrar. In 1967 there were 0.83 cases per 1,000 population.

Abortion became legal in Japan in 1948. The law was presented as being for eugenic and medical rather than for

demographic purposes. Under Japanese law, polygamy is prohibited.

### Education in Japan

As far as ordinary reading and writing skills are concerned, the degree of literacy in Japan is nearly 100 percent. More than 99.8 percent of the 6-15 years old population are enrolled in elementary and lower secondary schools [85]. Since 1947 compulsory education in Japan is extended to nine years. After the first nine years, without discrimination as to sex, every child is entitled to advanced education according to his or her ability. About 80 percent move up to the high school with a slightly higher percentage of girls than boys attending. Twenty three percent of the high school graduates proceed to university education. Compulsory education is provided free in publicly maintained schools [137].

### Employment in Japan

In 1968, 64 percent of the population aged 15 and over were economically active. This percentage represents 81.7 percent of the males and 47.5 percent of the females [94: 3-7]. The per capita national income of the same year was \$1,155.

Female workers get a pension provided by the government on attaining the age of 55 while male workers can get it at 60 years of age.

### Religion in Japan

The three essential religions in Japan are Shintoism, Buddhism and Christianity (both Roman Catholic and Protestant). Among the different classes in Japan, religion is more often a matter of tradition of the family or the community to which the individual belongs rather than a matter of deep concern. One must consider these traditional attitudes toward religion in order to understand the fertility control behavior among the Japanese people, particularly the question of induced abortion [94: 3-7]. In general, religious attitudes on the glories of the large family seem to have been surmounted in Japan.

### Child Allowance Program in Japan

A child allowance program in Japan has been under discussion for about ten years. In 1971 the government considered providing each family with a child allowance of \$83 per month for their third child and every child thereafter. From the government point of view it is entirely a welfare measure [94: 3-7].

### France

France is the largest country in Western Europe. According to the 1971 official estimates, France had a population slightly more than 51 million inhabitants. The population density is roughly 92.5 persons per square kilometer.

Although, at the present time, France is liberalizing the laws that restrict the use and dissemination of contraceptive methods, from a demographic view, the social policy of France is characterized by being pronatalist, protecting and encouraging large families [16: 1].

The first French organization, the Ligue de la Régénération Humaine was set up in 1896. But early phases of this birth control movement were concerned primarily with propaganda through meetings and pamphlets [56]. By the eve of World War II France had a birth rate of 16 per thousand per year. The continuing decline in its birth rate caused a concern about the population size. In response, France strengthened its pronatalist family policy and the Government explicitly stressed the demographic crisis and proclaimed its determination to halt declining fertility, notably by means of its new family allowance scheme [148: 46-73]. Although the sale and distribution of contraceptives was finally legalized in 1967 in response to public demand, the law specifically continued the prohibition of anti-natalist propaganda and commercial advertising of contraception [44: 12849]. Subsequently, in 1969, a revised family allowance scheme giving further support to large families was approved [43: 5197].

### Fertility in France

In 1971, the crude birth rate in France was 17.3 per thousand, death rate 10.6 and population growth rate 6.7.



The life expectancy at birth in 1970 was 68.9 years for men and 75.2 for women. The average family has three children which is regarded as the ideal by most families.

Although the sale and advertising of artificial birth control methods was illegal until 1967, the sale of condoms has always been authorized in France as a health measure and oral contraceptives have also been sold for health reasons. In 1950, a female doctor created an association which offered consultation on family planning [16: 10].

The pattern of generally inverse relationships between fertility and social-economic status in low fertility countries has not always been found to be entirely consistent. In France, about the turn of the twentieth century, while fertility was, in general, related inversely to income, families in the highest income brackets were found to have more children than those in somewhat lower brackets [42: 9-46].

#### Civil Law in France

Traditionally there were many legal restrictions on French women, but in practice they were ignored. This is shown by the fact that in the majority of French homes it is the wife who controls the family budget and even gives the husband his pocket money. Only in 1965 did a married woman obtain the power to open a bank account without her husband's permission and had complete freedom over her personal property [19]. French citizens vote at the age of 21.

### Age at Marriage, Divorce and Abortion

In 1969, the average age at first marriage was 24.5 for males and 22.4 for females. Later data reflect a tendency toward earlier marriage. French males usually get married after the military service is fulfilled.

Each year in France there is an average of one divorce for every ten marriages.

In 1920, the French Parliament passed a law prohibiting promotion and practice of induced abortion. This law remained untouched by the 1967 law which legalized contraception. Although rules on prohibiting abortion are very severe, in practice, punishment for infraction of the law is rare. Many French people anticipate the replacement of the 1920s abortion law [16: 11].

### Education in France

In urban areas, most French children enter the "école maternelle" or nursery school at the end of their second year. Enacted in 1882, compulsory education is from 6 to 14 years of age. The upper age limit was raised to 16 years in the scholastic year 1967-68. University education is free of charge, except for low entrance and examination fees [19]. The statistics for higher education are less precise because there are duplications and part-time students. "Advanced students" formed in 1968-69 were 12.5 percent of those aged 18-24.

### Employment in France

One-third of the French working population are women. The 6.5 million working women are roughly distributed in equal proportions between all kind of jobs, from agriculture to high posts. Women are in the majority in teaching and textiles but they are equal with men in the fields of banking and commerce. Between 1954 and 1962 the number of women in teaching and higher executive posts rose by sixty percent, which was double the rate for men [19].

France was one of the first countries to call for equal pay for men and women for similar work. The country urged this right by signing the international convention in 1963. Today France claims, although having a gap of ten percent in equal payment, it is one of the best in Europe.

Health and maternity insurance are extended to members of worker's families, and old-age pensions are extended to spouses of workers.

In per capita gross national product, France remained during the last decade among the ten richest countries of the world.

### Family Allowances in France

Family allowances are relatively large in France and are part of an extensive family program, giving support in many ways. The value of the allowances has been increased progressively over the years, creating the impression among the people that children are welcomed by society [125: 138-9].

France's allowance program has been accused of having definite pronatalist intent. French demographers, while recognizing that other factors played an important part in fertility, hold that such measures have had a positive effect on the birth rate in France since the Second World War [40: 58].

Family allowances are grouped under the social security code and have been extended since 1945 to everybody, including the self-employed. French family allowances are divided as follows.

1. Pre-natal allowances for which all pregnant women are eligible. \$14.5 a month for nine months.
2. Maternity allowances payable after birth of \$132 plus pay during the twelve weeks permitted absence from work (for wage earners).
3. Children's allowances are calculated at 22% of the basic salary for the second child and 33% for the third and subsequent children.
4. The allowance for a nonworking mother is calculated on a basic monthly salary of about \$41 and amounts to 20% for one child, 40% for two and 50% for three or more children.
5. Housing allowance calculated according to rent, size of family and salary.
6. In 1963 a special allowance was introduced to help pay for the specialized education required for handicapped children [19].

#### United States of America

The United States of America is composed of fifty States with a population of 205 million in 1970. Today, it is characterized by low population density and a declining

birth rate but that does not eliminate the concern about the population in the sense of achieving a proper balance between size, growth and distribution on one hand and the quality of life on the other. The annual rate of growth dropped from 1.9 percent during the fifties to 1.1 percent in 1972. The American family has an average of 2.3 children which is moving closely toward the replacement level of 2.11 in the U.S., but infant mortality is higher than that of twelve other nations. Despite their higher fertility rates, minorities contribute less to population growth than does the rest of the population. In 1969, the Spanish-speaking, Indians and blacks together contributed 30 percent of the childbearing in excess of replacement needs, while the non-Spanish-speaking white majority contributed 70 percent [105: 82].

Family planning was introduced in the United States largely through the efforts of Margaret Sanger, a practicing nurse in New York. Mrs. Sanger opened the first U.S. birth control clinic in 1916 and formed the National Birth Control League in 1921. Her statements of thoughts could have been spoken today in terms of their relevance to contemporary feminists. "We know that there never can be a free humanity until woman is freed from ignorance, and we know too, that woman can never call herself free until she is mistress of her own body" [120]. She maintained furthermore, that "Birth control is the first important step

women must take toward the goal of her freedom. It is the first step she must take to be man's equal. It is the first step they must take together toward human emancipation" [120].

It was not until March 1970, at the request of the President, that the Congress of the United States passed an Act to establish a Commission on Population Growth and the American Future, and directed this body to conduct an inquiry into several aspects of population growth and its foreseeable consequences. At the same session Congress also enacted the Family Planning Services and Population Research Act of 1970 [99].

As of June 1965, the sale of contraceptives became legal in all states of the United States following a ruling of the Supreme Court [57: 479-531]. However, it was reported that "approximately 22 states prohibit the sale of all or some contraceptives; but all states, either by statute or common law, allow exceptions for doctors, pharmacists, or other licensed firms or individuals" [105: 86].

#### Civil Law in USA

The first organized meeting of women to demand equal rights in the States was held in New York in 1848. It took 72 years for the Nation to acknowledge that women had the right to vote and hold public office (1920). Legislation proposing an equal rights amendment to the U.S. Constitution has been introduced in every Congress since 1923. However, equal rights and responsibilities are

still denied to women in many ways in the legal system [105: 85].

Equal opportunities for employment, equal pay and conditions of work started to advance through the removal of some discrimination existing in legal codes. In the 1960s as a result of the political pressure of women, the Congress of the United States enacted a series of laws designed to assure women the right to engage in the economic life of the nation. The Equal Employment Opportunity Commission set forth the basic principle that sex may not be taken into consideration in employment or in conditions relating to employment. In December 1971, the U.S. Department of Labor issued a directive which went into effect April 1972 requiring prime federal government contractors and sub-contractors with fifty or more employees and government contracts of \$50,000 or more to set specific goals and timetables for moving qualified women into all levels of their work forces. It further requires them to recruit, hire and train women and minorities for those job classifications where they have been found to be under utilized [146: 27].

#### Age at Marriage, Divorce, Polygamy and Abortion

With ratification of the 26th Constitutional Amendment in June 1971, the age at which the parties may marry without parental consent has been reduced to 18 years in several states. Almost all states have permitted women

to marry at 18 without parental consent. However, in some states of the United States, 16 is the minimum for males and 14 for females [28: 1011]. On the other hand, the U.S. Census Bureau Report (February, 1972) indicated that the average age of marriage among women rose from 20.3 to 20.9 years between 1960-1971. The median age at first marriage for men rose from 22.5 to 23.2. The proportion of women who are single at ages 20 to 24 jumped from 28 to 37 percent during the same period of time. This may indicate an inclination on the part of young women to delay marriage.

There is a high divorce rate in the U.S. In cases of dissolution of marriage, the husband generally remains responsible for the support of the children. In many states, children born out of wedlock do not have the same rights to child support or inheritance as children born to married women. In some instances, when a man has a wife and children born in wedlock, there are legal limits on the amount that a father may will to a child born out of wedlock. In 1970, out-of-wedlock births among young people aged 15 to 19 rose to 180,000. It has been estimated that while three-quarters of divorced men remarry, only two-thirds of divorced women ever do. Polygamy is illegal in the United States.

On January 22, 1973 in a historic resolution on the controversial abortion issue, the United States Supreme Court by a vote of 7 to 2 overruled all state laws that



prohibit or restrict women's right to obtain an abortion during the first 3 months of pregnancy. Only during the final 10 weeks when the fetus is judged to be capable of surviving if born, may state laws prohibit abortion altogether. The resolution did not abolish restrictions completely, any state may prohibit abortions, except where they may be necessary to preserve the life or the health of the mother. Rather, the justices emphasized that a pregnant woman enjoys a constitutional right of privacy that extends to the right of terminating a pregnancy [98].

#### Education in USA

Each of the fifty states has a system of free public schools, established by law, with courses covering 12 years. Every state has compulsory school attendance laws. Most of the nonpublic elementary and secondary schools are affiliated with religious denominations. The number of teachers in public elementary secondary schools in 1972 was estimated to 2.1 million. The average annual salary of the public school teachers was about \$9,615 in 1971-72.

There is a disparity regarding education obtained by women based on personal and family economic circumstances. Many scholarships are available and in specific instances a public welfare agency assists an individual to secure secondary and higher education. However, for the women who assume full responsibility for children and the care of the home and for whom child care facilities and services

are not available, educational pursuits are very limited even if they have access to education and training.

One study disclosed that in the whole U.S. (1957), children born per married women aged 15-44, classified according to six educational status groups varied, regularly from 3.12 for women with less than 8 years of education to 1.59 for those with four or more years of college training [81: 105].

Pregnancy is the number one cause for school drop-out among females in the United States. The psychological effects of adolescent pregnancy are indicated by a recent study that estimated that teenage mothers have a suicide attempt rate ten times that of the general population. A number of states have passed legislation in support of sex education in public schools.

### Employment in USA

In the United States, women are classified as being in the labor force if they do any work for pay or profit, or if they work without pay for at least 15 hours a week on a family farm or in a family-operated business [146: 21].

About 43 percent of all American women are in the labor force. Employment outside the home seems to be both the reason and the effect of the lower fertility rates of working women. However, in 1970, almost 25 million children under 18 had mothers who worked at least part time, over 5.8 million of these children were under age six

[105: 84]. Large numbers of these working mothers were the only support of their families or supplemented incomes near the poverty level.

American women and especially minority women have experienced and continue to suffer discrimination and deprivation in the labor market. Often, they are paid less than men for the same work and they have less chance for advancement.

Child care arrangement for working mothers are often inadequate. Only a small percentage of children are enrolled in nursery schools or day-care centers; about one million American children receive no supervision and remain at home alone [105: 84].

#### Family Allowances in USA

The United States has no program of family allowances with benefits granted strictly according to the number of children. However, there are public assistance programs or welfare programs to aid persons in needs. Insurance programs, vocational rehabilitation programs, Medicare and Medicaid programs, and retirement insurance programs promote the welfare of the people and lessen the need for children to support them in their old age. All citizens, regardless of whether or not they have children, pay for the public costs of children. Tax exemptions are given for each dependent child, however, the tax policies are not instituted with the expressed intention of encouraging

childbearing in view of the fact that the costs of bearing and rearing children far exceed the savings in taxes.

### Religion in USA

Although there is a great diversity of religions in the U.S., the two dominating ones are the Protestant and the Catholic. Catholicism and several fundamentalistic Protestant groups as well as some ethnic groups still hold to the ideal of procreation. Ideal, desired and expected family size for Catholic women are consistently higher than for non-Catholics. However, the proportion of Catholic women using contraceptive methods is steadily increasing.

### Union of Soviet Socialist Republics

The level of Soviet fertility during the 1920's and earlier was quite high. It appears to have dipped sharply in the early 1930s, and to have partly recovered in the middle and later years of this decade. This country seems to have come out of the war period with a distinctly lower fertility which declined somewhat further during the early 1950s.

The level to which the birth rate apparently recovered, and from which it later subsided again, indicates that the long term trend towards smaller family size was asserting itself over a period of time during which large strides were made in industrialization, urbanization, popular education and the rising status of women and diversification of their roles.

The Soviet Union officially favors the continued

growth of its population [59: 269]. In 1959, the Soviet population consisted of forty-five percent men and fifty-five percent women. Figures show that there were 20 million more women than men in the Soviet Union. However, women are now free to determine themselves the number of children they wish to have. The sale of contraceptive appliances both male and female has never been prohibited in the Soviet Union. In the political field, neo-Malthusians believed that the small family system was the answer to all social problems of modern society. Estimated population in 1972 was 246.3 million.

#### Women and Civil Law in The Soviet Union

The Russian women started their revolution in 1904 and formed their first political organization called the "League of Equal Right for Women." The Constitution of the Russian Federation 1918, established the equality of political and civil rights of men and women. Working women were allowed to participate freely in the social life of the country. However, "the Soviet Government did not confine itself to establishing the equality of men and women before the law, but took all steps necessary to guarantee opportunities for women to participate equally with men in social and industrial activity and in the administration of the state" [13]. The Constitution also granted women the right to elect and be elected to all state's organs. However, "the right to vote and participate in elections is

a duty not easily evaded by the ordinary citizen. Passivity of the voter in an election campaign is interpreted as opposition. It is difficult for a citizen not to participate in the electoral process. The registration of all voters in the USSR is the responsibility of the state, the individual voter has no choice in this matter. With complete registration, the authorities are in good position to know who does not vote. The regime appears determined that every citizen shall make use of his right to vote, whether he wants to or not. Thus, some provision of the Constitution appears to facilitate pressure upon individual citizens in order to achieve a desired pattern of behavior" [108: 108]. Candidates for election to the Supreme Soviets of USSR must be 23 years of age, and to the Supreme Soviets of the Union Republics and Autonomous Republics 21, for all regional and other local authorities the minimum age for candidates is 18.

#### Age at Marriage, Divorce and Polygamy

The Decree on Civil Marriages, enacted in 1917, established full equality of husbands and wives in family and marriage relations. In the USSR, a new marriage and family law was ratified in June 1968 which introduced a minimum age of 18 for both males and females, giving individual republics the right to lower it, but by no more than two years [131]. Marriages with persons under age is a crime punishable by imprisonment not to exceed two

years or by correctional labor for a term not exceeding one year.

Early in 1917, divorce was granted by a decree on the request of both or one of the spouses, the decree required no statement or reasons for divorce. But in 1944, divorce was granted by the courts on grounds deemed justifiable by the courts. Polygamy is prohibited and constitutes a crime.

#### Abortion in the Soviet Union

In the USSR, where abortions have been legalized for health reasons and to advance the emancipation of women, the demographic consequences of legalized abortion have caused some Governments to invoke pronatalist measures. Thus, the legalized abortion of 1920 was revoked by law in 1936 [87: 126-30]. But in recognition of the fact that many illegal abortions were taking place and that, basically, women should have the right to regulate the size of their families when other methods have failed, the law legalizing abortion at the women's request was again adopted in 1955 [63: 531].

#### Women's Education in USSR

Education is free of charge and compulsory from 7 to 15 years of age. Coeducation was reinforced in all schools in 1954. There are 58 universities, in 1972 there were 1,002,900 scientific workers in places of higher education,

research institutes and Academies of Sciences [102: 1400].

Fertility and illiteracy declined together in Russia. Literacy and mass education appeared to deserve special attention in relation to changing fertility, along with the more frequently stressed urbanization and industrialization.

In 1919, the Soviet Government issued a decree on the liquidation of illiteracy among the population. Everybody from the age of eight to fifty was obliged to study in the schools for the elimination of illiteracy. In the Russian Federation of the seventeen million persons given priority in the schools, fourteen million were women. At present, fifty percent of the many thousands of students at the Moscow university are women.

#### Women's Employment in USSR

Soviet women are encouraged to participate in the labor force [109: 258]. Women constitute almost half of the workers in all branches of the national economy. There were about 10 million more women than men of working age in 1970. Reliance upon the female labor reserve was far more important in terms of annual growth of the labor force than reliance upon male workers [33: 8-14]. Nearly 26 percent of the Deputies to the Supreme Soviet of the USSR elected in 1954 are women; more than half a million women are Deputies to the local Soviets [13]. The Soviet women have the right to equal pay for equal work.

The pension law, 1956, affords women the right to



receive a pension five years earlier than men while having fewer years of service. Furthermore, the State Pensions Act provided that "mothers of five or more children who have reared them to eight years of age have the right to full pension after reaching the age of fifty. The only condition is that they must have worked for at least fifteen years previous to that age" [59: 274-6].

Social insurance is administered by the trade unions. In 1971, 10.6 million people were sent to sanatoria or rest homes by the unions. There were over 42 million pensioners in 1972. Twelve million collective farmers were receiving state-aided pensions [102: 1402].

#### Family Allowances in USSR

In the USSR a pre-natal grant and a birth grant are paid to aid a woman with the increased expenses on the arrival of a new child. Mothers with two children, after the birth of a third, and for each subsequent child, receive a money grant; both the outright maternity grant and the supplementary monthly allowance increase progressively with the birth of each subsequent child. Maternity insurance and maternity benefits for employed women are provided to cover the loss of income of mothers who can no longer work and also to enable mothers to procure necessary medical and child care services. The USSR also awards prizes to mothers of extremely large families [101: 21].

Religion in USSR

With the Revolution, the Orthodox Church lost its position as the dominant one and all religions were placed on an equal footing. Since most of the Russians are not practicing any religion, the latter does not have an effect on family planning programs.

Summary

In general, the five developed countries are characterized by smaller family size. A high percentage of women participate in the labor force and have a considerable amount of education. Consequently, marriage is delayed voluntarily in many cases to fulfill the previous purposes. Although limited in certain cases, women in developed countries may exercise freely their civil and political rights. Religious attitudes toward family size are not an obstacle in most of these countries. Demographic data about the five developed countries are summarized in Table 2.

Table 2: Demographic data for five developed countries.

Demographic Information	Japan	Sweden	France	USSR	USA
Population estimates mid-1971 (millions)	104.7	8.1	51.5	24.5	207.1
Annual births per 1,000 population	18	13.5	16.7	17.0	18.2
Annual deaths per 1,000 population	7	10.4	11.3	8.1	9.3
Infant deaths per 1,000 births	15	13.0	16.4	25.7	19.8
Population under 15 years (percent)	25	21	25	28	30
Annual rate of population (percent)	1.1	0.5	0.7	1.0	1.1
Per capita gross national product (US \$)	1,190	2,620	2,130	1,110	3,980
Life expectancy at birth	71.67	74.19	71.4	69.5	70.8

Source: World Population Data Sheet--Population Reference Bureau, Inc., August 1971.

## CHAPTER V

### PROCEDURE

This chapter includes the sample selection, methodological issues and limitations of the study, and statistical data on population, fertility and indicators of the status of women. In virtually all cases, United Nations Census data were used, however, U.N. data were not available in certain cases and some figures were estimates. For the sake of consistency, U.N. data were utilized primarily and other sources were used only when necessary.

#### Sample Selection

The selection of the ten countries in this study was based on the decisions to have region representation. West Africa, the Middle East, North and South America, North-East and Mid Asia, East, West and North Europe were represented. Culture and religious diversity were considered in the sample. Size of country and the population range in developing as well as developed countries had to be large enough to be representative.

For many countries data of the nature required were not available or complete. Therefore, countries were selected for which preliminary search had indicated sufficient reliable data might be available. Other than that the

countries have been arbitrarily selected.

Classification of the countries as developing or developed was based on the level of fertility of each, measured by the Gross Reproduction Rate. Where the GRR between 1960-65 was greater than 2.0, the country was considered developing, and where it was less than 2.0, the country was considered a developed one (see definitions in Chapter 1).

### Methodological Issues and Limitations of the Study

The indicators of the status of women were selected with the hypothesis in mind that they would have a correlation with women's fertility.

### Level of Education

The relationship between the percentage of women by level of education and the level of fertility was examined. Reliability on the literacy issue completely depended on the validity of available statistics. According to Linder, "the status of demography as a science depends on the type and quality of data available for the objective study of population, as well as upon the theoretical structure with which these facts can be classified, interrelated and interpreted" [83: 321]. Illiteracy might be underestimated if it is omitted from official censuses of slum and rural population, especially in developing countries, where the illiteracy rate for women is frequently very high. On the

other hand overestimation was reported in cases of newly independent countries where the official language is English or French. Whoever does not read or write that language is considered illiterate. In Algeria, for example, many girls are sent to small religious schools where they learn only the local language (Arabic) and not the official one (French), "still they cannot be considered illiterates more than non-French speaking American women can" [117:4].

Statistical data must be used with caution especially in cross-cultural comparisons. For the purpose of this study, the author used all the U.N. demographic and statistical sources. However, for the same census year, two different data were reported in two different U.N. sources. For example, percentage of female illiteracy 15 years and over in Egypt 1960 was reported to be 91.4 in "U.N. Compendium of Social Statistics 1967" while it was reported to be 87.6 in "U.N. Demographic Yearbook 1970."

To compare status of women by their college education, statistics should be broken down by field of study. Subjects as social work, nursing, home economics and elementary school teaching are college specialities and considered as professional fields in countries like the United States, while are considered sub-professional and are taught in special training schools of 1-3 years duration in most European countries as well as in nations on other continents [116: 23-37].

Therefore, the same percentage of women enrolled in such subjects would indicate a different status of women in these societies. The same could be said if we compare the status of women in the same country or between countries by the percentage enrolled in fields such as engineering, medicine or business and the percentage enrolled in branches of the social sciences. Censuses by educational field are not available for many countries. However, this study will not be affected directly since the relationship examined is the correlation between fertility and level of education in general (see Tables 3, 4, and 5).

#### Women's Employment

The relationship between percentage of employed women and their level of fertility was examined. For the accuracy of the employment issue as an indicator of the status of women, the following classifications should be considered: full-time working women, employment by occupation, marital status, percentage of working married women with children under 3 years of age. These classifications would reflect a different status of women in different countries if we compare the importance and the prestigious status of 1) part-time versus full-time jobs, 2) secretarial and sub-professional occupations versus medical, law, engineering and business occupations. 4) working women with children under 3 years of age. This is considered a sensitive indicator of women's status

Table 3: Illiterate population by age and sex.

Country	Census year	Age	Illiterate population in %		
			Both sexes	Male	Female
Japan	1960	15 plus	2.2	1.0	3.3
Sweden	1950	15 plus	1.5 a	---	---
France	1946	14 plus	3.6	3.3	3.8
USSR	1959	9 - 49	1.5	0.7	2.2
USA	1959	14 plus	2.2	2.5	1.8
India	1961	15 plus	72.2	58.5	86.8
Taiwan	1966	15 plus	46.1	29.9	42.0 b
Egypt	1960	15 plus	80.5	68.1	87.6 b
Brazil	1960	10 plus	39.3	35.6	42.8 b
Ghana	1950	15 plus	79.5 a	---	---

Source: U.N. Compendium of Social Statistics 1967.

a Source: World Handbook of Political and Social Indicators, Yale University Press, 1967.

b Source: U.N. Demographic Yearbook, 1970.

Table 4: Percentage of female students by level of education.

Country	Census year	1st level*	2nd level*	3rd level*
Japan	1969	49	49	28
Sweden	1969	49	51	37
France	1969	49	51	38 a
USSR	1969	48 a	55 a	48
USA	1969	49 a	51 a	41
India	1965	34	24	21
Taiwan	1969	48	41	35
Egypt	1969	38	32	26
Brazil	1969	50	50	37
Ghana	1968	43	30	12

Source: U.N. Statistical Yearbook, 1971. Percentages calculated.

a Source: UNESCO Statistical Yearbook, 1966.

\*1st, 2nd, and 3rd level are respectively elementary, secondary and university level.



Table 5: Percentage of female graduates by field of study.

Country	Census year	Humanities	Education	Fine arts	Law	Social science	Natural science	Engineering	Medical science	Agriculture
Japan	1964	59	53	70	4	32	14	0.8	29	3.9
Sweden	1963	49	51	a	15	23	25	4.3	39	7.5
France	--	--	--	--	--	--	--	--	--	--
USSR	--	--	--	--	--	--	--	--	--	--
USA	1960	48	64	50	3	27	20	0.4	38	1.4
India	1962	25	40	53	3	0.9	b	0.4	8	0.6
Taiwan	1964	50	37	30	16	40	22	2.3	26	18
Egypt	1965	28	36	28	6	31	23	5	34	11
Brazil	1964	73	81	60	17	33	42	1.9	27	4.2
Ghana	--	--	--	--	--	--	--	--	--	--

Source: UNESCO Statistical Yearbook, 1966. Percentages calculated.

a included in engineering

b included in humanities

because it indicates the extent to which this important option for work advancement is open to women [117: 8-13]. These classifications would give a more accurate and more sensitive measure of status, however they were unavailable. The present purpose is to find out whether or not the employment of women in general (involvement away from home) could have an effect on fertility (see Tables 6 and 7).

Table 6: Economically active female population\*--  
total and percentage.

Country	Census year	Total female population	% Females economically active
Japan	1960	47,540,899	36.2
Sweden	1960	3,756,434	25.7
France	1962	23,898,985	27.9
USSR	1959	114,776,347	41.5
USA	1960	90,991,681	24.6
India	1961	212,713,821	28.0
Taiwan	1960	5,267,140	13.7
Egypt	1960	12,848,753	4.8
Brazil	1960	35,108,354	11.5
Ghana	1960	3,326,545	31.3

Source: U.N. Demographic Yearbook, 1970.

\*Females active in the labor force and those who are looking for jobs.

Table 7: Percentage of female teaching staff by level of education.

Country	Census year	1st level*	2nd level*	3rd level*
Japan	1969	50	22	12
Sweden	1969	83	46	--
France	1969	56	39	--
USSR	1969	71	68 a	--
USA	1969	88 a	51 a	19 a
India	1965	17 a	23 a	13 a
Taiwan	1969	41	31	16
Egypt	1969	51	23	14 a
Brazil	1968	94 a	53	21
Ghana	1968	23	30 a	12 a

Source: U.N. Statistical Yearbook, 1971.

a Source: UNESCO Statistical Yearbook, 1966.

\*1st, 2nd, and 3rd level are respectively elementary, secondary and university level.

### Civil Rights

Relationships between average age of marriage, and the divorce rate and the level of fertility were examined (see Tables 8 and 9). Age at first marriage is discussed separately, since marriage underage was not officially reported in the census of many countries. Property rights and social security system were also discussed as women's civil right which might have an effect on their fertility level.

Table 8: Legal and median age at marriage.

Country	Census year	Legal age a		Median age b	
		bridegroom	bride	bridegroom	bride
Japan	1960	18	16	27.0	24.3
Sweden	1960	21	18	25.5	22.2 c
France	1962	18	15	25.1	21.6
USSR	1926	18	--	22.4	20.4
USA	1965	16	16	22.3	20.9 d
India	1961	--	--	18.9	17.2
Taiwan	1956	18	16	23.0	20.3
Egypt	1960	18	16	24.7	19.2
Brazil	--	--	--	--	--
Ghana	--	--	--	--	--

Sources: a U.N. Demographic Yearbook, 1965.

b Donald Bogue, "Principles of Demography," (New York, 1969)

c U.N. Demographic Yearbook, 1967. Median calculated

d U.S.A. Census Bureau, February 1972.

Table 9: Rate of divorce per 1,000 population.

Country	Census year	Rate of divorce
Japan	1965	0.78
Sweden	1964	1.20
France	1964	0.69
USSR	1964	1.50
USA	1963	2.27
India	--	--
Taiwan	1964	0.38
Egypt	1965	2.20
Brazil	--	--
Ghana	--	--

Source: U.N. Demographic Yearbook, 1965.

### Political Rights

Existence of the right to vote and to be elected indicated the women's political right and whether the women had lower levels of fertility when they were politically active (see Table 10). Today, there are only seven countries in the world which have not yet granted women equal political rights with men. In two of these countries, Yemen and Saudi Arabia, neither men or women have the right to vote. The five countries in which women do not vote are Jordan, Kuwait, Liechtenstein, Northern Nigeria and Switzerland. (In Switzerland women have the right to vote in cantonal elections only in the Cantons of Geneva, Vand, Neuchatel and Bern.) Women have the right to vote in all the countries in this study, however, the grant of political rights in itself means very little unless it is implemented. This is discussed later.

Table 10: Percentage of eligible voters, voting.

Country	Census year	% Voting
Japan	1960	71.2
Sweden	1960	83.1
France	1962	89.4
USSR	1958	99.6
USA	1960	64.4
India	1962	52.6
Taiwan	--	--
Egypt	--	--
Brazil	1960	34.4
Ghana	1957	43.9

Source: Bruce M. Russet, World Handbook of Political and Social Indicators," Yale University Press, 1967.

### Other Indicators

Cultural values, religion (see Table 11) and other social factors which affect attitudes toward family size, the role and the status of women in the family are discussed separately in relation to fertility.

Table 11: Percentage of Roman Catholics and Moslems.

Country	Census year	Roman Catholics	Moslems
Japan	1956	0.3	0.0
Sweden	1940	0.3	0.0
France	1960	83.0	0.8
USSR	1959	5.1	12.0 a
USA	1959	20.6	0.0
India	1961	1.4	10.0
Taiwan	1962	1.1	0.4
Egypt	1961	0.8	92.0
Brazil	1950	93.0	0.0
Ghana	1961	10.0	14.0

Source: Bruce M. Russet, "World Handbook of Political and Social Indicators," Yale University Press, 1967.

a Source: El Kammash M., "Islamic Countries in Population and Law," L. Lee & A. Larson (ed.), Rule of Law Press, North Carolina, 1971.

### Methods of Measurement

Scales were developed to classify the two variables in this study: fertility, measured by gross reproduction rate, and the status of women, measured by the six indicators selected. These are described below.

To examine the relationships between fertility, measured by the gross reproduction rate and each indicator of

the status of women, graphic distributions were presented, and correlation techniques were used. The use of more refined methods of analysis was precluded by the small size of the sample and inaccuracy of measurements. An a priori level of confidence indicating a significant difference was not appropriate in this analysis because of the small sample size and the exploratory nature of the study. Each indicator suffers from its own defects, including varying degrees of inaccuracy and noncomparability of the data. The effects of such defects tend to be reduced when data are combined in groups so that errors are partly merged and compensated in the group averages. As a check on reliability and variability of the correlation coefficients, Chi-Square values and Standard Errors were calculated respectively.

#### Scale for Gross Reproduction Rate (GRR)

The corelation coefficient is directly related to the range of the two correlated variables. To minimize the influence of minor variations which may easily be due to errors of measurement or estimation and in order to secure some degree of comparability in the scales used, the values of the gross reproduction rate and the indicators were classified into six levels.

The GRR range 2.01 and above was divided into three equal intervals\* so that the highest GRR in the sample

$$*GRR \text{ interval} = 2 \times \frac{3.00 - 2.00}{5} = 0.40$$

countries (3.0) would be the mid-point of the highest level interval. The low GRR range 2.00 and below was divided in the same way with the lowest GRR (1.0) as the mid-point of the lowest level interval. This method secured an equal distribution of countries by levels within the high and low fertility ranges.

The six levels of the gross reproduction rate were consequently defined as follows:

Low GRR group:

Level I . . . . .	.81 to 1.20
Level II . . . . .	1.21 to 1.60
Level III . . . . .	1.61 to 2.00

High GRR group:

Level IV . . . . .	2.01 to 2.40
Level V . . . . .	2.41 to 2.80
Level VI . . . . .	2.81 to 3.20

### Scale for Indicators of Status of Women

The indicators of the status of women were also divided into six levels. The following standards were adopted for the choice of the class limits:

1. For each indicator except illiteracy, Level I was taken for the highest and Level VI for the lowest value in order to obtain positive correlations. For illiteracy, Level VI was the highest and I the lowest.
2. For each indicator except illiteracy, the



highest score value in the sample countries was taken as the score limit between Level I and Level II. The lowest score value was taken as the score limit between Level V and VI. The range between the highest and lowest score values was divided into four equal intervals; as a result the six determined class limits were obtained. Inversely for illiteracy, the lowest score value was taken as the score limit between Level I and II and the highest score was taken as the limit between Level V and VI. Illiteracy was considered a negative indicator.

Consequently the six levels of the indicators of status of women were defined as shown in Table 12.

Table 13 shows the values of the gross reproduction rate and each indicator for each of the countries included in the study.

Table 14 gives the classification of each country by level of GRR and each indicator of the status of women.

Table 12: Levels and class limits of GRR and of indicators of status of women.

Levels Indicators	I	II	III	IV	V	VI
GRR	.81-1.20	1.21- 1.60	1.61- 2.00	2.01- 2.40	2.41- 2.80	2.81-3.20
% Illiteracy	1.8 and under	1.9 -23.3	23.4 -44.8	44.9 -66.3	66.4 -87.6	87.7 and over
% Voting	99.6 and over	83.4 -99.5	67.1 -83.3	50.8 -67.0	34.5 -50.7	34.4 and under
Female median age at marriage	24.3 and over	22.6 -24.2	20.8 -22.5	19.0 -20.7	17.3 -18.9	17.2 and under
% Female economically active	4.15 and over	32.4 -41.4	23.2 -32.3	14.0 -23.1	4.9 -13.9	4.8 and under
% Female 2nd level of education	55.0 and over	47.3 -54.9	39.6 -47.2	31.8 -39.5	24.1 -31.7	24.0 and under
% Female 3rd level of education	48.0 and over	39.1 -47.9	30.1 -39.0	21.1 -30.0	12.1 -21.0	12.0 and under

Table 13: Values\* of the GRR and of each indicator for each of the countries included in the study.

Country	GRR	% Illiteracy	% Voting	Median age of marriage	% Economically active	Enrollment in education		
						% 2nd level	% 3rd level	
Japan	1.0	3.3	71.2	24.3	36.2	49	28	
Sweden	1.1	--	83.1	22.2	25.7	51	37	
France	1.3	3.8	89.4	21.6	27.9	51	38	
USSR	1.4	2.2	99.6	20.6	41.5	55	48	
USA	1.8	1.8	64.4	20.9	24.6	51	41	
India	2.4	86.8	52.6	17.2	28.0	24	21	
Taiwan	2.7	42.0	--	20.3	13.7	41	35	
Egypt	2.8	87.6	--	19.2	4.8	32	26	
Brazil	3.0	42.8	34.4	--	11.5	50	37	
Ghana	3.0	--	43.9	--	31.3	30	12	

\*Values were selected from previous tables.

Table 14: Classification of each country by level of GRR and indicators of status of women.

Country	GRR	Illiteracy	Voting	Median age of marriage	Economically active	Enrollment in education	
						2nd level	3rd level
Japan	I	II	III	I	II	II	IV
Sweden	I	--	III	III	III	II	III
France	II	II	II	III	III	II	III
USSR	II	II	I	IV	I	I	I
USA	III	I	IV	III	III	II	II
India	IV	V	IV	VI	III	VI	V
Taiwan	V	III	--	IV	V	III	III
Egypt	V	VI	--	IV	VI	IV	IV
Brazil	VI	III	VI	--	V	II	III
Ghana	VI	--	V	--	III	V	VI

## CHAPTER VI

### RESULTS AND DISCUSSION

This chapter includes the graphic presentation, results of the statistical analysis and the discussion of the findings. Tables on population, fertility, indicators of status of women, and statistical findings are given.

#### Graphic Distribution Presentation

##### Distribution of Illiteracy by Level of Fertility

In comparing developing and developed countries, Figure 1 shows that the percentage of illiterate women are very different in the two groups, with all of the low fertility countries having a low level of illiteracy, and all of the high fertility countries falling into a relatively higher level of illiteracy. This comparison supports the basic hypotheses of this study.

In general, within the developed countries, all the sample countries fall into a low level of illiteracy. However, Figure 1 shows a tendency toward a slight negative relationship between illiteracy and level of fertility. The lower rate of illiteracy for USA and USSR might be due to the strict law enforcement for compulsory education. Also Japan has decreased fertility at a very rapid rate in recent years, apparently faster than increasing the rate of literacy.

Within the developing countries, Figure 1 shows that no consistent relationship exists between high fertility and illiteracy. Although they all fall into a high level of illiteracy, the sample countries were scattered into two groups with India and Egypt falling into the highest level of illiteracy, and Taiwan and Brazil in the lowest. From this distribution, although the sample is very small, it can be concluded that in countries like India and Egypt where over half the population is rural and dependent on child labor for agricultural work, illiteracy is very high. On the other hand, this increase in illiteracy could be related to the fact that compulsory education is not enforced.

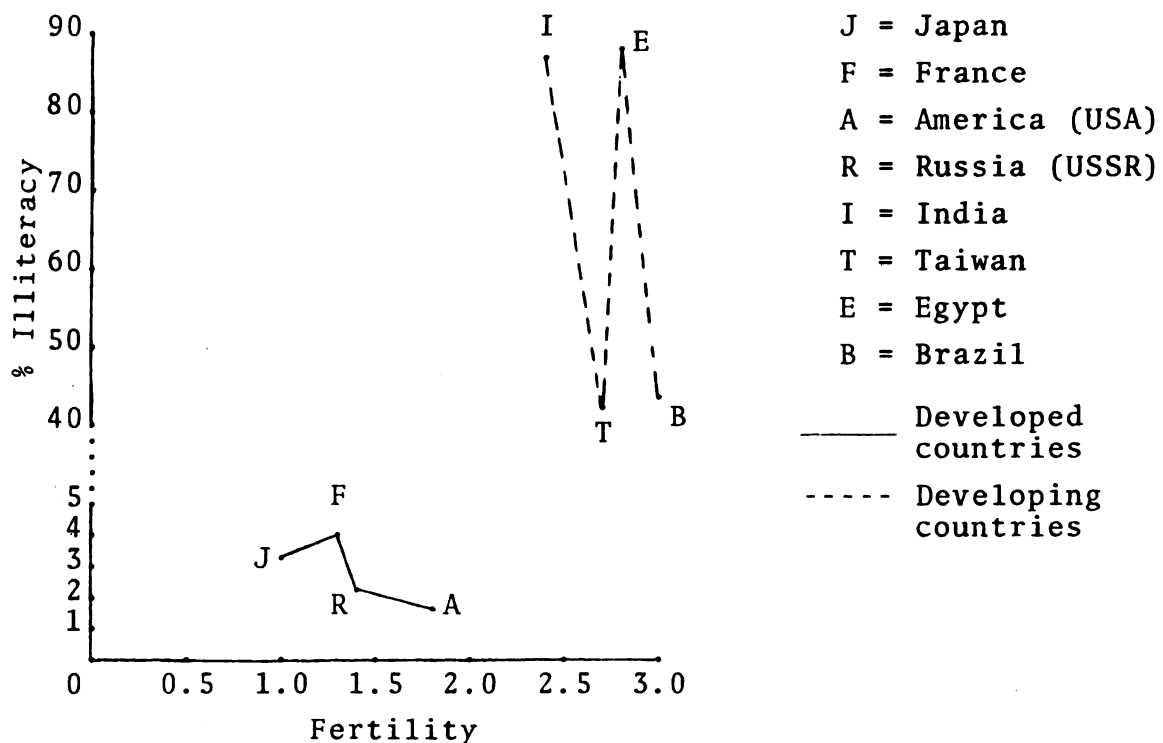


Figure 1: Distribution of countries by levels of illiteracy and fertility.

Note: Data were not available for Sweden and Ghana.

Distribution of Voting Percentages by  
Level of Fertility

Although voting does not seem to be a predominant factor affecting fertility within developing and developed countries, in general higher percentages of women are voting in low fertility countries than in ones with high fertility.

Within the developed countries Figure 2 shows that except for the USA there is a positive relationship between percentage voting and level of fertility. The more women who vote, the greater the birth rate for developed countries. However, the high percentage of voting women in the USSR may be due to their compulsory voting system. It is interesting to notice the existence of a negative relationship in the case of the USA, the lower the percentage of voting women, the higher is the level of fertility.

Within developing countries, Figure 2 shows that there may be a negative relationship between percentage voting and level of fertility. However, the sample is very small and data for two of the sample countries were not available. It is interesting to notice that percentage of voting women in Ghana is higher than in Brazil. This is mainly due to the guaranteed right to vote to all Ghanaian citizens in spite of being literate or illiterate. Because many qualified voters cannot read or write, pictorial symbols or colors are used to denote candidates in Ghana. On the other hand, although voting is compulsory in Brazil illiterates may not vote.

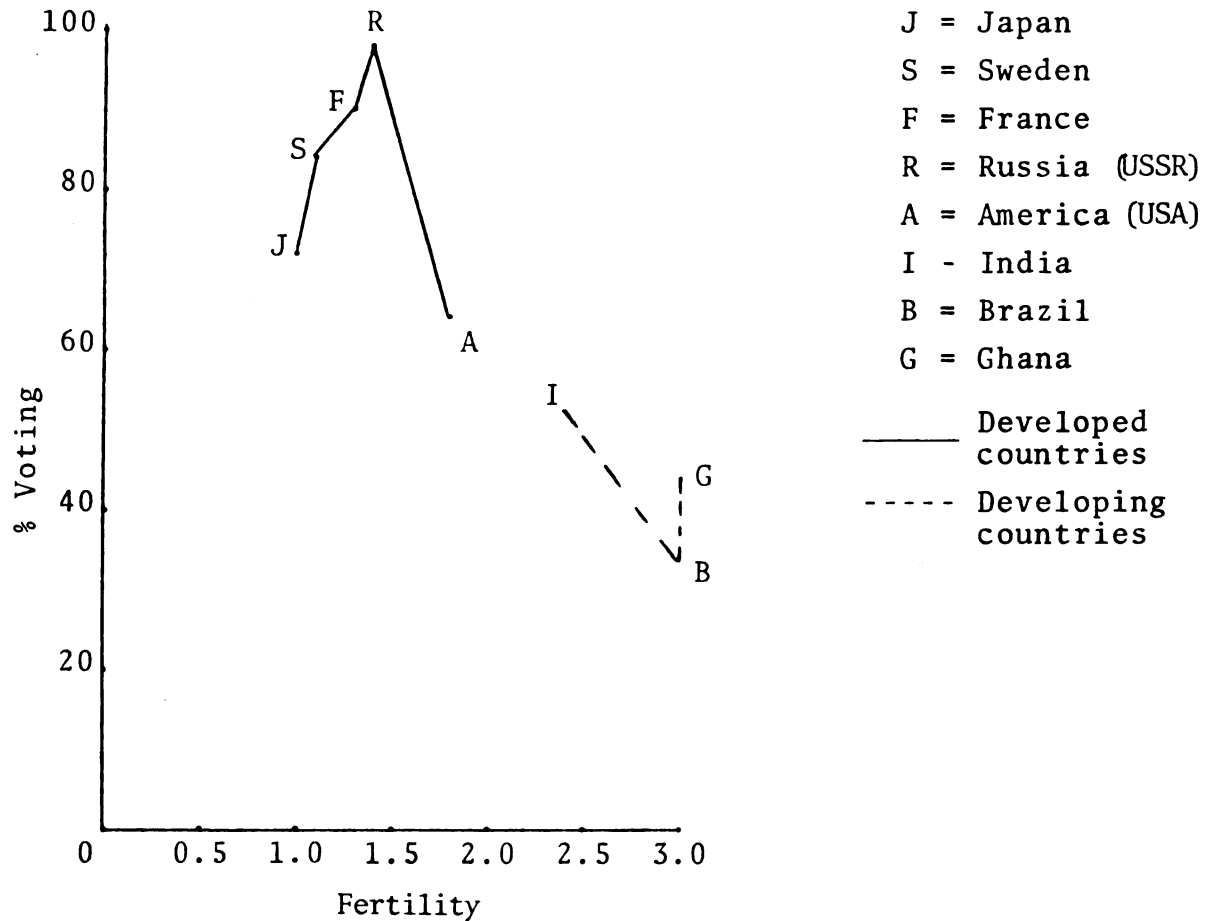


Figure 2: Distribution of countries by levels of voting and fertility.

Note: Data for Taiwan and Egypt were not available.

#### Distribution of Percentage Median Age at Marriage by Level of Fertility

In general, Figure 3 shows that there is a tendency for low fertility countries to fall in a higher percentage of age at marriage than high fertility countries do. It seems logical that increasing the age at marriage would decrease the reproduction period in a woman's life cycle during marriage which could lead to smaller family size.



Within the developed countries Figure 3 shows that a slight negative relationship exists between median age at marriage and level of fertility with lower reproduction rate in countries with a greater proportion of women marrying later.

Within developing countries with only three countries represented no interpretation can be made from the graph.

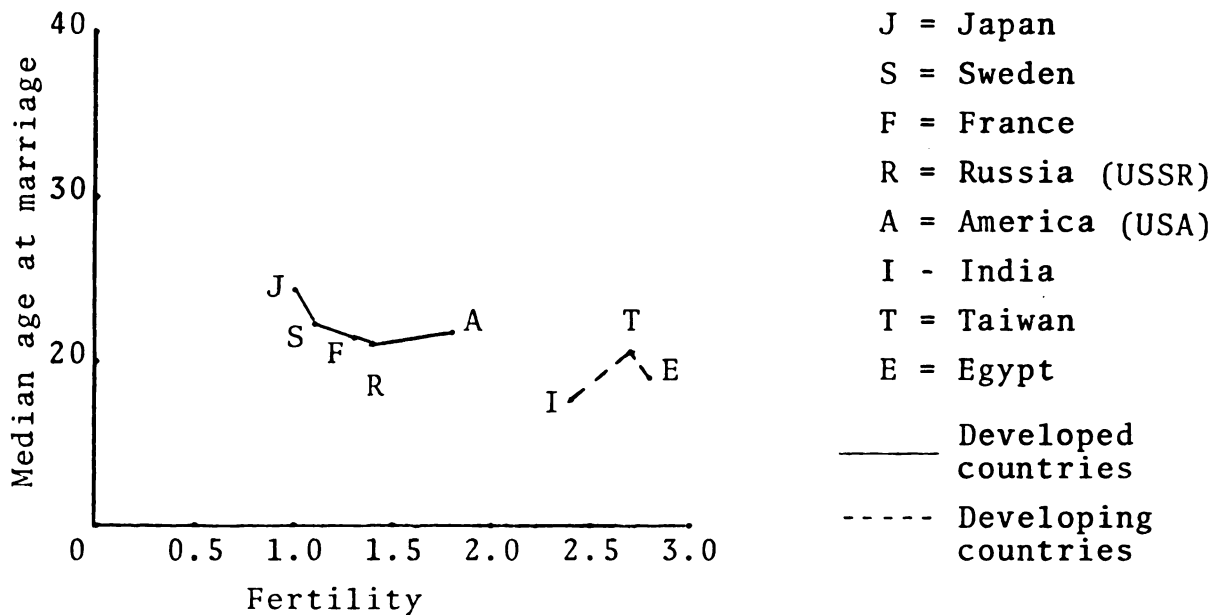


Figure 3: Distribution of countries by median age at marriage and level of fertility.

Note: Data for Ghana and Brazil were not available.

#### Distribution of Percentage of Women Economically Active by Level of Fertility

In comparing low and high fertility countries with respect to economic activity of women (without including the USA), Figure 4 shows that a curvilinear shape is present

in both groups. Level of fertility may be related to economic activity with a very high population rate reflecting the greater need to join the labor force for survival support of the family. While at another level, economic activity may help reduce the size of families in order to have a higher quality of life.

Within the developed countries, Figure 4 shows that at one perspective except for Sweden and USSR (which provides child care), there is a negative relationship between economic activity and level of fertility. As women join the labor force there is a lower birth rate. It should be noticed that in the case of the USA, women are joining the labor

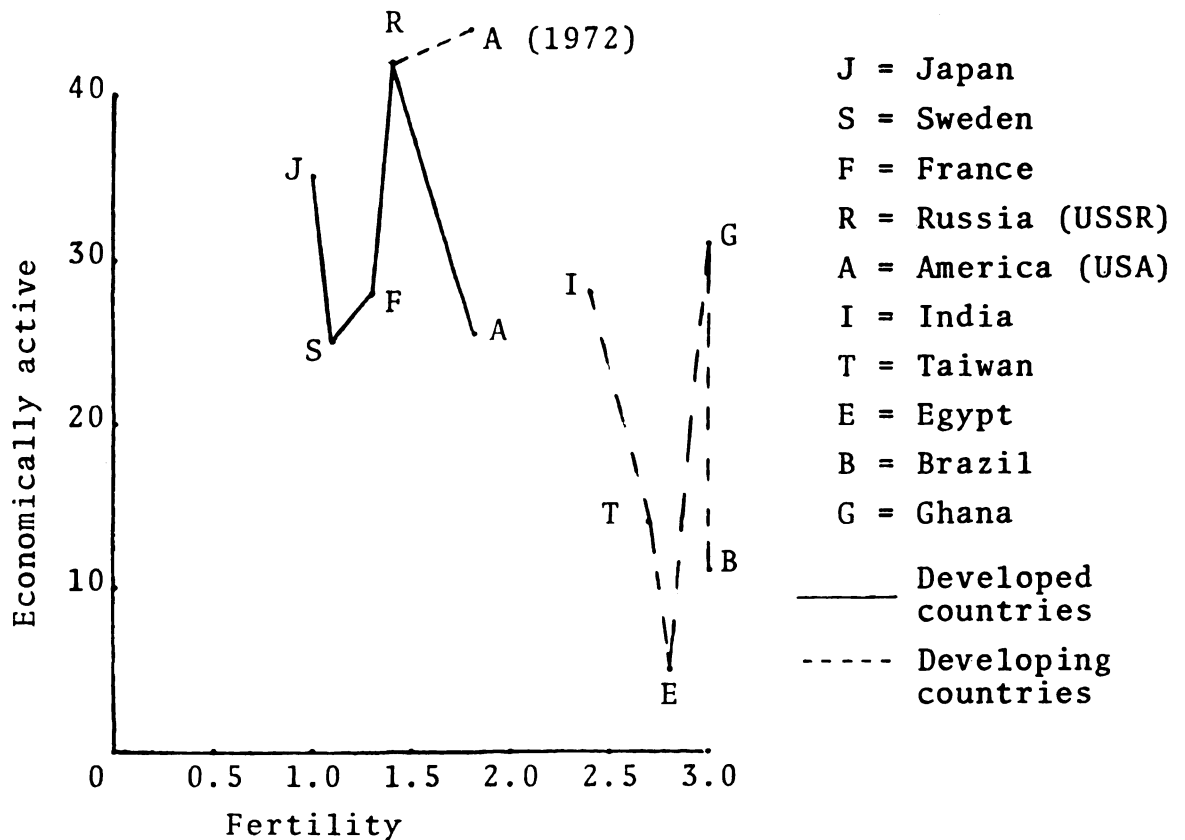


Figure 4: Distribution of countries by % women economically active and level of fertility.

force at a rapid rate. If recent data were used [89: 157], percentage of women economically active in the USA would be 43.9 and would fall as is shown dotted in Figure 4. With the new distribution a positive relationship exists between percentage of women economically active and level of fertility.

Within developing countries there is no consistent relationship between level of fertility and economic activity. However, except for Ghana and Brazil, there is a negative relationship between level of fertility and economic activity. The more women involved in the labor force, the lower is the fertility rate. India and Ghana show a higher level of economically active women, that could be due to the extended family system which helps in taking care of the children while the mother is at work.

#### Distribution of Second Level of Education by Level of Fertility

When comparing both groups of countries, Figure 5 shows that, except for Brazil, all high fertility countries fall into a lower level of education than do the low fertility countries. Therefore, a higher level of secondary education is associated with a lower level of fertility.

Within developed countries, Figure 5 shows that when excluding USSR, there is no consistent relationship between level of fertility and second level of education. However, when including USSR and excluding USA, a slight positive relationship develops. More countries need to be

included in order to verify any relationship.

Within developing countries, Figure 5 shows no consistent relationship between second level of education and level of fertility.

Distribution of Third Level of Education  
by Level of Fertility

In comparing both low and high fertility countries, Figure 6 shows an overlapping distribution which makes it difficult to see the effect of college education on the level of fertility.

Within developed countries, Figure 6 shows a slight positive relationship between college education and level of fertility with the highest in the USA and USSR. Again this might be due to the advanced child care system available in those two countries or to the higher per capita income in the USA and family allowances in the USSR. Also the fact that the population of women in the USSR was higher than the population of men after the war, women were pushed to take higher position jobs, hence, higher education. Japan has decreased fertility at a rapid rate apparently faster than increasing the rate of education.

Within developing countries, Figure 6 shows no consistent relationship between college education and level of fertility. However, when comparing Figure 6 with Figure 5, high fertility countries show a larger proportion with secondary education level than with college education. These

figures indicate that in developing countries, percentage of secondary level of education for women may be a very important factor related to fertility.

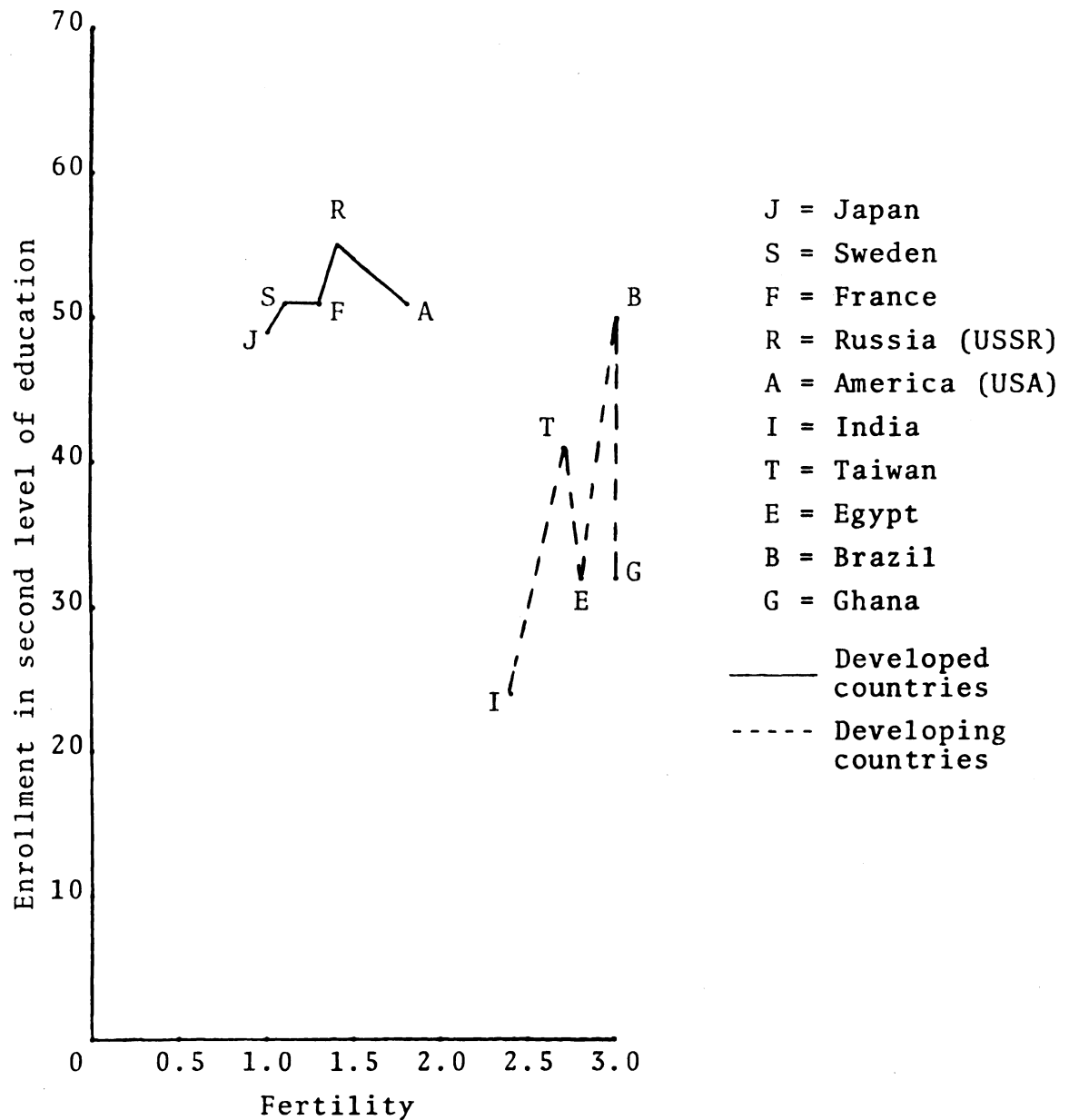


Figure 5: Distribution of countries by enrollment in second level of education and level of fertility.

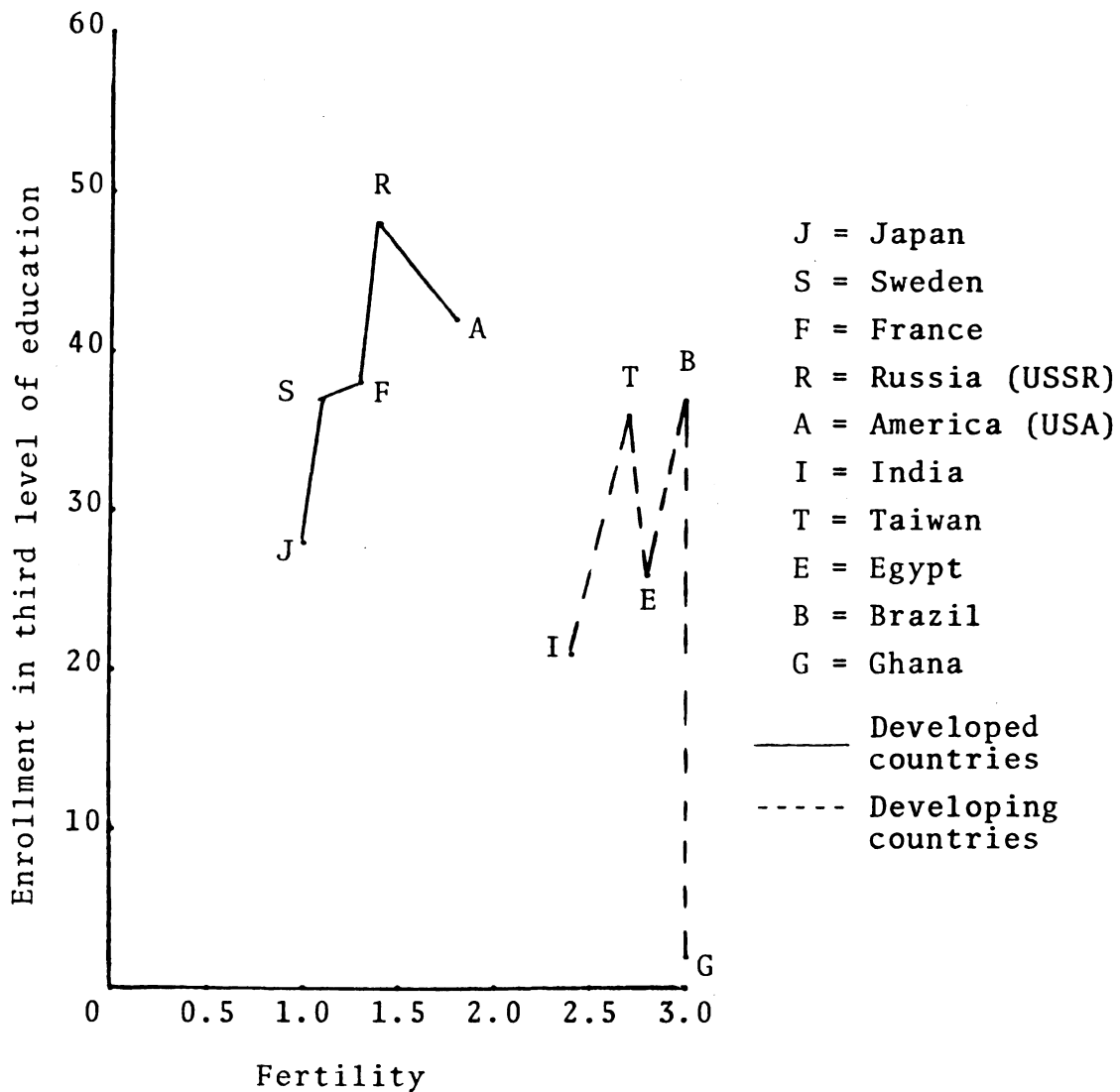


Figure 6: Distribution of countries by enrollment in 3rd level of education and level of fertility.

Distribution of Average Percentages of All the Indicators for All Developed and Developing Countries by Level of Fertility.

When comparing high and low fertility countries on each average of the indicators, Figure 7 shows that the two groups of countries differ greatly in every aspect of status of women represented by the indicators. Higher values of

indicators generally prevail in low fertility countries than in those of high fertility. As would be expected, the opposite is true for illiteracy.

Illiteracy shows the greatest difference with a lower rate in low fertility countries and a higher rate in high fertility countries. This fact is supported by the two indicators, second and third level of education; the higher the rate of education, the lower is fertility. Therefore, it can be concluded that education is an especially important factor contributing to lowering the level of fertility and may be the very precondition necessary for motivated birth planning. On the other hand, education can deter early marriage and childbearing or postpone it beyond the average age as long as the woman stays in school. At the same time a higher level of education expands the probability for women's employment.

Percentage of women economically active is much higher in low fertility countries. This supports the hypothesis that women who are in the labor force may be inclined toward small family size, and that when they have smaller families they are more free to enter the labor force.

Age at marriage although only slightly higher in low fertility countries as indicated in Figure 7, is very relevant for the purpose of this study. Data were not available for two of the developing countries and if they

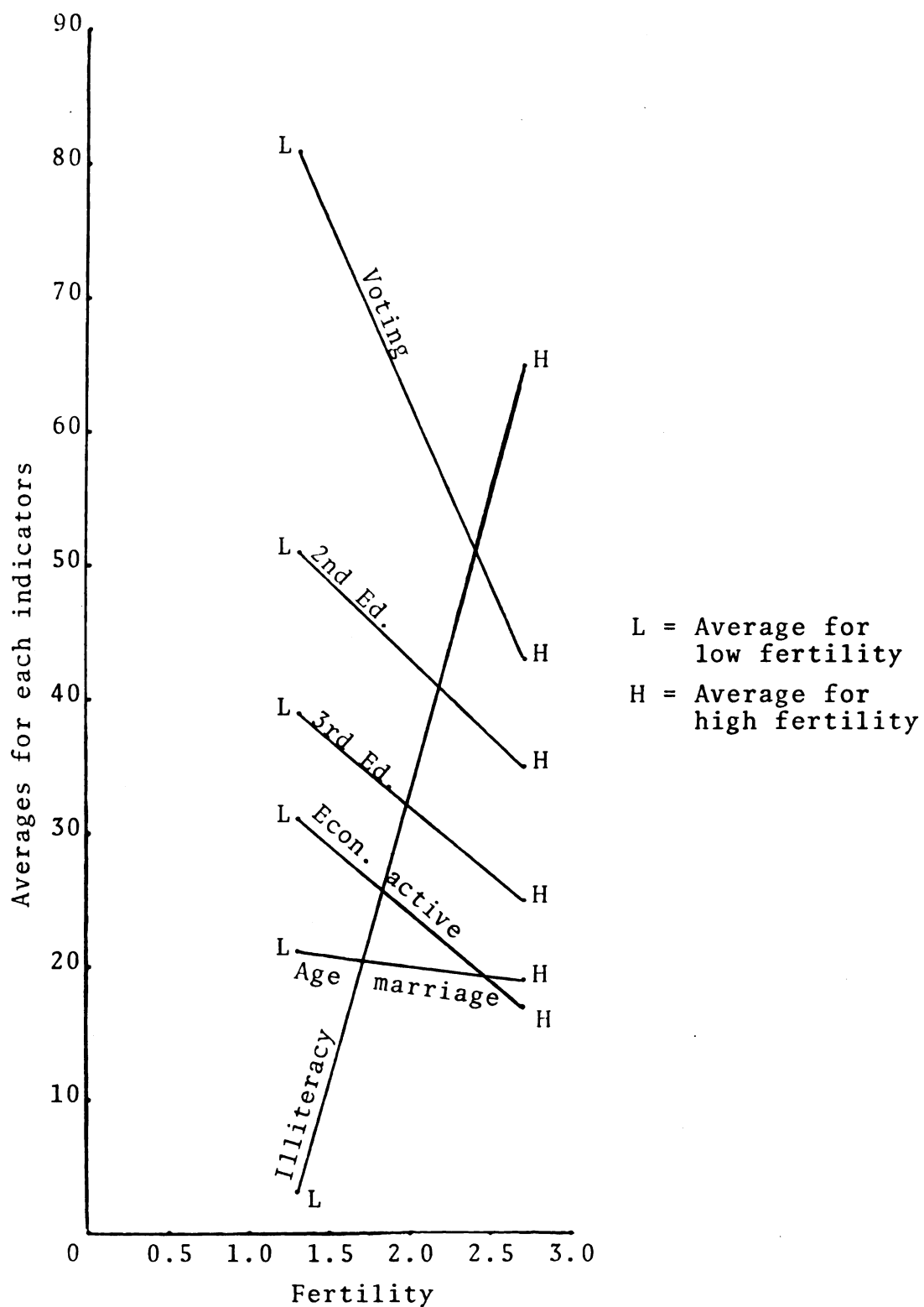


Figure 7: Distribution of unweighted averages of each indicator by averages of high and low fertility (GRR).

Note: Averages are reported in Table 17.



had been, might have added to strengthening the relationship between marriage age and fertility. The later the age at marriage, the lower is the fertility.

Percentage of women voting is much higher in low fertility countries. Although other factors such as compulsion or not being able to vote because of illiteracy, are involved, still voting is a symbol of women's capabilities of independent thought and action which could be carried on into their private life. In order to participate in political activities, women may also desire to have smaller families to be free for such participation.

It should be realized that the transition to low fertility and improvement of status of women are interacting processes. It is unlikely that the level reached in any one indicator would determine the movement of fertility. The initiation of a shift from high to low fertility would probably depend on the interaction of several indicators.

#### Correlation of Indicators with Fertility

##### High and Low Status Women, and High and Low Fertility Countries

Correlation coefficients were calculated on the basis of (2x2) contingency tables combining levels I to III and IV to VI of fertility and each indicator of the status of women. In addition Chi Square values\* were calculated to indicate the degree of assurance (percent confidence) that

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\*values were calculated with Yates' correction for small frequencies.

the correlation is not due to chance. As a check on variability, standard errors were calculated. As was indicated in the scale development, data were arranged in order to obtain positive correlations.

The results shown in Table 15 support the existence of a correlation between fertility and indicators of status of women when high and low fertility countries are considered.

With consideration to the methods of measurement for this study, the coefficients are relatively higher for percentage of voting women ( $r = 0.77$ ); percentage of females economically active ( $r = 0.66$ ); and percentage of females in second level of education ( $r = 0.66$ ). They are relatively lower for percentage of female illiteracy ( $r = 0.58$ ); and percentage of females in third level of education ( $r = 0.41$ ).

#### Status of Women and Fertility in All Countries

Correlation coefficients ( $r$ ) were also calculated from (6x6) contingency tables showing the combinations of the six levels of fertility with the six levels of each indicator of the status of women for all countries. Because of the small sample size, the results are not reliable (see Table 16 in Appendix B) but the same technique could be used for a similar study with a larger sample size.

#### Status of Women in High and Low Fertility Countries

Correlation coefficients were calculated for the groups of high and low fertility countries separately from

Table 15: Coefficients of correlation, Standard Errors, and Chi-Square values of each indicator with gross reproduction rate in 2x2 contingency tables and percentage confidence of  $r$ .

Indicators	All countries 2x2			
	$r$	$\sigma_r$	$x^2$	(1- $\alpha$ ) % confid.
Percentage of female illiteracy	0.58	0.39	0.67	60
Percentage voting	0.77	0.16	2.14	85
Female median age at marriage	0.77	0.16	2.14	85
Percentage of female economically active	0.66	0.19	1.90	83
Percentage of female in 2nd level of education	0.66	0.19	1.90	83
Percentage of female in 3rd level of education	0.41	0.27	0.42	50

(3x6) contingency tables. Those tables combined the three levels of high fertility and the three levels of low fertility with the six levels of each indicator. Again because of the small sample size, the results are not reliable, (see Table 16, Appendix B). The same technique could be used for a similar study with a larger sample size.

Variations of the Indicators Among Countries  
Classified by Levels of Fertility

Table 17 shows the unweighted averages of the indicators of the status of women classified according to level of fertility. This table indicates that high fertility and low fertility countries differ greatly in every aspect of status of women represented by the indicators. Within each of these groups, higher values of indicators generally prevail in low fertility countries than in those of high fertility. As would be expected, the opposite is true for illiteracy. The only exception is percentage of women economically active in third and fourth level of fertility where it is lower in the former and higher in the latter.

On the average, the low fertility countries have about one-and-a-half times as many educated women in second and third levels of education, twice as many females economically active, two times as many voting women\*, while the high fertility countries have an illiteracy rate over twenty times greater than the low fertility countries.

The differences between the group averages of indicators for high and low fertility countries indicate that it can be considered virtually certain that they are not due to chance. The existence of some association between fertility and the indicators is suggested by the data in Table 17. Such association is implied by the general

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\*Voting data by sex are not available. It is assumed in this study that women are representing 50% of the voters in all the sample countries since they have officially the right to vote.

Table 17: Unweighted averages of the indicators of status of women classified according to level of fertility.

Fertility level	Gross reproduction		% Illiteracy	% Voting	% Median age of marriage	% Economically active	% Enrollment in education	
	range	group average					2nd	3rd
I	.81-1.20	1.05	3.3	77.15	23.25	30.95	50	32.5
II	1.21-1.60	1.35	3.0	94.5	21.1	34.7	53	43
III	1.61-2.00	1.80	1.8	64.5	20.9	24.6	51	41
IV	2.01-2.40	2.40	86.8	52.6	17.2	28.0	24	21
V	2.41-2.80	2.75	64.8	--	19.75	9.25	36.5	30.5
VI	2.81-3.20	3.00	42.8	39.15	--	21.4	40	24.5
Combined groups (averages)								
I-III	under 2.00	1.32	2.77	81.54	21.92	31.18	51.4	38.4
IV-VI	over 2.00	2.78	64.8	43.63	18.9	17.86	35.4	26.2

consistency of the patterns of variation of the indicator averages from one level of fertility to another. It is unlikely that chance variations would produce the observed averages for all the indicators. According to the consistency of these findings, in countries where fertility is initially high, improving the indicators of status of women are likely to have some effect on fertility. One reservation should be made here. It is unlikely that the level reached in any one indicator would determine the movement of fertility. The initiation of a shift from high to low fertility would probably depend on the levels of several indicators. The present distribution of countries by levels of fertility would be interpreted under this hypothesis as a result of one group of countries having attained a low level of fertility while the other group did not.

Data in Table 13 show that education, employment and age at marriage are higher in low fertility countries and vice versa. Such association suggests that the improvement of status of women represented by these indicators will lead to lower fertility. But under different circumstances in developing countries where women must move from the rural areas and find an employment opportunity, does that always mean an independence and advancement for them or would it represent an isolation from a formerly supportive environment? Can a gainful employment always be a sign of emancipation or does it substitute one form of exploitation for another?

Age at marriage is also associated with fertility. Higher age at marriage shows a negative effect on fertility and vice versa. In many countries although there is a required minimum age at marriage, the law is not enforced and marriages are still being contracted out-side the legal age. Those marriages are not shown in many censuses since they are illegal and not reported or because birth certificates have been reissued to meet the required legal age and consequently they are subscribed under different ages.

Table 13 shows that the voter percentage is higher in low fertility countries, however, we should not neglect the fact that in some developed countries, voting is compulsory and the individual has no choice in this matter since passivity is interpreted as opposition. In this case higher number of voters is not important if the grant of this political right in itself means very little and is not implemented as it should. On the other hand we find lower percentage of voters in high fertility countries. It should also be emphasized that in many developing countries while women have the right to vote the same law prohibits this right to illiterates who form 40 to 70 percent of the population, most of whom are women.

#### Other Factors Related to the Status of Women and Fertility

Divorce was considered an indicator of women's civil rights in this study. Figures in Table 18 show the rate of divorce for each country, however, correlation between divorce

Table 18: General data related to fertility.

Country	Population 1971 (millions)	Annual infant mortality (deaths under one year per 1,000 live births)	Annual rate of population growth (%)	Male life expectancy at birth	Female life expectancy at birth	Per capita income US\$	Rate of divorce per 1,000 population	Percentage Roman Catholic population (a)	Percentage Moslem population (a)
Japan	104.7	15	1.1	69.05	74.30	1,190	0.78	0.3	0.0
Sweden	8.1	13.0	0.5	71.85	76.54	2,620	1.20	0.3	0.0
France	51.5	16.4	0.7	67.6	75.3	2,130	0.69	83.0	0.8
USSR	245	25.7	1.0	65	74	1,110	1.5	5.1	12.0
USA	207.1	19.8	1.1	70.8		3,980	2.27	20.6	0.0
India	569.5	139	2.6	41.89	40.55	100	--	1.4	10.0
Taiwan	14.3	19	2.3	61.33	65.60	270	0.38	1.1	0.4
Egypt	34.9	118	2.8	51.6	53.8	170	2.20	0.8	92.0
Brazil	95.7	170	2.8	60.7		250	--	93.0	0.0
Ghana	9.3	156	3.0	46.0		170	--	10.0	14.0

Source: World Population Data Sheet--Population Reference Bureau, 1971.  
a Source: see Table 11.



rate and fertility could not be calculated for the purpose of this study. Although divorce rate might have a direct effect on fertility, it is not possible to classify it as an indicator of higher status of women. This hypothesis would not be valid for developing countries where divorced women are subject to social pressure in their communities, hence, have low status. On the other hand, if high divorce rate is considered as an indicator of low status of women, it should be eliminated from women's civil rights. Consequently divorce rate could not be used as an indicator of status although it is an important factor in the women's civil right.

As indicated previously in the literature review, religion is a factor affecting the attitude of women toward family size, however, the data in Table 18 do not reflect it with the exception of the high percentage of Moslems and Roman Catholics in Egypt and Brazil respectively. While the two latter countries fall in the high fertility group, France on the other hand has a high percentage of Roman Catholics and falls in the low fertility group. Therefore, religion seems not to be a predominant factor affecting fertility. In general, Buddhist, Confucian, Hindu and Islamic attitudes on the glories of the large family seem to have been surmounted in Japan, Taiwan, Egypt and India.

Other factors related to fertility but not considered as indicators of status of women are per capita income, life expectancy at birth and infant mortality (see Table 18). The two first factors are higher in low fertility

countries and lower in high fertility countries. Infant mortality is low in low fertility countries and vice versa.

It should be realized that the transition to low fertility and the improvement of status of women are interacting processes and that other factors may play an important part in determining the result of their interaction. Factors such as national culture and value system should be emphasized. It is clear from the course of this study that the high fertility and low fertility countries in the world are characterized by important differences in culture as well as the status of women. Therefore, the wide differences in fertility levels might not be due only to one group of countries having reached a higher level of social and economic development (Table 18) but also at least partly to cultural circumstances affecting the interactions between fertility and social changes.

#### Interpretation of Findings in Relation to Time Perspective

The data configuration of fertility levels and their associations with the indicators of status of women represents a picture which changes in the course of time. If the same study were to be repeated within ten or twenty years, different results will be obtained for the same countries; the evidence that the group of low fertility countries has been formed by a process of transition over a period of several decades. More recent GRR statistics\*

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\*GRR for recent years was not available for all the sample countries during the time of this study.

than the ones used in this study show the continuous decrease in some of the low fertility countries; for example, USA 1968, GRR = 1.2; Sweden 1970, GRR = 0.9. Recent statistics also show the launching of new countries from high to low fertility as is the case in Taiwan, GRR = 1.9 in 1970. According to this level of fertility Taiwan should be considered as a low fertility country in future research studies.

## CHAPTER VII

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### Summary

In every society there are norms of behavior which affect fertility, and every legal structure contains regulations which encourage or discourage childbearing.

This study has indicated that there are correlations between fertility and the status of women when all high and low fertility countries are compared. High fertility and low fertility countries differ greatly in every aspect of status of women represented by its indicators. Indicators such as age at marriage, voting, employment and second level of education appear to be highly correlated. The statistical analyses supported the existence of these relationship.

#### Conclusions

Population policy is not an end in itself, but a means to facilitate the achievement of social goals desirable in their own rights. The aim of any population policy must be the enrichment of human life not its restriction. The population problem can and should be based on voluntary action determined by the individual dignity and reach his full potential. The universal human rights aspects of birth planning and the status of women must be affirmed. Constraints

on the exercise of the right to decide whether, and when, to bear children affect the exercise of other rights in marriage and the family, education, employment and public life.

To achieve a significant change in a society we should make a change in the status and role of women and hence in the structuring of family life. Included among such changes would be greater educational opportunities and the attainment of high levels of literacy, greater female participation in the labor force, and more equitable divorce and inheritance laws. It is also necessary to reduce infant mortality and to make systematic provisions for the aged. There are reasons to believe that variations in fecundity among people living in different conditions are more powerfully influenced by social and psychological rather than purely biological factors. Religious communities which formed minorities in composite societies often maintained high fertility because of the resistance created by their religious faith against the assimilation of culture patterns developed in other communities. However, a culturally conditioned trend towards lower fertility could occur rapidly in a closely knit community, if the sociocultural leaderships of the community were in favor of such a trend.

#### Recommendations for Population Programs and Social Policy

One of the objectives of this study was to develop recommendations to assist personnel in the various countries

in the formulation and design of population programs and social policy. It has been a central thesis of this study that such programs go far beyond traditional family planning programs, and must change the social structure in order for population growth to be significantly altered.

The recommendations which follow are based on both the qualitative and quantitative findings of this study, and are founded on a value for human dignity.

1. Compulsory education is becoming a reality in all countries of the world. The school system touches every child and fosters the growth of intellectual knowledge and skill, it also influences values and goals. Population growth is one of the world's most pressing problems, and all persons should be aware of the consequences of unrestricted population growth. Therefore, to better prepare present and future generations to meet the challenges arising from population change, well-planned population education programs should be established in the school systems.

2. Decisions and actions regarding the conception of a new life, and about the number of children desired are made, in most cases, within the intimate relationship of the family. Sexual behavior is a fundamental aspect of family life. It is essential that people have an understanding of the nature of human sexuality, biologically, psychologically and emotionally, and its implications of sex for family life. Many people have not been well informed about human sexuality,

nor have they had education related to family life and family planning.

To maximize information and knowledge about human sexuality and its implication for the family, we should make sex education available through responsible community organizations, the media, and especially the schools. Educational institutions may be identified as the place of instruction in such matters as sex education, family living and the population dynamics of the society. Teachers can then, presumably, play important roles by inculcating into young people the attitudes and values favorable to the achievement of lower fertility. Instruction about family planning programs should be included, therefore, in the curricula of schools and universities, where teachers, social workers and various other professionals who work in family planning are trained. Similarly we should seek to improve the quality of education for parenthood throughout the society.

3. Education of women appears to be one of the strongest factors affecting fertility. On one hand, the mother plays a crucial role in the formative years of her child's life; therefore, the mother should be educated and free from any inferiority complex based upon ignorance, and also free from anxieties that she might pass on to her children. The image of the mother in the eyes of her children is important in preparing them better for life ahead. In addition, education is the precondition necessary for family planning,

for postponement of marriage, for a higher level of employment and greater independence of action. Therefore, education for women should be a necessity for the well-being of future generations.

4. Today it is widely believed that in industrialized societies, women avoid childbearing or restrict their number of children in order to maintain jobs outside the home. Therefore, we should encourage the participation of women in gainful employment as an alternative to the bearing and rearing of children. Attention should be devoted not only to employment itself but to the type of employment in which women engage as a factor tending to reduce family size.

5. In some cultures, because of high infant mortality, a child is not considered completely human until enough time has elapsed for its survival to be assured. Little emotional or material investment is therefore, made in its early months--a fact which lowers even further the child's chances of survival, and high infant mortality leads to uncontrolled fertility. If the day care center programs for the mothers include an element of family planning education, they may even be more successful channels for influencing attitudes than maternal and child health centers.

The child care system should be greatly expanded so that working mothers will have a place where their children can receive beneficial care. The child care centers should



be the places where the health, recreational, educational, and psychological needs of the child will receive full attention. This is women's right, human right, and population control too.

6. Early age at marriage tends to be generally related to fertility. In some countries girls under the age of ten years are given away in marriage and are forced to marry men not of their choice. Consent of the woman to marriage is not required provided the consent of her parents is obtained. Marriage registration does not exist in many countries and there we find men who marry as many women as they like. The legal minimum age at marriage should be raised to 18 for women. Consent of the woman to marriage as well as marriage registration should be legally required. In order to obtain practical consequences on fertility, legislation providing for marriage law should be enforced by the government where marriages are still being contracted outside the legal rights. Delayed marriages, on the other hand, might foster the accomplishment of a higher level of education for women and might also permit practical training for employment.

7. In a number of countries where women legally have full personal rights, there is often a gap between the laws and the actual situation. In the rural areas, this gap is due to the isolation of women and the minimal contact they have with the national decision-making centers. In the urban areas, the nonexercise of these rights is related to

the woman's low educational level and her low socioeconomic position. Implementing legislation is important to eliminate discrimination against women as well as it is necessary to create conditions to guarantee their implementation.

8. In some countries women are excluded from inheritance of their parent's property and wealth which is inherited only by the sons. In certain cases the widow is obliged to marry the husband's brother in order for the property to remain in the family. Such provisions tend to encourage parents to have larger families to ensure that enough sons would be born and survive to benefit from the laws in question. To rectify such a system, inheritance and property laws should be changed.

9. A child labor prohibition law and the enforcement of a compulsory education law should have a depressing effect on fertility, if the respective minimum and maximum ages are made to correspond. In this case children will represent definite high costs for their families even when education is free, and at the same time will deprive them of additional income. This hypothesis while significant among populations where voluntary parenthood is well established, may not apply among people who do not deliberately make family size decisions.

10. In seeking changes in traditional societies, we should bear in mind the cultural emphasis on the duties of women

that society prescribes. Local leaders in such societies must be chosen among those who are considered open-minded in promoting changes of attitude. The traditional midwife as well as the social worker could have a positive role. The position of the village head should not be underestimated. If he is a man motivated to family planning, the advancement of women's programs should go through him.

11. Since the family is the most significant social unit of a community, the relative attribution of males and females power is of the greatest real importance. Men are too often forgotten in programs related to family planning, although their role in responsible parenthood is quite as important as that of women. To get to the real cause of the population problem, we will need elimination of the childbearing bias of a society which seeks to impose home life on women by social indoctrination. Family life education courses could be given to young men in high school, vocational training, and youth organizations in rural and urban areas. Men can be reached through different channels such as rural and urban development, industry, labor unions, and the armed forces.

12. From a population control standpoint, it makes more sense to prevent pregnancy than to seek its termination but the right of termination must exist as a human choice. For many, the very need for abortion is evidence of a social and personal failure in the provision and use of

birth control. Restrictive statutes violate social justice, for when abortion is prohibited, medically safe abortions have always been available to the wealthy, to those who could afford the high costs of physicians and trips abroad; but the poor woman has been forced to risk her life and health with folk remedies and disreputable practitioners. We believe that abortion should not be considered a substitute for birth control, but rather as one element in a comprehensive system of maternal and infant health care.

13. The poor of the world are restrained by ignorance not only of contraceptive practice but of the consequences of high fertility for themselves, their children and their countries. In order to enable all people regardless of age or income, to avoid unwanted birth and to enhance their capacity to realize their own preferences in childbearing and family size we should extend subsidized family planning programs, include information on the necessity of spacing births for the health of the mother, and improve the delivery of health services related to fertility through public and private financing mechanisms.

Voluntary fertility should be made universal, allowing the greatest freedom for each to work out his own destiny. For those who favor the incentive programs, especially for sterilization, they must realize that such a policy will put the whole matter of family planning in a grossly commercial light. To the poor, the very need of financial

inducements will completely restrict their freedom of choice. Professionals in the human field should realize that such success, if there is any, will be due to a temporary factor and will disappear by its elimination. Can we realize how great would be the differential effect by social class to the disadvantage of the poor? How much should we pay before the practice calls for a moral restraint? How much in values should we be willing to forego for the solution of a great social problem? Does effective freedom lie with an incentive system of payment or with a program of social benefits and penalties geared to the desired result?

Preoccupation with population growth should not serve to justify measures more dangerous or of higher social cost than population growth itself. Individuals should control fertility as a result of an independent decision. In order to establish a deeply ingrained pattern of behavior affecting such a fundamental area as human reproduction, the rationality of doing so should be properly communicated to them. The role of communication is therefore to help in making the population favorably disposed to the idea and to the acceptance of a method of family planning.

#### Suggestions for Further Research

As has been pointed out, this study was limited by the nature of the data available, as well as by the small sample size. These precluded the use of refined statistical technique to examine relationships. There is great need for

more accurate, and consistent data. For example, to obtain more valuable and reliable information on the status of women, more sensitive indicators must be made available in the National Censuses and in the U.N. Censuses. Such indicators as numbers of full-time and part-time working women, employment by occupation, number of working women with children under three years of age, and university education by field of study would make possible more discriminating scales to describe and differentiate the status of women.

Further research studies on other countries are suggested. The scales developed to indicate the status of women, and to classify the countries according to GRR, and the statistical techniques used could be applied to larger samples. This would yield more valid findings.

Further studies in relation to the time perspective are indicated. These would yield important information on changes over time and would help in identifying the most significant factors related to fertility control. They would also help predict future trends. The indicators used in this study were appropriate at this point in time. However, more appropriate indicators may emerge in the future.

## APPENDIX A

## APPENDIX A

### HUMAN RIGHTS DECLARATION ON THE ELIMINATION OF DISCRIMINATION AGAINST WOMEN\*

In the preamble to the charter the peoples of the United Nations reaffirmed their faith "in fundamental human rights, in the dignity and worth of the human person, and in the equal rights of men and women." Article 2 of the Universal Declaration of Human Rights lays down the principal that "Everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status." Article I of the Declaration on the Elimination of Discrimination against women states that "Discrimination against women, denying or limiting as it does their equality of rights with men, is fundamentally unjust and constitutes an offence against human dignity." The substantive articles of the Declaration which appear to have particular relevance in considering the status of women and family planning are: article 4 dealing with political rights; article 6 dealing with civil law; article 9 dealing with education; and article 10 dealing with employment.

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\*United Nations Monthly Chronicle, Vol. IV, No. 11, December, 1967, pp. 113-7.



Article 4

1. All appropriate measures shall be taken to ensure to women on equal terms with men, without any discrimination:
  - a. The right to vote in all elections and be eligible for election to all publicly elected bodies;
  - b. The right to vote in all public referenda;
  - c. The right to hold public office and to exercise all public function. Such rights shall be guaranteed by legislation.

Article 6

1. Without prejudice to the safeguarding of the unity and the harmony of the family, which remains the basic unit of any society, all appropriate measures, particularly legislative measures, shall be taken to ensure to women, married or unmarried, equal rights with men in the field of civil law, and in particular:
  - a. The right to acquire, administer, enjoy, dispose of and inherit property, including property acquired during marriage;
  - b. The right to equality in legal capacity and the exercise thereof;
  - c. The same rights as men with regard to the law on the movement of persons.
2. All appropriate measures shall be taken to ensure the principle of equality of status of the husband and wife, and in particular:

- a. Women shall have the same rights as men to free choice of a spouse and to enter into marriage only with their free and full consent;
  - b. Women shall have equal right with men during marriage and at its dissolution. In all cases the interest of the children shall be paramount;
  - c. Parents shall have equal rights and duties in matters relating to their children. In all cases the interest of the children shall be paramount.
3. Child marriage and the betrothal of young girls before puberty shall be prohibited, and effective action, including legislation, shall be taken to specify a minimum age and to make the registration of marriages in an official registry compulsory.

#### Article 9

1. All appropriate measures shall be taken to ensure to girls and women, married or unmarried, equal rights with men in education at all levels, and in particular:
  - a. Equal conditions of access to, and study in, educational institutions of all types, including universities and vocational, technical and professional schools;
  - b. The same choice of curricula, the same examinations, teaching staff with qualifications of the same standard, and school premises and equipment of the same standard, and quality, whether the institutions are co-educational or not;

- c. Equal opportunities to benefit from scholarships and other study grants;
- d. Equal opportunities for access to programs of continuing education, including adult literacy programs;
- e. Access to educational information to help in ensuring the health and well-being of families.

#### Article 10

1. All appropriate measures shall be taken to ensure to women, married or unmarried, equal rights with men in the field of economic and social life, and in particular:
  - a. The right, without discrimination on grounds of marital status or any other grounds, to receive vocational training, to work, to free choice of profession and employment, and to professional and vocational advancement;
  - b. The right to equal remuneration with men and to equality of treatment in respect of work of equal value;
  - c. The right to leave with pay, retirement privileges and provisions for security in respect of unemployment, sickness, old age or other incapacity to work;
  - d. The right to receive family allowances on equal terms with men.
2. In order to prevent discrimination against women on account of marriage or maternity and to ensure their

effective right to work, measures shall be taken to prevent their dismissal in the event of marriage or maternity and to provide paid maternity leave, with the guarantee of returning to former employment, and to provide the necessary social services, including child care facilities.

3. Measures taken to protect women in certain types of work, for reasons inherent in their physical nature, shall not be regarded as discriminatory.

## APPENDIX B

# APPENDIX B

Table 16: Coefficients of correlation and Standard Errors for gross reproduction rate and the indicators of the status of women for all countries in 6x6 contingency tables and for high and low fertility countries separately in 3x6 contingency tables.

	All countries 6x6		Low fertility countries 3x6		High fertility countries 3x6	
	r	$\sigma_r$	r	$\sigma_r$	r	$\sigma_r$
Percentage of female illiteracy	0.57	0.39	-0.81	0.20	-0.53	0.42
Percentage voting	0.81	0.13	0.16	0.49	0.86	0.19
Female median age at marriage	0.65	0.22	0.49	0.38	-1	0
Percentage of female economically active	0.68	0.18	0.13	0.49	0.13	0.49
Percentage of female in 2nd level of education	0.55	0.23	-0.13	-.49	-0.57	0.34
Percentage of female in 3rd level of education	0.44	0.27	-0.63	0.30	-0.05	0.50

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