This collection of readings on women and education in regard to changing traditions in population/family planning is designed for international home economists, students, and other educators. It presents background information in designing curriculum which integrates family planning and population education concepts into home economics programs. It also provides students with a convenient reference to current developments in theory and research concepts related to family planning, home economics, and population education. Although the nine readings selected represent the general themes of women and education, each reflects a different perspective and draws on many sources for its substance. Part I consists of six articles about the status and role of women in economic life. The articles cover an international perspective on women's rights, family planning, and family size; rights and opportunities of women in education; design of education for females; changing roles of women, family dynamics, and fertility; rural women in Africa; and the woman in Latin America. Part II deals with family planning and population education; and the relationship of family planning to savings and consumption in Taiwan. (Author/ND)
WOMEN'S ROLES AND EDUCATION:

CHANGING TRADITIONS IN POPULATION PLANNING

Compiled by
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and
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Introduction

Viable attempts to initiate change in traditions related to population/family-planning must invariably involve two major components: education and women. The relative effectiveness of such attempts depends heavily on an enlightened awareness and understanding of the contributions of women to the economic and social development of family, culture and nation.

The relationships of women and education to solutions of problems created by factors of population, modernization and economic development are being increasingly recognized. This trend represents at least, a shift in emphasis from concerns of family size to concerns of quality of life through effective use of human and non-human resources.

Because of its singular nature, home economics has a unique role in the initiation, design and development of population education/family planning programs. International home economists, because of their professional preparation, can approach concerns of family planning with a comprehensive view which includes recognition of the effects of health, housing, inter-personal relationships, nutrition, clothing, decision-making, and human development factors on the quality of life.

This collection of readings has as its major objectives (1) the development of a publication for use by international home economists and other educators as background information in designing curriculum which integrates family planning/population education concepts into home economics programs; and (2) to provide students a convenient reference of current developments in theory and research on concepts related to family planning, home economics, and population education.

Although the readings selected represent the general themes of women and education, each reflects a different perspective and draws on many sources for its substance. In each case, the opinions expressed are those of the authors, and do not necessarily reflect those of the American Home Economics Association, its membership or units.
Part I

Women: Their Status and Role in Economic Life
INTRODUCTION

The phrase "family planning" means very different things to different people, depending in part on their social and political perspectives. Within the United Nations, family planning refers to far more than birth control. It includes a wide array of measures and programmes aimed at expanding the range of human rights and freedoms and contributing to social and economic development.

Participants in a United Nations Seminar on the Status of Women and Family Planning held in Istanbul, Turkey, in July, 1972 proposed a broad definition of family planning. They recommended that

(a) 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:

(i) Adequate social, economic, legal and educational conditions, and adequate social and medical measures for the care and protection of mothers and children;

(ii) The availability of all necessary information, advice and means permitting individuals to decide freely on the number and spacing of their children;

(iii) A proper education for young persons of both sexes to prepare them for responsible parenthood;

(b) It is also essential to take due account of the decisive influence of economic and social development in enhancing conditions for the enjoyment of human rights and the improvement of living conditions for all individuals, as well as on family planning policy, and consequently to take all appropriate national and international measures to advance such development;

(c) Individuals have a fundamental human right to decide freely and responsibly 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;

(d) States have a sovereign right to formulate and promote their own population policies, with due regard to the principle that the size of the family should be the free choice of each individual.
Encompassing aspects of individual, family and social wellbeing, this general formulation highlights the view that family planning is an integral element of economic and social development as well as a fundamental human right. Thus, family planning cannot be substituted for economic and social development, but should be provided simultaneously with other measures to promote the health and wellbeing of all people.

With the understanding that family planning includes this wide spectrum of services, this paper is addressed to a more specific aspect of family planning, namely, the ability to decide whether, and when, to bear children. In particular, the paper explores the relationship between the practice of “birth planning,” as we call it, and the roles and status of women in private and public life.

The Status of Women from a Demographic and Human Rights Perspective

The United Nations in its Charter and in the Universal Declaration of Human Rights proclaimed its faith in the dignity and worth of the human person and in the equal rights of men and women. All Member States have pledged themselves toward this end. More recent declarations and numerous resolutions have called for equality between men and women in all areas of law, political life, education, employment, and marriage and the family. Moving beyond the concept of legal status alone, the Declaration on the Elimination of Discrimination Against Women, for example, demanded the eradication of prejudice against women and the aboition 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.

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 behaviour: 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—that is, the human rights aspect of population questions—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.

One problem in analyzing the relationship between the status of women and childbearing patterns is the difficulty of measuring the status of women on a cross-cultural basis. Over-emphasis on the legal status of women often fails to reflect wide gaps between law and practice. The absolute condition of women measured in life expectancies, years of education, labour force participation rates and similar ways may be less relevant than the condition of women as compared to men, in each area, and is difficult to elaborate in universally accepted terms. Internationally comparable social indicators have not been developed. The status of women must be represented by a multidimensional cluster of variables reflecting many spheres of activity rather than by a single measure. Moreover, the very definition of what constitutes “high” or “low” status depends on the perspective of the observer. How does one deal, for example, with the common situation in which a woman’s prestige in the eyes of her family and her community rises with every child she bears, or a man is ashamed when his wife is forced to work outside the home? The “objective” observer may define the first woman’s status as low and the second as higher, a direct contradiction of the norms of the woman’s own social situation.

In the absence of valid comparative measures, however, we must use those at hand. In this paper we deal with the status of women in public and private life as measured primarily by the number of years of their schooling, by their representation in the paid labour force as shown in censuses and surveys, by their participation in major areas of political decision-making, and by their age at marriage and rights and obligations within the family, insofar as these can be determined. Reference is made to the imperfect nature of these indicators, especially in the area of employment where the labour force figures often exclude large numbers of agricultural and other unpaid workers who are nevertheless actively involved in the process of production.
The Right to Determine Freely and Responsibly the Number and Spacing of One's Children

Our main purpose is to examine the relationship between childbearing patterns and the exercise of women's rights in other spheres. In 1966, the United Nations proclaimed for the first time that "the size of the family should be the free choice of each individual family". The International Conference of Human Rights, in 1968, declared more broadly that couples have a basic human right to decide freely and responsibly on the number and spacing of their children and a right to adequate education and information in this respect. By 1969 the concept had evolved to include the right to knowledge and the means to space and limit births, and it will probably continue to evolve as individual and family rights in this area are further elaborated.

A number of legal, economic, social and cultural factors may constrain women from fully exercising the right to plan births, however. Such constraints include, for example, legislative restrictions on access to relevant education, information, advice and services; inadequate family planning programmes that leave many women—especially poor and rural women—without knowledge of the possibility or the means to regulate fertility safely and effectively; cultural definitions of woman's primary role as sexual partner, homemaker and breeder of children rather than as full participant in the life of her community; and patterns of male dominance within the family, including hostility to the use of female contraceptive methods and to the independent rights of the woman, among others.

The results of surveys on the attitudes of men and women toward contraception and on their knowledge or practice of birth planning are always difficult to interpret, for they depend on the way questions are worded, cultural values, the particular interview situation and a number of other factors. The extent of ignorance about ways to prevent births, for example, may well be overestimated in many studies. Nevertheless, surveys show that in rural areas of some developing countries as few as 15 percent of women claim to know of any method of birth control. In general the figures in Asian, African and Latin American studies tend to run closer to 30 to 50 percent, and are higher in urban areas, among men, and among the better educated. In most industrialized countries from 90 to 100 percent of women are likely to know of a method. The percentages of couples who say they have actually practiced some method are even smaller. Figures as low as one percent have been reported in some studies during the 1960's, although a more typical range is 5-20 percent for Africa, 20-40 percent for Asia, 40-60 percent for Latin America and from 75-90 percent for developed countries.

In questioning the apparent lack of knowledge and infrequent practice of birth planning among many groups, it would be a mistake to assume that blocked access to information and services is the sole reason. Motivational factors are likely to play a much larger role. Where structural and cultural conditions encourage high fertility, family planning programmes are likely to make little difference. On the other hand, where couples are already motivated to space or limit births the provision of information and services is crucial in enabling them to do so safely and effectively. This is where the real benefits of family planning programmes appear to lie.

Clinic-centered programmes tend not only to replace less effective with more effective methods but also in many cases to replace periodic abstinence or male-regulated methods with female-regulated methods. There are costs and advantages in this latter shift. If birth planning is to be a truly joint decision with shared responsibility, then more effective male methods need to be developed so that the burden (with current side effects) of contraception does not always rest with the woman. On the other hand the introduction of "invisible" female methods such as the pill and the intrauterine device is highly significant in giving women the freedom to control their own bodies privately, if they wish, especially where the man may be consistently less motivated to prevent a pregnancy. It may also offer an alternative to the practice of the rhythm method, which requires considerable knowledge and skill to be used effectively.

The Right to Physical and Mental Health

What is the impact on the individual woman of her ability to plan births? Certainly the knowledge alone of the possibility and means of doing so gives women a power to shape their lives in ways undreamed of by those who have never questioned the inevitability of their childbearing or who have resorted in desperation to cumbersome, ineffective and often
dangerous methods to stop unwanted births. Birth planning in this respect is an essential ingredient of health and human dignity. And when the power to space and limit pregnancies is translated into an actual decision to do so, the impact on women’s status may be dramatic. Disaggregated into its components the ability to delay the first birth, to space births several years apart, to stop childbearing earlier in the life cycle and to limit the total number of births, each aspect of birth planning may be examined separately for its effect on the woman’s health, on the health of her children, and on the exercise of her economic, social and political rights in the society and in the family.

States Parties to the International Covenant on Economic, Social and Cultural Rights recognized “the right of everyone to the enjoyment of the highest attainable standard of physical and mental health”. Steps are to be taken in particular to reduce the rate of stillbirth and infant mortality and to assure the healthy development of the child. If we are to speak of the right to determine freely the number and spacing of births, we must include the right of the infant to live a healthy life.

Evidence on the health benefits of birth planning, aside from the issue of the safety of particular methods, appears to be unambiguous: maternal and infant mortality and morbidity rates are lower when first births are postponed to the late teens or early twenties, when childbearing ceases by the mid-thirties, when births are spaced more than two years apart and when the total number of births does not exceed four or five. Thus, the right to space and limit births is directly related to the right to health, and infringements on the one automatically affect the other. Such infringements are especially harmful when lack of knowledge or means to prevent conception leads women to resort to illegal abortion, where the risks to health and even to life itself are extremely high. The risk extends to the existing children as well, whose mother may die or be unable to care for them.

A number of studies also suggest that the mental health of mothers and children is superior when births are planned and wanted, as expressed by various measures of social and psychological wellbeing. Children have a right to be loved and wanted. Women have the right to be mothers by choice, to take into account their own health, their personal plans, the plans of their family and factors such as the state of health of the existing children in deciding on family size.

The exercise of the right to determine freely and responsibly the number and spacing of births affects the exercise of women’s rights in other spheres as well. The direct impact is somewhat more difficult to establish than for physical and mental health, however, for the effect of birth planning cannot easily be isolated from other factors influencing the status of women in education, employment, and public and private life.

The Right to an Education

According to the Universal Declaration of Human Rights, everyone has the right to an education. In the Declaration on the Elimination of Discrimination Against Women, among other documents, girls and women, married or unmarried, are to be assured equal rights with men in education at all levels, including study in educational institutions of all types, the same choice of curricula, and equal access to scholarships and other financial support.

Equal education has proved to be an illusive goal, however, even in countries where equality under the law is guaranteed. Illiteracy rates in most countries are much higher among women than among men, although the situation is improving. Females are less than half of the school population in most countries and their proportions decline rapidly at the highest levels of training. Within educational institutions certain fields of study are often strongly sex-typed as appropriate for females only or males only, although the degree of sex-typing varies considerably across countries. In many areas the relative under-representation of girls and women in schools is compounded by an overall scarcity of educational resources, placing them at an even greater competitive disadvantage. The scarcity is often greatest where population pressures are most acute.

What effect does the ability to determine the number and spacing of one’s children have on the exercise of woman’s right to an education and to equal treatment in the schools at all levels?

Delaying the onset of childbearing, either through delaying entry into marriage or de facto unions or by postponing the first birth within marriage, is the most relevant aspect of fertility regulation in this regard. Postponing the first birth should have the greatest impact on a woman’s opportunities for vocational training or
for secondary, college or university education in those countries or among socioeconomic groups in which she had a high probability of pursuing an education beyond the normal first years of childbearing to begin with, and in which the birth of a child would effectively limit her chances of staying in school. Where few girls receive higher education, delaying the first birth is likely to make little if any difference as to her educational opportunities although it may well have a significant effect on other aspects of her life.

In societies where women marry and bear children early and in which virtually all women marry, the obstacles to the woman's exercise of her right to an education may not be her lack of knowledge or means to plan and space children so much as the social, economic and cultural pressures that steer her into an early marriage in the first place. Parental control over the decision as to which of their children will attend school, the timing of their children's marriages and the choice of spouse may preclude a young woman from making an individual decision attaching a higher priority to education than to early motherhood. On the other hand, the ability to delay marriage or a first birth does become salient as higher education for women becomes more generally accepted and valued.

Spacing pregnancies, limiting the number of births and ending childbearing earlier in the life cycle should also act independently to free women for formal schooling of various types, although the impact of these fertility variables on education is probably far weaker than the impact of postponing the onset of motherhood. They may affect women's attendance at adult literacy classes, however. In the long run, one would expect that as women increasingly delay, space and limit their births, spending shorter and shorter periods of their lives in childbearing, their claim to equality in education will become all the more persistent. But education itself may be the very precondition necessary for motivated birth planning.

Is it possible to untangle the network of interacting variables into cause and effect? On one side, as we have seen, early marriage itself or in combination with childbearing can "prevent" education by forcing or inducing women to discontinue their studies. Thus, where other structural and cultural conditions favour higher education for women, effective postponement of marriage and/or births is often crucial to the exercise of their human rights. On the other side, education can "prevent" 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 behaviour is the more interesting aspect of the association. Indeed, the educational level of women appears to be one of the strongest factors affecting fertility, especially in high-fertility countries.

It may be, as some writers have suggested, that the number of years of formal schooling is simply the most visible and quantifiable element in a cluster of interdependent forces affecting fertility, and that it is not higher education per se but its association with factors such as openness to new ideas, higher standards of living, exposure to an urban environment, and a greater range of options and interests outside the home that is responsible for the apparent influence of one on the other. 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 relationship is not a simple one, however, nor is it inverse in all cases. The number of years of schooling a woman has received is, after all, only one factor among many influencing her reproductive behaviour; other biological, economic, social and cultural variables affecting fecundity, family size preferences and access to birth control may render it more or less functional. The question is, how, and under what conditions, does a woman's education make a difference?

Higher education for women can work indirectly to reduce fertility in at least three ways, through (a) delaying marriage and increasing the probability of non-marriage, thus reducing or eliminating the time span of exposure to the possibility of conception; (b) reducing desired family size, by creating aspirations for a higher level of living for the couple and their children and by stimulating women's interest and involvement in activities outside the home, especially employment; and (c) exposing women to knowledge, attitudes and practices favourable to birth control, including a higher level of communication between husband and wife, enabling them to bring their actual reproduction in line with their desired family size. But structural and
cultural determinants may weaken the relationship between education and any of these intervening variables, thereby altering the overall association between education and fertility.

In most developing countries, the education of women appears to have a very strong impact on fertility. However, 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 a significant reduction in family size may not appear until much higher levels of schooling are reached. Studies in many developing countries also show that women with higher educations marry considerably later, are less likely to marry at all, desire smaller families and are far more likely to know about and practice "modern" effective contraception than less educated or illiterate women. Yet the majority of women of reproductive age in a number of developing countries, and especially in rural areas, is illiterate and without effective options in this area.

Even a high level of education may not contribute to a lower desired or actual family size if a woman does not find adequate outlets for her skills in a career or other rewarding non-familial activities, however. And just as even a high level of education may not motivate a woman to want a smaller family if her training does not lead to 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 labour, unpaid work in a family enterprise or low-status, low-paying jobs.

Rights Pertaining to Employment

International instruments declare that everyone has the right to work, to free choice of employment, to just and favourable conditions of work, to protection against unemployment, to fair remuneration and to equal pay for equal work, among other rights. Women, married or unmarried, are to have equal rights with men in this regard. In addition, in order to eliminate other forms of discrimination against women in employment, measures are to be taken to prevent their dismissal in the event of marriage or maternity, to provide paid maternity leave with the guarantee of returning to former employment, and to provide child-care facilities and other necessary social services.

In most countries, women are far from achieving equality in employment with men. General conditions of unemployment, underemployment, and discrimination where they occur, adversely affect women, of course. But women in developing countries are particularly difficult to exercise the right to equal work and equal pay.

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 labour. They are also more frequently classified as unemployed and looking for work than are men in many countries. Female earnings often average only a fraction of male earnings even when other factors such as type of work, education, training and experience are taken into account. Almost everywhere one finds women in the paid labour force disproportionately concentrated in lower status, lower paying jobs. Most employers do not provide paid maternity leaves or guaranteed return to former employment after childbirth, as the Declaration on the Elimination of Discrimination proposes, and child-care facilities in most countries are inadequate to meet the needs of working parents.

Moreover, whereas rates of male gainful employment vary little from country to country or through the normal working years in the life cycle, rates of female employment differ enormously across nations and within major subgroups of the population, usually follow well-defined patterns by age, and generally fluctuate according to women's marital status and the number and spacing of their children.

In this section we are looking at the relationship between variations in female employment and fertility. The major problem in analysing such a relationship derives from the difficulty of distinguishing cause and effect, as was the case for education. Does the opportunity or need to work actually influence women to have fewer children, or is it more often the case that women who have fewer children for a variety of reasons are free to take outside employment? The relative weight given to one factor over the other depends on unique situations in every country, but it is possible to make a few generalizations.
Let us look at the impact of birth planning on female employment first. Where cultural and structural conditions are conducive to female employment and where worker-mother roles are incompatible, one can point to the considerable advantages that women practicing effective birth planning have over those who accept early and frequent childbearing as inevitable. Delaying marriage and the first birth may enable women to complete their education and vocational training so that they are qualified for more highly skilled jobs or to establish themselves in a profession, where such options are open to them. Controlling the timing of births permits women to combine employment and childbearing in the least disruptive way. Keeping family size small frees women to work who might otherwise be overwhelmed by domestic responsibilities, especially in those countries where child-care assistance is scarce. Finally, having the last child early in the life cycle eases the burden on women working away from home and may encourage those who have stayed at home to re-enter the labour force. Viewed in this light, the exercise of the right to determine the number and spacing of children can have a direct impact on the woman’s exercise of her economic rights. On the other hand, where opportunities for women in employment are few, or where women are discriminated against on the assumption that they are (or will be) married and have children and that they have less right to a job or an income than a man, then an individual woman may not be able to improve her chances in the labour market at all by delaying, spacing or limiting her births.

The other side of the coin is this: to what extent might the full exercise of women’s rights to equality with men in employment influence the number and spacing of their children? If a consistent causal effect were to be found, the implications for development strategies would be clear; ensuring women’s right to equal work and equal pay should serve the purpose of reducing birth rates while simultaneously facilitating economic and social development. However, the relationship depends not on the simple fact of gainful employment but on the sector of the economy in which the woman is employed, her occupation, income, work commitment, duration or continuity of employment, whether it is full or part-time, and the availability of child care, among other factors.

Most research has focussed on the concept of role incompatibility in attempting to explain variations in the strength of the association between female employment and fertility. The more mutually exclusive are the roles of worker and mother, the more likely it is that gainfully employed women will remain childless or have smaller families than non-employed women. Female employment should reduce fertility most effectively when birth planning is widely practiced and when the roles of worker and mother are most incompatible. This is, when (a) the place of work is away from the home, which may pose practical problems relating to child care; (b) the prevailing belief is that women should devote full time to their children, in which case the woman feels she must choose between work and children; and (c) the woman’s employment provides her with significant social, psychological or economic rewards which she may be unwilling to forego in order to have another child.

It is mainly in the industrialized countries that the relationship between female employment and fertility seems most clear when currently employed and non-employed women are compared, although historical studies have shown that major declines in the birth rate have often preceded the expansion of women’s labour force participation. Women who are employed full-time tend to have smaller families (or to remain childless) more often than those who are employed part-time or not at all. Those who have worked for a major part of their married lives have smaller families than those who worked for only short periods or sporadically. Women in white-collar and professional occupations—occupations which require higher education and provide greater social and economic rewards—have smaller families than women in blue-collar and service occupations. Women with a high degree of work commitment (for example, women who say they would continue to work even if their husbands made all the money they needed) are more likely to know about and practice modern and effective birth planning and to bear fewer children than those who work only from economic necessity. In rural areas of industrialized countries, however, where traditional agricultural labour is not so incompatible with raising a family, the relationship between female employment and fertility often disappears.

In most developing countries the employment-fertility relationship is less clear, although a distinction must be made between ur-
ban and rural areas and between the "modern" and "traditional" sectors of the society.

In rural areas, paid employment (where it exists) 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, marketing or cottage industry type in which a woman may either keep her young children with her while she works or leave them with other family members. The same reasoning holds true for women who are engaged in unpaid production.

In urban areas, on the other hand, 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. She is also more likely to learn about birth control and have access to family planning services in urban than rural areas, although much depends on the sector of the economy in which she works. For example, some studies in urban centers of developing countries have shown that women in the professions and in white-collar occupations are more favourably 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.

Generally speaking, however, the opportunities for labour force participation of women in non-agricultural sectors of the economies of developing countries have been extremely limited. Although such employment may have a significant effect on the reproductive behaviour of individual women, and may acquire greater force in the future, in the aggregate its demographic impact has been slight.

Rights Pertaining to Marriage and the Family

Perhaps no issue in the area of women's rights has been as sensitive or as controversial as the idea of equal rights of men and women "as to marriage, during marriage, and at its dissolution", although the principle is clearly stated in Article 16 of the Universal Declaration of Human Rights. In many countries, equality within the family has not yet been recognized in civil law, and, upon marriage, women may be deprived of many civil rights such as the independent ownership of property or the right to work without their husband's consent. But even in countries where legislation favours equal rights, traditional cultural patterns of male dominance in private life are slow to change. The distinction is sometimes made between "formal ideology" and "everyday ethics" in this regard. Formal ideology, such as the doctrine of equalitarianism, is best seen in laws and practices relating to the participation of women in education, employment and other aspects of public life. The everyday ethic is seen better in sectors of life that are not under public surveillance, at the level of interpersonal relations between the sexes, where the equalitarian doctrine is slower to permeate.

Could the widespread practice of birth planning significantly alter the status of women as compared to men in private life? And how does a woman's educational or employment status affect her role in the family? Do laws and practices relating to the status of women at the time of marriage, during marriage and at its dissolution (through death, divorce, desertion, separation, annulment) influence reproductive behaviour in a way that can be isolated from the effects of other, related forces? The area is a rich and fascinating one to explore, for it is of course in the everyday interaction between the sexes that extraneous factors such as education or employment are translated into actual fertility patterns through the medium of sexual expression and birth planning behaviour.

Rights on Entering Marriage

The United Nations 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. The inheritance of widows is banned. 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. 1

Legal minimum ages for the first marriage of girls range across countries from about 12 to 20 years, while actual averages range somewhat higher from about 14 or 15 years to 24 or 25. In setting a legal minimum age for marriage most countries have legislated inequalities by setting a higher minimum for males than for females, although there is a trend towards greater equality in laws enacted in recent years. In general, the pattern in Western industrialized countries has been one of delayed marriage and relatively high proportions of women remaining single
Throughout their childbearing years (from 5 to 20 percent) while in developing countries early and universal marriage for girls is more the rule. However, there are important exceptions to this generalization, and in recent years the marriage patterns of many developing and industrialized countries appear to be converging toward an intermediate position. 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, although in some cultural settings one finds women of the highest socioeconomic status being married earlier than women without children. Without children has a better chance of finding a husband than a woman who has had children by another man. If the early pregnancy is intended as a means to ensure marriage, however, as in societies where a woman’s fecundity must be proven before she is acceptable as a bride, then there would be little motivation for birth planning at this stage in the life cycle.

Effective birth planning can also lower the average age at first marriage by making it possible for couples to marry early while postponing their childbearing. Much of the decline in the average age of brides in some Western countries, especially among college students, may be attributed to this factor.

Whatever its impact on the timing and probability of marriage, the separation of sexual activity from reproduction—especially when reproduction outside of marriage is severely condemned—would seem to provide women with a far greater degree of control over the choice of husband and the decision of whether or not to marry than they could otherwise achieve. The major exception is where exposure to the opposite sex, the choice of spouse and the timing of marriage is controlled entirely by the girl’s parents or other relatives, in which case her knowledge of birth planning would make little difference to her situation.

Turning the question around, how much impact on family planning behaviour and fertility would we expect the ability to delay the first birth could serve to raise the average age at marriage and place women in a far better bargaining position over the choice of a spouse, especially where a high proportion of early first marriages appear to be “caused” by an unplanned pregnancy. It could also increase her chances of an eventual marriage in societies where out-of-wedlock births are common and yet where a woman without children has a better chance of finding a husband than a woman who has had children by the time of her marriage. Having discussed the effect of birth planning on education and employment in the previous sections, we will attempt here to consider only the direct, independent effect of birth planning on the timing or probability of marriage.

The essential contribution of birth control is of course the separation of sexual behaviour from reproduction. In examining the effect of contraception on the timing or probability of marriage, then, much depends on the cultural mores of the particular society. Where premarital heterosexual relations are common, the ability to delay the first birth could serve to raise the average age at marriage and place women in a far better bargaining position over the choice of a spouse, especially where a high proportion of early first marriages appear to be “caused” by an unplanned pregnancy. It could also increase her chances of an eventual marriage in societies where out-of-wedlock births are common and yet where a woman without children has a better chance of finding a husband than a woman who has had children by the time of her marriage.

Social pressures to marry at what they are very young remain strong in many regions. An unmarried daughter past a certain age may be considered a disgrace to the family. Moreover, one generally finds that in countries where girls marry very early, the age gap between males and females on entering marriage may average as high as ten to twelve years. In countries where women marry later the difference in ages is usually much smaller. Thus, in a number of countries, the girl’s already subordinate position at the time of her marriage is compounded by the additional advantages her husband has accrued with his age and “experience.”

What impact would the ability to space and limit births have on the timing of marriage and the exercise of the woman’s rights at this crucial transition period in the life cycle? Having discussed the effect of birth planning on education and employment in the previous sections, we will attempt here to consider only the direct, independent effect of birth planning on the timing or probability of marriage.

Effective birth planning can also lower the average age at first marriage by making it possible for couples to marry early while postponing their childbearing. Much of the decline in the average age of brides in some Western countries, especially among college students, may be attributed to this factor. Where birth control within marriage is widely practiced, the timing of marriage alone is less influential in determining completed family size;
differentials appearing early in the reproductive years as a response to marital postponement may disappear by the time childbearing is completed. Of course, if marriages are delayed in conjunction with higher education or non-agricultural female employment, family size may be reduced in the quest for a higher standard of living for the couple and their existing children.

Where de facto marriages and consensual unions are frequent, as in parts of Latin America and the Caribbean, formal marriage patterns are also less likely to have a significant effect on fertility. A large proportion of the female population, while not legally married, enters into more or less permanent consensual unions or more casual "visiting" unions in which childbearing is nevertheless accepted. The fruitlessness of trying to regulate birth rates through the medium of legislation raising the minimum age at marriage—if such were considered desirable—can clearly be seen in this case, as in cases where young girls continue to be betrothed or married before puberty in spite of legal prohibitions. At any rate, raising the minimum age 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 suggest that marriages would have to be pushed upward 19 or 20 years to have a significant demographic impact in that country.

The loss of parental control over the arrangement of their children's marriages, insofar as such control is associated with early and universal marriage within an extended family system placing great importance on large numbers of children, should serve to delay marriage on the average and to increase the probability of non-marriage for some women, either voluntarily or involuntarily. Courtship, after all, takes time, and an independently contracted marriage requires a degree of maturity unappropriated of a young girl whose primary obligation is to obey the wishes of her husband and his family. The free choice of a spouse—especially with a considerable amount of parental guidance—also implies a degree of equality between husband and wife at the time of their marriage that is essential to effective communication about family size desires and the practice of family planning, as we shall see.

Rights During Marriage

According to United Nations instruments, men and women are to share equal rights and responsibilities within marriage, including equal rights and duties in matters relating to their children. It is interesting in this regard that aside from legal definitions of the rights and responsibilities of the spouses, evidence from surveys suggests that the greater the resources that a woman brings into her marriage relative to those of her husband (especially in regard to her education and outside paid employment), the more equal her voice is likely to be in the major decisions of the family. And in general, it appears from studies of predominantly urban areas in both industrialized and developing countries, that the more equal or "non-traditional" is the division of labour (including decision-making) in the home, the more likely it is that couples will (a) communicate with one another about sex, family size desires and birth planning; (b) report a high degree of sexual satisfaction; (c) express a desire for small families; and (d) space and limit their births effectively.

Patterns of male dominance within the household, where they exist, are frequently found to be associated with strong double standards of sexual behaviour and with extreme resistance on the part of husbands to their wives learning about or using female methods of contraception. Resistance is apparently often founded in the belief that wives will no longer remain sexually faithful or generally submissive to their husbands if they know how to prevent pregnancies. The implicit assumption here is that birth planning can indeed be a powerful means to greater independence for the woman in the family, at least under some conditions.

However, 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. Under these conditions a woman who remained childless or who bore only one or two could well be the object of ridicule or pity. The experience of family planning clinics in several African countries, for example, has been that women are often more interested in learning about ways to increase their fertility than to decrease it. 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. Insofar as the ability to space and limit births is associated with a higher rate of infant survival, however,
birth planning could increase family size by lowering pregnancy wastage and child deaths.

The crux of the argument in the relation between equality within marriage and fertility appears to be the issue of alternative roles. When non-familial activities for women are highly valued and rewarded, such as essential agricultural production, wives' participation in these activities tends to bring a greater degree of equality into the marriage. Greater equality tends to create an interpersonal relationship more favourable to birth planning and lower fertility, while the resulting smaller family size itself permits a closer relationship between husband and wife and a greater degree of equality. But where non-familial alternatives are not available for women—where the division of labour follows highly traditional lines and the individual woman has little autonomy, then frequent childbearing is rewarded and encouraged. 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.

The rights and duties of parents regarding their children (and the reciprocal rights and duties of children regarding their parents) may also play a crucial role in shaping reproductive decisions. It has become commonplace to assert that where children participate in economic or domestic production at an early age and carry obligations to support their parents in sickness and old age, the incentive for having large numbers of children is high. On the other hand, where children become primarily consumers of material resources rather than producers, the costs of a large family may override the benefits.

The question is less frequently asked about the effect of the division of parental rights and responsibilities on family size decisions. Speculation on the differences between husbands and wives in their desire for additional children sometimes focuses on the assumption that because women tend to carry the major responsibility for day-to-day care of children whereas men are removed from the immediate burdens of child-care, the motivation to keep the family small should be higher among women. But this is not always the case. Alternative hypotheses suggest that men, being more closely associated with the financial responsibilities of children and more exposed to "modern" ideas outside the home, should be more strongly motivated to limit family size. The true answer must rest in the unique cultural and structural conditions of each society which determine the division of

labour between the spouses and the perceived costs and benefits to each spouse of additional children. It must also rest with the nature of parental rights and responsibilities when the marriage dissolves, either through death, divorce or desertion.

We have been discussing the nature of informal equality between the spouses. It is not possible to examine here the relationship between the number and spacing of children and the exercise of a woman's specifically legal rights and obligations within the family because there is little systematic data in this area. How does the denial of certain of her civil rights, such as the right to own, inherit or bequeath property, for example, affect her 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?

Nor have we explored the relationship between fertility and equal rights within different kinds of marital unions—nuclear families as compared to extended families, monogamous as compared to polygamous unions, legal marriages as compared to consensual or more casual visiting unions. Evidence regarding the effect of these differences in family structure on fertility is inconclusive and needs to be more precisely specified, along with the legal and de facto rights that a woman has within each type of union.

Rights on the Dissolution of Marriage

The International Covenant on Civil and Political Rights and the Declaration on the Elimination of Discrimination Against Women call for the equal rights of the spouses at the time of marital dissolution, either through death, separation, annulment or divorce. Provision is to be made for the necessary protection of children at the time of marital dissolution. In assessing the rights and responsibilities of parents the interests of the children are to remain paramount.13

The United Nations has not addressed the question of whether couples have a basic right to terminate an unhappy marriage. Its instruments do declare that whatever the degree of restrictiveness a State imposes regarding divorce, the grounds for dissolving a marriage and the rights
and obligations following its dissolution should be the same for men and women.

How might the practice of birth planning affect a woman's rights at the time of divorce or the probability of the divorce itself? In industrialized countries with liberal divorce laws one would expect that remaining childless, or having only one or two children, would place women in a more advantaged position; they would feel less compelled to remain in an unsatisfactory marriage and more able to manage independently. Of course, much depends on their options outside the home. Some studies show that women who are gainfully employed have a higher probability of divorcing than housewives, and we do know that divorce tends to be more frequent among couples with no children, or with small families, even when unequal durations of marriage are taken into account. Under these conditions, birth planning should enable women more easily to exercise their equal rights at the time of divorce.

On the other hand, in societies where the husband has unilateral power to divorce his wife and take another where the wife has no such power, and where her options outside the home are few, 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 woman with the most children may feel the safest in her marriage—a marriage she depends on for her survival. Eliminating the husband's power to divorce his wife at will could lighten the pressure on a wife to reproduce so abundantly.

The impact on fertility of marital dissolution either through divorce, annulment, desertion, separation or death depends to a large extent on patterns of remarriage and on the length of reproductive time a woman "loses" between sexual unions. Under high mortality conditions, women may lose up to 7 or 8 years on the average due to the early death either of herself or her husband. If the remarriage of widows is forbidden, as it was in Hindu tradition, fertility is inevitably depressed; if widows are inherited, as in Moslem custom, fertility may not be reduced at all. Similarly, the impact of divorce, annulment or separation depends on the probabilities of the woman's remarriage or her entry into another type of sexual union.

It is difficult, with existing evidence, to evaluate precisely the relationship between reproductive behaviour and women's rights at the time of marital dissolution as to property, support, custody over children, remarriage, and so on. But there seems to be little doubt that such factors can play an influential role in shaping family size desires and decisions.

**Participation of Women in Public Life and Decision-making**

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 have won the right to vote in all but a handful of countries, but in most nations—even those that guarantee equality in the law—women are poorly represented at the upper levels of decision-making in government offices or elective bodies. Their greatest successes have occurred in countries where the Government actively promotes equality between men and women in public life, thus overcoming some of the traditional resistance to the idea of placing women in leadership positions. Elsewhere the story is not so encouraging. Many countries point to the one or two women in conspicuously high positions while ignoring the weight of evidence on the extreme underrepresentation of women as a major population group.

The participation of women in public life can have the same effect on fertility as other forms of employment. Women with reduced domestic responsibilities are more free to involve themselves in community or national activities, while women whose political involvement takes them out of the home and into a world of wider interests and rewards may desire and have smaller families. But beyond this relatively direct association between public life and reproduction, among those who are themselves active participants, an expanded engagement of women in public affairs may have a far broader—though less direct and more difficult to measure—impact on fertility patterns by providing a community or a nation with highly visible models of women who are active, competent, leaders and decision-makers. Such women can be a powerful force toward changing attitudes regarding female roles and responsibilities, whether they intend to or not. Even the simple act of voting is symbolic in manifesting a belief in women's capabilities of independent thought and action and in portraying women as active rather than passive participants in the life of their communities. The exercise of civic responsibilities in
this area could carry over into private life, as women acquire greater awareness of and confidence in their ability to make autonomous decisions.

Of course, the participation of women in political areas specifically devoted to improving the status of women, promoting equality between the sexes or expanding birth planning information and services can have a tremendous impact on the questions we have been discussing. Women are becoming increasingly active in a number of countries as policy-makers in their own organizations, highly vocal social critics and skilled pressure groups. Governments are having to respond.

In the field of development planning and population policies, where women have been severely underrepresented in the past, many are beginning to take note of the overwhelmingly masculine character of research institutes and decision-making bodies. They are demanding that women play a larger role in determining and evaluating policies that affect their lives so intimately. In the long run, the direction of development planning and population research, along with the priorities for action, may shift considerably as the relationships between social and economic structures, equal rights for men and women and demographic behaviour are more fully understood.

The Status of Women and Demographic Changes

At a time when the attention of the world is focussed on the dynamics of human population growth, structure and geographical distribution, one of the most burning issues is the way in which current and projected population trends have affected, and are likely to affect, the exercise of fundamental human rights and freedoms. Within this general area of concern, questions are being asked about the differential impact of population processes on human rights, as experienced by major subgroups in society, such as racial or ethnic minorities, religious groups, children, working people and the aged. In this paper we are concerned with the determinants and consequences of population trends as they are affected by, and, in turn, affect the degree of equality between men and women. Is it possible to isolate particular aspects of population processes in order to identify their general influence on women's status now and in the future? More specifically, how is the position of women in the family, in education, in employment, and in public life shaped under different conditions of population growth, structure and distribution? What demographic conditions appear to facilitate equality between the sexes and what conditions appear to hinder it?

It is easy to point to examples of countries with very rapid rates of population growth in which the advancement of women is apparently severely hindered by the burden of a high dependency ratio and by extreme population pressures on scarce material and social resources that limit their opportunities, not only absolutely but differentially, in comparison with men. There are also highly visible examples of countries with very low birth-rates in which women appear to have achieved a rather high level of equality with men, especially in education and employment, and in which the necessary resources are invested in health-care, social security, child-care, maternity benefits and other essential social services. However, beyond these two extremes it is almost impossible to evaluate the impact on the status of women of different rates of population growth in the middle range. And even including the extremes it is obvious that demographic conditions may play only a minor role in determining the absolute and relative position of women in the family and in society at large, as compared to the role played by economic conditions, stages of development, political and social structures, cultural values and beliefs, and public priorities for policy and action.

Moreover, a vast number of questions remain unanswered regarding the effect of specific population trends on the status of women and on their potential for equality with men. What is the effect of changing mortality conditions, for example? As health care, sanitation and nutrition improve, one immediate effect should be to make childbearing safer. But the trend could be disadvantageous if it means an "unwanted" increase in fecundity among women who are already overburdened with family responsibilities and who lack the knowledge and means to prevent further pregnancies. And a higher survival ratio among infants, if it occurs at a time of food shortages, could mean that female children are even more likely to be deprived of adequate nourishment, when males are given priority for scarce resources within the family.

What effect does urbanization have on the status of women? In rural areas with a heavy out-migration of males, the remaining female population may "improve" its status by taking
over many activities formerly performed by men and acquiring a major decision-making role in the family and in the community. Or could the consequences mean only a double burden for the women left behind, and an increased competition for the attentions of the remaining males?

When women move to cities are their rights likely to be expanded or contracted, and in what ways? Under some conditions the move may represent a real freedom from the constraints and traditions of village life and an opportunity for higher education, employment and new independence. Under other conditions it may represent an isolation from a formerly supportive environment, loss of child-care and household assistance, and a new division of labour between husband and wife even more rigid than the one left behind. Does the transition from extended to nuclear family, from polygamous to monogamous union, from early marriage to late marriage or non-marriage, from arranged match to free choice always represent an improvement? Or can it sometimes expose women to the possibility of greater male domination, or domination of a subtler type?

Can the expanded gainful employment of women outside the home in most countries of the world always be taken as a sign of their emancipation, or does it often merely substitute one form of exploitation for another?

There appears to be little doubt that a continued high rate of population growth can have serious implications in retarding economic and social development, with accompanying repercussions on the status of women. This is particularly true in the areas of education, training and employment. In most countries, social services assisting parents with family responsibilities are still in short supply; the positive value of day-care centers as a means of raising women's aspirations and releasing them for education, economic production and political participation is yet to be fully recognized. Some critics of current development programmes have expressed the fear that under the pressure of competing economic priorities, women's right to equal participation with men in all aspects of social and economic development will be sacrificed to preferential treatment for males in training and employment, leaving women relatively untouched in their traditional roles. Yet the participation of women is essential to the developmental process, and of great and immediate consequence. Women can be a driving force in society or they can retard progress. Much depends on the priorities set by development planners.

Policy-makers need to take more careful note of the demographic relevance of equality between the sexes. We have seen the extent to which equality in the spheres of education, employment, the family and public life appears to be associated with more effective birth planning and with a smaller desired family size among women who marry. Indeed, in some countries where women come closest to exercising their equal rights, birth rates have reached very low levels.

But regardless of the demographic conditions or goals of any particular country, 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. They may affect directly the right of women and of children to physical and mental health. At the same time, constraints on women's right to equality with men in all these spheres may severely limit the exercise of the right to decide freely and responsibly on the number and spacing of their children.

The aim of any population policy must be the enrichment of human life, not its restriction. Thus, the provision of family planning services is no substitute for radical social and economic reform but must be seen as an integral and simultaneous element among a variety of policies and programmes designed to promote the full exercise of all fundamental human rights.

A policy of raising the status of women and promoting equality between men and women, which expands the range of human rights and freedoms, is an end in itself as clearly stated in the United Nations Charter and in many other international documents. It may also be a significant means to achieving desired population goals, a question only recently provoking serious interest. But the essential purpose remains the full utilization of the talents of all of a society's members, and the creation of a new basis for free and happy relations between men and women.

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Women, the ILO Director-General has stated to the United Nations Economic and Social Council, "should be regarded as the Number One potential for the Decade of Development." The growing awareness of the importance of full and effective participation by women in all aspects of the development process has led to a re-examination of their status and role in economic life in countries in many parts of the world. This fresh look is timely because far-reaching changes have taken place and are taking place in the character of women's participation in economic activity, in the distribution and composition of the female labor force and, above all, in the whole concept of women's contribution to economic and social life. Women's economic rights and opportunities have been changing accordingly.

Women today constitute a very important and sizable part of the world's labor force. Over the world as a whole, 30 out of every 100 women are economically active, and women make up over a third of the world's labor force. In some countries, women form more than two-fifths and nearly one-half of the total work force. In general, women have been moving out of agriculture into industry and service, especially into the latter sector, which now occupies over half the total female work force in some countries. In many nations, there has been a sharp increase in the participation of married women in the labor force: in some, these women now make up over half the female work force, and the activity rate for married women is over one-third. There has also been a tendency in many countries for women's work lives to be longer than in the past and for larger numbers of women to pursue an uninterrupted career. Both changing technology (industrial and household) and improving educational opportunities for girls are affecting the participation of women in economic activity and also their status in economic life. Finally, in many of the developing countries, the advent of political independence based on egalitarian notions, and recognition of the need for women as well as men to take part in nation-building activities, have brought women a new status and new opportunities in the economic and social field.

The pattern and the details of the picture vary substantially from one country and part of the world to another, but the factor of change linked with an improvement of status and a wider recognition of women's potential in the development process is everywhere constant. Moreover, while women in the developed countries may have different immediate preoccupations from those of women in the developing countries, and those in socialist countries may have differing areas of emphasis from those...
in free-enterprise countries, their problems are not fundamentally dissimilar: it is the factors associated with their solution which are and are bound to be different.

Clearly, the status of women in the economic field is closely related to their status in other fields. Experience indicates that action taken to improve their general, legal, and social status tends to facilitate their integration in economic life and to have a direct bearing on their economic rights and opportunities.

What, for women, are “economic rights”? Perhaps they could be summarized as follows: the right of access to vocational, technical, and professional training at all levels; the right of access to economic life without discrimination and to advancement in work life on the basis of qualifications and merit; the right to equal treatment in employment, including equal pay; and the right to maternity protection. Most people today would not challenge women’s claim to these rights. The real problem now is to make them fully effective and to transform them into practical opportunities. This is a vast task, requiring many different kinds of action on a broad front.

Two questions arise at the outset in any discussion of women’s economic rights. The first is that discrimination is a term used very loosely. As defined in the ILO’s Discrimination Convention, it means “any distinction, exclusion or preference made on the basis of...sex...which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation.” But is it possible to make a contrast between the deliberate shutting of doors to women simply because they are women and the discrimination encountered by women simply because there has been an unimaginative approach to their problems and no encouragement to open doors closed to them by tradition and thoughtless practice? Second, distinctions based on the inherent requirements of particular jobs are not regarded as discriminatory. But are such distinctions really justified by inherent differences in jobs or are they, by and large, the result of outmoded thinking and definitions of requirements?

Thus, in most of the world there are now relatively few vestiges of overt discrimination against women as such—for example, sex discrimination in national laws or regulations—but the general position is far from satisfactory. There are serious problems arising out of discrimination in practice, which has the result of confining women’s role and status in economic life within unnecessarily narrow limits and of preventing the exercise of rights. There are equally relevant and important problems connected with revising the concept of what is “men’s work” and “women’s work” in the world of today and tomorrow, preparing women properly to play their full part in the economic community and enabling them to do so, and changing outdated social attitudes towards their employment and capacities. The solution of these interrelated problems is the key to achieving “equal rights” in practical terms.

Access to Vocational Guidance and Training

General education, of course, is the foundation for work life; and equality in the access of girls to education...is thus of the greatest importance in determining women’s role in economic life. Leaving this aside, however, there is, first of all, the whole question of vocational guidance and counseling in relation to the choice of training and occupation. In principle, girls in most countries have the right to full and free access to such guidance and counseling on the same footing as boys. In practice, their occupational choice is frequently given little thought, and they very often receive biased advice, influenced by various and often unrealistic pressures of tradition, parents, teachers, the immediate environment, and marriage possibilities. Action to ensure to girls more realistic and forward-looking vocational guidance, based on a more positive and dynamic concept of women’s role in the economic life of today and tomorrow, is thus a fundamental factor in facilitating the integration of women in employment on a basis of equality of opportunity and treatment.

Moreover, while, in principle, girls may appear to have full access to training facilities of all kinds and at all levels, in fact, in most countries, they still have limited practical access to training for many types of occupations, and particularly, in many countries, for training at higher levels of skill and responsibility. By and large, for a variety of reasons, they go into systematic apprenticeship less than boys and tend to be satisfied with shorter and more simplified training courses within a narrow occupational range. Where vocational and technical education is segregated (as in some older industrial countries and developing countries which have copied their systems or where special cultural factors...
exist), training opportunities for girls tend to be unequal: training is generally provided in only a small number of trades "suitable by their nature for girls," and standards of training are inclined to be low. Coeducation—which is, in fact, spreading, often for practical economic reasons—is the more obvious way to ensure equal training opportunities and standards.

As an ILO meeting of consultants on women workers' problems concluded recently, although many countries have extended, improved, and varied training facilities, the general level of vocational training of girls and women is still markedly lower than that of boys and men in most countries.

There is, consequently, a serious gap almost everywhere between the role which women could play in economic life and the means at their disposal to enable them to play this role.1

Access to Economic Life and Advancement Work Careers

There is little discrimination in law as regards women's access to employment and occupation. Studies of occupational outlook, made in recent years by the ILO and the United Nations Secretariat for the United Nations Commission on the Status of Women, confirm this with respect to the principal technical and professional fields (for example, law, architecture, engineering, medicine, and social welfare).2 Analyses of national legislation indicate that the same holds true in other occupational fields. With few exceptions, however, women's right of access to economic life is limited by practical factors.

The preceding section suggests clearly that girls on the threshold of employment are already seriously handicapped, as regards access to economic life, by deficiencies of general education and training. The limitations of access are most notable when the pattern of distribution of women by level of skill and responsibility is examined. For the most part, women are concentrated in a limited number of technical and professional fields to which they are drawn by tradition, and often by natural inclination (for example, teaching, nursing, and child care) and in the lower range of traditional occupations (for example, textiles and dressmaking), and only a very small proportion are to be found in skilled occupations and in senior administrative, managerial, and executive work, whether in the public or private sector.3 While the relative position is improving in some cases rather fast, it is, unfortunately, rather difficult to envisage any marked change for the better in the near future in most parts of the world, particularly where the pace of economic and social development is slow.

As noted, girls are not encouraged, as a rule, to be venturesome in their choice of career and persistent in preparation for it. But many other factors affect, in practice, their access to employment and the framework of their opportunities in the economic field. Some of these are rooted in history and technology: others are economic and socio-psychological; still others are political in nature, and there is always the biologic factor, which is constant and universal. Of great importance are the social attitudes drawing somewhat rigid lines between "men's work" and "women's work," conceiving women as a temporary and marginal "pocket-money" earning element in the labor force and deprecating their capacities and contribution. These attitudes persist in most countries, but where they do not, it is striking to note the greatly increased stretch in the employment opportunities of women and in the use they make of them.

This suggests the importance of promotional and educational activity expressly directed towards raising girls' and women's vocational goals, widening their occupational horizons, and improving their practical access to employment. In measures of this kind it is clear that governments and women's organizations have a leading role, but much can be done, as recent experience in many countries (for example, the Scandinavian countries, Australia, Canada, and the United States) shows, to persuade employers' organizations and trade unions, as well as university circles, to play a substantial part.

Marital status and discrimination

While women's right to work is almost universally recognized,4 in practice it is limited by the various factors mentioned above, and many women find doors shut to them simply because they are women. More often, it is because they are married women. An ILO survey of discrimination on the basis of marital status5 found considerable evidence of discrimination against married women in the public and private sector, some in law, but most often in practice, the basic form being the combination of the rule of not engaging married women with that of dismis-
ing women on marriage (this may be based on informal agreements or voluntary undertakings between the parties concerned, often oral in character). More recently, the steady increase in the number and proportion of married women in employment suggests that there may have been some lessening of discrimination against them in a good many countries, thanks very largely to a combination of high levels of employment and changing social attitudes. It is doubtless significant that discrimination in economic life against women, especially married women, is substantially less or almost nonexistent in countries where equality of the sexes has been achieved in all sectors.

**Discriminatory policies in relation to promotion**

Discriminatory policies and practices have tended to persist in relation to promotion and to put women, in consequence, in a disadvantaged position. Barriers to women’s employment have been displaced from access to employment to the right to advancement in employment on the basis of individual qualifications and merit, and are now operating at higher levels in the occupational pyramid. Since they are very often informal and intangible, they are particularly hard to break down.

Married women often experience special difficulties as regards promotion. They may be refused access to higher categories of employment or supervisory or executive posts as a matter of policy or even, in some cases, on marriage, they may have to revert to the bottom of the promotion ladder. There may be formal or informal rules restricting the grades into which married women may be recruited and cutting off their access to upgrading.

Nevertheless, progress is being made in some parts of the world towards enabling women to move ahead in their work careers on a footing of equality with men. Several countries (for example, the United States) have undertaken special campaigns to try to increase the number of qualified women in responsible posts in all walks of political, administrative, economic, and social life. In some of the developing countries (for example, in Africa) trying to encourage more effective use of their womanpower, if there are two equally well qualified candidates—a man and a woman—for a post, sometimes a deliberate preference is given to the woman, in the hope that she may set an encouraging example to other women. In some of the more developed countries (for example, the Soviet Union), women are to be found in large numbers in the higher echelons of public service and the economy.

Nonetheless, can any country be altogether satisfied with its record of achievement, in particular, as regards the numbers of women in the very top posts, nationally and internationally? It is doubtful. It may be that, with changing and improving occupational horizons, more women will be more interested in careers rather than jobs and will make the necessary efforts to qualify for promotion. Moreover, attitudes toward their advancement to posts of skill and responsibility are likely to be favorably influenced by various factors, including the increasing continuity in many women’s work lives and in the length of their total participation in economic activity and the general tendency (particularly in some developing countries) to raise their status in all fields and to eliminate discrimination against them.

**Right To Equal Treatment In Employment And Occupation**

In general, men and women are, in principle and in law, granted equal treatment in employment and occupation in most respects in most countries, irrespective of the stage of development. Where there are differences, it is usually the woman who is accorded what is regarded as more favorable treatment, alleged to be justified for the sake of her health and welfare in relation to her functions of maternity and motherhood. Thus, a great many countries place special restrictions on the hours of work of women (including overtime), on night work by women, and on their employment in certain industries and occupations regarded as particularly dangerous or unhealthy for them (such as underground work in mining).

These special standards governing women’s employment are of long standing. Recently, however, there has been a conscious effort in a good many countries to re-examine them, not with a view to weakening the social protection afforded to women workers, but with a view to ensuring that it is realistic in present-day terms and not a historical hangover. This is being done, for example, in the Scandinavian countries with respect to revising restrictions on the night work of women. After having considered the matter, the ILO Consultants on Women Workers’ Problems, in 1965, concluded that, apart from standards for maternity protection in the widest
sense, it was perhaps "both realistic and important to envisage an evolution of social policy directed towards obtaining similar protective standards for men and women, with as few differentials as possible." It is generally recognized that existing ILO standards are particularly important for the protection of women in the developing countries.

Right Of Equal Pay
For Equal Work

Experience indicates that acceptance and application of the equal-pay principle are very closely related to efforts to raise the status of women in economic and social life generally. Indeed, equal pay is often taken as a test of a nation’s willingness to integrate women into the economy on a true footing of equality with men and to accept them as partners in work-life. Acceptance of this principle and its full application in practice, in addition to their intrinsic importance for all women workers, are therefore of even wider significance than would appear at first sight.

Today the principle is widely accepted. Steady progress has been made in various parts of the world, whether by laws or regulations, collective bargaining, judicial decisions, educational and promotional measures, or, most often, by a combination of several or all of these means. In this forward movement, the role of governments has been influential, sometimes decisive; more liberal and realistic attitudes on the part of employers and their organizations, even if adopted under pressure, have been important; the struggles of many trade unions to apply the equal-pay principle in negotiating or revising collective agreements have often been victorious; and women’s organizations of all kinds have been in the vanguard of equal-pay campaigns and related activities.

To cite a few examples: equal pay is the law and practice in the Soviet Union and the socialist countries of eastern Europe; in the Scandinavian countries it has been achieved by progressive stages, thanks to government encouragement, central employer-worker acceptance of the principle, and revision of collective bargaining agreements; the European Economic Community (EEC) countries have been moving towards equal pay gradually, under the impetus of Article 119 of the Rome Treaty, committing them to applying equal remuneration without discrimination based on sex; Canada and the United States have made progress through new federal and state equal-pay laws, collective agreements, educational and promotional measures, and the assistance of the Women’s Bureaus; and in the developing countries of Africa, Asia, and Latin America the equal-pay principle has been increasingly incorporated in the constitutions, in labor codes or charters, and in minimum-wage legislation. In some countries (for example, Australia, New Zealand, and the United Kingdom), acceptance of the principle has gained ground, but practical application has been slower, and in other countries (for example, some in Africa), the issue of equal pay hardly arises as yet because women are not working alongside men to any large extent (except in the public service where equal pay is usually the rule).

While progress has been encouraging, in practice much remains to be done to make sure that women get equal remuneration for work of equal value. Thus, preoccupation with equal pay has shifted from an earlier concentration on efforts to promote theoretical acceptance of the principle toward efforts aimed at solving the practical problems of its full application. There have been difficulties, for example, in arriving at a common concept and a practical definition of what is meant by “equal pay for equal work” or “equal remuneration for work of equal value.” There have been complaints, for instance, in EEC countries, that the expression is defined too narrowly (equal pay applying only on “mixed jobs” where both men and women are employed on the same work); that in abolishing separate wage categories and scales for men and women and introducing new uniform ones established without regard to sex, women have been relegated to low-paid categories; and that in work done by women only and in industries and occupations employing a predominantly female labor force, there has been a persistent tendency to undervalue, underage, and underpay the work performed. There have been technical difficulties of job classification and evaluation, that is, of finding a reliable and objective method of measuring job content and comparability; a lack of adequate factual data about many factors bearing on equal pay and related questions; and some reluctance to apply equal pay, which, combined with general lethargy and an unwillingness on the part of women to press their claims, results in inaction even where economic, technological, and social factors converge to create a climate conducive to the achievement of equal pay.
The real problem of women's wages, however, is their absolutely and relatively low level compared with men's. In some countries, the position has improved during the last ten years or so, but in others there has been little change for the better and even some deterioration. True, in many countries the differentials between the wages of men and women doing similar work have been reduced or have remained constant. But the effect of this on the general level of women's wages relative to those of men has sometimes been outweighed by other factors, for example, a general lag in wages in industries employing large numbers of women or a widening of skill differentials. Wage drift has very often been greater for men than for women, and this has, in some cases, reduced the effectiveness of efforts to bring about greater equality of remuneration. Moreover, even when women are doing the same work as men, their earnings tend to be lower because men have greater opportunities for earning higher bonuses for such things as overtime, night work, and especially heavy or dangerous work. Finally, women's earnings tend to be adversely affected by differences in basic and further education and training, in skill and seniority, and in continuity in worklife, as well as by discrimination rooted in obsolete and pejorative notions about women's potential to utilize skill and competence and to succeed in positions of responsibility.

Thus, in looking ahead, it would seem necessary to give more attention to the factors causing the level of women's wages to be lower than that of men's in the different industries and occupations and determining or influencing the distribution of women workers in the economy. Equal pay is only one aspect of the broader and basic issues of how to raise the general level of women's wages and prevent underutilization of womanpower.

Maternity Protection

If women's right to work is to be effective, they must have the right to maternity protection: paid maternity leave before and after childbirth, medical care during confinement, and a guarantee of reinstatement in employment.

This right has been widely accorded. A recent survey of national law and practice with respect to maternity protection, covering 135 countries and territories, showed that this protection now occupied a key place in labor and social legislation and that there has been a marked trend toward the introduction of new and more favorable standards of protection.

Generally speaking, the protective measures cover, irrespective of marital status, women employed in industrial and nonindustrial occupations and, less frequently, women employed in agriculture, domestic servants, and homemakers. A standard of 12 weeks of authorized maternity leave applies in over 50 countries and that of 14 weeks in 22 others, while the period varies between 90 days and 22 weeks in another 14 countries. Almost all countries recognize the right to cash benefits during maternity leave, paid out of social insurance funds or public funds, and not by the individual employer (some countries pay 100 per cent of the basic wage or average earnings), and to medical benefits, as well as to certain other benefits in cash or in kind (for example, milk allowances or layettes). The great majority of the measures also include an absolute prohibition of dismissal during the period of maternity leave, as well as special provisions to protect health during pregnancy (for example, transfer to lighter work and restrictions on hours).

Despite this heartening progress, there is still room for improvement in many countries and for extending the scope as well as raising the standards of maternity protection. Moreover, the concept of protection is still, perhaps, too narrow and restricted. What happens, for example, if a woman wants to extend her maternity leave beyond the statutory or agreed period of six to eight weeks following the birth of a child—to prolong her leave, say, up to six months or a year? Would she have any guarantee of reinstatement in her work or receive any preferential treatment in respect to re-employment? Would she have to relinquish the rights accruing from her employment or would these be maintained?

These are questions to which increasing thought is being given, not only in connection with maternity protection, but also as part of reconsideration of a basic problem in connection with women's economic rights and opportunities and the exercise of their right to work: the employment of women with family responsibilities.

Employment of Women With Family Responsibilities

This problem—by no means new—has come into special prominence in recent years with the
rapid increase in the employment of married women, including married women with young children. It is a problem which lies at the heart of the whole question of women's rights and opportunities in the economic field and of their status in employment. If these women with family responsibilities are to be enabled to work outside their homes if they so wish, and if nations are going to enlist their services in a responsible manner, then society as a whole has to adapt realistically to a new pattern of needs in their work and life. This implies the provision of adequate child-care services and facilities on the scale and of the standard required, as well as many other social measures and measures of practical convenience designed to assist women workers to meet their employment and family responsibilities harmoniously and without detriment to their opportunities in economic life. Much has been done in this respect in a number of countries, but in most countries a great deal has still to be done and action is slow—and often reluctant, largely because of apprehensions about the effects of the employment of women with family responsibilities on family life in general and on children in particular.

Part-time employment is often regarded as a solution for the problems of women who have family responsibilities and who wish to work outside their homes on a less than full-time basis. A recent international survey by the ILO showed that opportunities for such employment have been increasing in a great many countries, both for jobs where full-time work is not required and in other industries and occupations, particularly those with shortages of skills and technical and professional services. Part-timers are generally concentrated in unskilled service occupations (for example, cleaning) and in highly skilled technical and professional services (for example, nursing and teaching). There are indications (for example, in Canada, France, and the Netherlands) that more women would take up part-time work if they had the opportunity and that more employers (public and private) are adjusting to the idea of such arrangements.

There are many pros and cons about part-time employment: fears, for example, that it may jeopardize the position of women in the employment market generally by encouraging the tendency to regard them as a marginal balancing factor and as amateurs, and difficulties connected with implementing part-time arrangements, avoiding competition between full-time and part-time workers and ensuring equitable treatment for both. But there can be no question that part-time work does provide at least some kind of a solution to some of the problems of many individual women, particularly those who most need to work and those with high qualifications who wish to keep their "hands in."

The ILO in Relation to Women's Economic Rights and Opportunities

The ILO has been concerned with women's role in economic life for nearly a half-century and has done a great deal—whether through standard-setting, research, or advisory work in the field—to defend women's rights as workers and to widen their opportunities. Its approach has changed over the years in response to women's changing needs and problems in the world of work. While its first efforts were largely directed towards the social protection of women with relation to their functions of maternity and motherhood, these were succeeded and complemented by efforts aimed at the promotion of women's rights in the economic field, with particular reference to nondiscrimination in employment and occupation.

Very few of the ILO's 126 Conventions and 127 Recommendations apply exclusively to women. The vast majority of the international labor standards apply equally to women. This principle of nondiscrimination is made express in a number of instruments. Thus, the Discrimination (Employment and Occupation) Convention, 1958, ratified by 63 member states, lays down the principle of nondiscrimination in employment on the ground, inter alia, of sex. Ratifying governments undertake a policy of nondiscrimination and to promote equality of opportunity and treatment for all, with a view to wiping out discrimination in law and in practice. The Equal Remuneration Convention, 1951, ratified by 60 states, requires ratifying governments to promote the principle of equal remuneration for work of equal value, regardless of sex, and to ensure its application to the extent that national methods of wage determination permit. The principle of nondiscrimination has also been laid down in other important instruments, including the Employment Policy Convention, 1964, and the Vocational Training Recommendation, 1962.
The protection of working women in connection with maternity and the prevention of discrimination against them by reason of their maternity function is dealt with in several Conventions and Recommendations. The revised Convention of 1951, which has a very wide scope (industrial, nonindustrial, and agricultural occupations), provides for six weeks of maternity leave (at least six days to be taken after confinement); the provision of cash benefits during maternity leave and sufficient for the full and healthy maintenance of the child and paid out of insurance or firm public funds; medical care; prohibition of dismissal during maternity leave; and nursing breaks following return to work for mothers nursing their infants.

The instruments regulating the employment of women at night in industry and those relating to unhealthy employment (underground work, processes involving the use of zinc or lead, work involving high radiation risks, and the like), welfare, and preventive health are also relevant in involving high radiation risks, and the like), processes involving the use of zinc or lead,_R
dominating maternity leave; and nursing breaks following return to work for mothers nursing their infants.

Finally, an instrument adopted by the International Labour Conference in 1965 deals with the employment of women with family responsibilities. The Recommendation urges governments to pursue a policy which will enable women with such responsibilities who work outside their homes to exercise their right to do so without discrimination and to encourage, facilitate, or undertake the development of services to enable women to fulfill their various responsibilities at home and at work harmoniously. Various sections deal with public understanding of the problems of working women with family responsibilities, child-care services, measures to facilitate re-entry into employment after a fairly lengthy period of absence owing to family responsibilities, and additional leave following maternity leave during which employment rights may be safeguarded; the last section draws attention to matters of special relevance for women workers with home responsibilities (harmonization of working hours and hours of schools and child-care services, low-cost household facilities, and the like).

There is no doubt that these various instruments have had a profound and widespread influence on national policies and practices relating to women’s employment and their role in economic life in countries all over the world. Their impact has been both tangible and intangible and many of them—such as the Discrimination and Equality Conventions—have served as a point for national campaigns to improve the status of women or as a point of departure for government re-examination of the matter. It may also be mentioned that the ILO has special machinery for following up and supervising the application of its international instruments; this is of great importance in ensuring that ratified or formally accepted standards are translated into national law and practice.

Problems in Developing Countries

The great bulk of women workers in the developing countries, living and working in rural areas, face special cultural difficulties in many cases and are severely handicapped by the lack of adequate education, training, and employment for all. These problems can only be solved over time with the progress of economic development and of a social climate conducive to “first-class citizenship” for women. It will be important to ensure that, as industrialization moves forward, women in these countries do not lose the economic status that they have won, but are instead enabled to catch up in the development process and to contribute fully in the new patterns of economic and social life. Examination by the ILO of problems in Africa shows that there is a will to help women find opportunities for making this contribution and to overcome the handicaps imposed upon them by the past.

Concluding Observations

The preceding sections indicate that in most parts of the world and in most countries, women have basic economic rights and expanding economic opportunities. There are comparatively few legal obstacles to the exercise of their rights and the exploitation of their opportunities, but many practical difficulties place women in a disadvantaged position in economic life. Sheer discrimination is the element in the situation. It is easy, however, to blame an inferior status on “discrimination,” and it is hard to isolate and come to terms with the factors which truly underlie this status. It is significant that even in the most highly developed countries with no discrimination against women, the problems relating to women’s status in economic life do not automatically disappear: they have
constantly to be refined and used within new frameworks.

While prejudice and outmoded attitudes undoubtedly play a part, it is often the fact that, for the most part, girls do not receive the same care to their preparation for work as boys, nor are they encouraged to do so by their parents or teachers or by society as a whole. These are exceptions, of course—nations as well as individuals; but the problem is widespread and serious, because without a solid base and training, women will necessarily limit their opportunities for employment and advancement. Positive encouragement from parents and teachers is needed in the early stages and from society as a whole in the later stages.

A second factor of general importance is the reluctance of society to face up to the problems of women workers realistically, although drawing them increasingly into economic life. Women do tend to get married and to have children or other family responsibilities. While marriage can be done to ease their burden by mutuality and sharing of responsibilities between husband and wife, for the foreseeable future the woman's share will be the greatest. In the community does not take the necessary foresight and imaginative action to enable women with family responsibilities to work outside their homes, if they so wish, without discrimination, and to provide the necessary services so that they may fulfill their various tasks harmoniously, then the economic rights and opportunities of many of these women will remain, for the most part, an empty myth.

There is a need for a breakthrough which will not only destroy prejudice and eliminate unfair discrimination against women in employment but will also set in motion a positive approach to their real problems as workers. It is, of course, easier to make a breakthrough when the economic and social winds are favorable, but an uncertain climate must not be made an excuse for inaction. In countries where there exist dynamic and forward-looking Women's Bureaus or similar bodies, much can be done to spearhead action to improve the status of women in economic life, particularly by furnishing the factual data on which sound policy must be based and on which practical action must be. There is sometimes a tendency to be afraid of facts on the ground that they might reveal women's "frailty" in the world of work. This is, of course, a most unconstructive and ostrichlike approach: facts are needed to delineate the problems and to point the way to solutions.

There is, moreover, a particular need for concerted action to raise the status of women in economic life in the developing countries, where the great bulk of economically active women are still working in agriculture or related rural activities in very poor conditions. National development planning will have to accord this problem the priority it merits, and international action to advance the status of women in developing regions will have to be carried out more vigorously than they are at present envisaged. The problem poses a challenge to women in the developed countries and a challenge to which they have not yet fully responded. Women in the developing countries need practical technical assistance, not patronizing advice, and they need a near widening opportunities for exchanging their own experiences and for truly useful contacts with leading women workers in the developed countries.

REFERENCES


2A report prepared for the National Council of Civil Liberties in the United Kingdom put it; however, "Almost all professions are open to women, but some are less 'open' than others, and women are scantily represented in them."—Great Britain, National Council of Civil Liberties, Discrimination against Women, Study prepared by Data Research, Ltd., for the Council, London, August 1964, p. 9.

3International Labour Organisation, Yearbook of Labor Statistics (Geneva, 1966), Table 2: "Structure of the Economically Active Population, p. 41-255. (This table is organized on a country basis.)

4In some cases, it is guaranteed by the constitution and/or by the labor code. In most cases, however, it is simply practical recognition of the fact that women always have worked. In certain cases, the right to work is accompanied by the notion of a duty to work. In others, the expression may reflect the contrary notion of a traditional belief that "women's place is in the home."


6It must be noted that women in those developing countries plagued by widespread unemployment experience special difficulties in finding employment opportunities.

7Special protective legislation for women only is not regarded as discriminatory by its protagonists. It is considered a necessary social response to women's needs arising out of their biological characteristics and maternity function. But even the most ardent advocates of "protecting" women recognize that, if overdone, special protection is likely to affect women's employment opportunities and right to work, particularly in nonsocialist countries. Others regard all differentials in the treatment of men and women workers as discriminatory and argue that equal treatment should be
equal in all respects, the only exception being maternity leave.

This means that all considerations related to the sex of the worker have to be excluded from the criteria and circumstances taken into account in determining rates of remuneration and, moreover, that rates must not be based on considerations related to the sex of the workers performing or likely to perform particular jobs or types of work.


The United States of America is lagging behind in respect to maternity protection, for example.

Part-time employment is not "for women only," although the great bulk of the part-time labor force is made up of women: students and older workers or convalescent workers take up such arrangements.

International Labour Review, Vol. 51, Nos. 4 and 5 (October and November 1963). This section is relevant.

A section on part-time employment was deleted from this instrument during the Conference of Experts and a resolution adopted inviting the Office to give further study to the question.


This article is not concerned with the question why women with family responsibilities work; whether this is a "good" thing or a "bad" thing. It starts from the premise that, in fact, they are working outside their homes in growing numbers and that, in consequence of this, certain adaptations have to be made to enable them to face their various responsibilities harmoniously, with a view to the former Director of the Canadian Women's Institute, has said, to minimizing the less desirable possibilities and maximizing the more positive possibilities of women's employment in a rapidly changing society.
THE DESIGN OF FEMALE EDUCATION

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In the most widely read book about labour conditions in India, the problem of women workers is summarized as follows: 'If the number of women employed in industry is small, it does not reflect any reluctance of the Indian women to take to vocations in industry; but it is only because industrialization in India has not progressed far and there yet remains millions of men to be provided with work. In women, a vast manpower potential, both willing and eager to work, is existing and when the time comes for rapid industrialization, their services could be well drafted.'

The first idea propounded in the above quotation is that industrialization must reach a certain stage before the employment of women in the modern sector can really begin. This reasoning was controverted in the preceding chapter*, where we reached the opposite conclusion: that the recruitment of women to the modern sector helps to accelerate the growth of the economy beyond the rate attainable by the use of male labour alone.

What are we to think of the other main idea in the quotation, i.e., that 'a vast manpower potential' of women stands ready to be drawn into employment the moment this appears to be desirable? On closer inspection, this idea seems as questionable as the first one. It is of course true that there are now more women applicants for industrial jobs on many Indian labour exchange registers than there are vacancies to be filled, but there is little doubt that if the demand for women workers were to increase markedly, a point would soon be reached where the supply of willing and qualified women would be deficient.

In India, as in most other developing countries, women's attitudes to work outside the household are changing slowly. Women teachers are now considered respectable in nearly all developing countries; the nursing profession is respected in many developing countries—but not in India; women typists and clerks are accepted in Latin America and are beginning to be accepted in some developing countries in Asia. But, as yet, the idea of women in the role of industrial worker is frowned upon by respectable women in most developing countries—including India. Since women have access, at best, only to unskilled and low-paid industrial jobs, industrial employment has no prestige value for women who aspire to a career, and the earning capacity of women workers is not high enough to compensate for the social stigma attached to women's industrial work. Therefore a change of policy, aiming at a better utilization of the labour potential of urban women, would need to be

combined with policy measures designed to make industrial jobs attractive to young literate urban women, instead of refuge for lonely and destitute widows and for deserted wives, who are unable to support themselves in ways which are considered acceptable.

But women's way to employment in the modern sector is not only by women's prejudices, but also by their lack of proper qualifications. It is illiteracy, formerly an exception, is now becoming the rule among urban girls in nearly all developing countries, but owing to the enduring prejudice against female employment urban girls are rarely given the type of education which would qualify them for employment in the modern sector. Apart from the major exception of commercial schools for girls in Latin America, very few opportunities for training girls exist in developing countries. At the same time, facilities for the vocational training of boys are increasing rapidly in nearly all these countries. It would seem, therefore, that in most of the developing countries outside Latin America the qualifications gap between male and female labour is becoming increasingly wider.

The Productivity of Female Labour

In primitive communities, the difference in productivity between male and female labour is not very large, as was explained in previous chapters. Boys and girls produce goods and services their family use only. Although most men have the advantage of superior physical strength at this stage neither men nor women can benefit from specialization. All those who work in a family must spread their activity over many fields in order to cover the various needs of the family.

A major difference between male and female productivity begins to develop when men become specialized producers of some agricultural or non-agricultural goods or services while all or most women continue to produce a variety of traditional products and services for family use. The specialized producer can devote much more time to training in his particular craft than a subsistence producer with a variety of jobs to do, and, furthermore, a specialized producer working for a wider market can afford to acquire better tools and other equipment than can a subsistence producer. Only very recently, and then only in highly industrialized countries, have a significant number of subsistence producers in such communities—i.e., the housewives—begun to apply anything but the most primitive types of equipment to their work. In developing countries, the men who work in the modern sector handle much more advanced equipment than the women, who perform household duties or use home-made tools for their home-made industrial products. As long as the specialized worker in agriculture or crafts is trained within the family, the difference in male and female productivity remains relatively small, since the girls are given some training by their mothers in household and other duties. But the gap in productivity between the two sexes widens considerably at the stage when boys get some systematic training in schools or in workshops, while girls continue to be taught only by their mothers. At a later stage, when girls also go to school, the gap is reduced so far as literacy and other school subjects are concerned, but another gap then emerges because an increasing number of boys receive vocational training while virtually all the girls continue to receive only the traditional initiation into their roles as housewives and mothers. Even within the ordinary schools there is a significant difference in the teaching of the two sexes. The school will normally seek to stimulate the boys' interest in subjects that are useful in the labour market, while the interest of the girls is directed towards subjects of little or no vocational relevance. Last, but not least, nearly all the parents teach their boys and girls that boys are superior to girls and that they alone can show initiative and accept positions of responsibility.

Employment in the modern sector requires not only formal training, but also a certain attitude to work which may best be described as the capacity to work regularly and attentively. This attitude is not easily acquired by people who are accustomed to come and go, to work and rest as they please. Those who work within the confines of the family are not likely to acquire this attitude unless their position is so precarious that they are forced into working harder and longer in order to subsist. It is well known that people who are accustomed to hard work in intensive agriculture are more able to adapt themselves to other types of work than are people accustomed to the more leisurely rhythm of work in shifting cultivation. Within the framework of shifting cultivation, women usually work harder than the male family
The Escape from Competition

It was suggested above that the difference between female labour productivity and that of men is due to differences in education. But there are of course other approaches to the question of a sex differential in labour productivity, ranging from denial of its existence to the consideration that it is the result of an overall and innate superiority of male over female.

The idea that women are by nature inferior workers is widespread in developing as well as in industrialized countries. This prejudice is usually mitigated to some extent by the assumption that in certain occupations women are more efficient than men. We have already mentioned as an example the widespread prejudice against men as teachers of small children. This type of prejudice is likely to result in a selection of applicants for various occupations which then provides a spurious confirmation of the prejudice. For instance, if it is generally agreed that women are superior teachers but inferior to men in nearly all other occupations, teaching will attract many able women but few able men. The inevitable result of this kind of selection combined with the general prejudice about female inferiority is to reinforce the conviction about the innate differences in the abilities of the two sexes.

In communities where girls are taught by their parents that they are inferior to boys and where boys receive a training which makes them more qualified than girls for employment in the modern sector, it is inevitable that women who enter the labour market will suffer from a deep insecurity and feeling of inferiority. It is not surprising, therefore, that they seek security by sticking to certain occupations which are supposed to be suitable for women, while only a small minority want to enter into open competition with men in the fields which by general consensus among men as well as women are considered as less suitable for women. Therefore, the flocking of women to certain occupations would seem to be primarily due to their own desire to be employed in supposedly ‘feminine’ professions while men’s fear of accepting women in the ‘masculine’ occupations may be a less important factor.

At a conference about women’s role in developing countries, Carr-Sanders warned against attaching ‘too much importance to education of women for a narrow range of tasks, especially for the office skills of typing and shorthand. I sometimes think that in this we can trace a remnant of the old idea of what is proper for women; if they must be employed, it is thought that they should find employment only in special tasks. . . . They should not be confined to particular skills. In the same vein, W. Arthur Lewis has warned against telling the women ‘that if they work outside their homes they may only be domestic servants or typists or crowded into some other narrow range of jobs.

But these are not the only voices. Other scholars invite women in developing countries to abstain from intrusion into men’s spheres in the labour market. A European anthropologist, addressing a conference of women in South Asia, praised women’s movements in the area which ‘follow less the Western concept of mechanical equality among the sexes (which is a practical Utopia) than that of certain preferential rights for women, in order to establish ultimate harmony and cooperation between both sexes. Unfortunately, the demand for preferential rights, instead of ‘mechanical’ equality, cannot fail to appeal to women who are in the process of breaking out of the secluded sphere of home subsistence production on to the threshold of a labour market where they feel like inferior and often unwelcome intruders. In fact, women workers usually prefer the existing system of confining women to special jobs reserved for them in industries and offices.

Crowding women within a narrow range of jobs in industries and offices comes, in the first instance, from decisions by the employers. In the academic field, on the other hand, it is the result of the girls’ free choice. Where girls are first admitted to universities, they always seem to gather in the arts faculties. Later they reluctantly enter first the medical faculty and then related branches like pharmacy and bio-chemistry. These preferences suggest that the girls accept the tradition that women should deal with
children and sick persons and leave the abstract or technical branches to the men.

Many Indian universities have now reached the stage where women are overcrowding the arts faculties and social faculties, while in the medical faculty women are still in a minority. In this respect, the Philippines are ahead of India: in 1960-1, 285 women and three men passed professional government examinations in pharmacy. In Thailand, the number of women medical students was formally restricted in order to prevent the medical profession from becoming predominantly female.

As economic development gets under way, women tend increasingly to enter the non-agricultural labour market. This growing number of young women cannot indefinitely be accommodated in the occupations which were first considered to be appropriate for women. As a result, women spill over into other occupations, entering reluctantly at first but with increasing enthusiasm as the new occupations become more 'feminine'. The effect of this is similar to the well-known phenomenon of 'tipping' in the market for urban dwellings in multi-racial communities where each race huddles in special quarters and 'white' districts are only reluctantly opened to and entered by coloured. After an occupation is invaded by the sex considered inferior a stage is reached when it is deserted by the sex which considers itself superior, just as a white quarter invaded by 'coloured' is deserted by its white inhabitants when the 'density' of 'coloured' has reached a certain level. In both cases, prejudice is reinforced by economic considerations: a suddenly increased supply of labour for a given occupation exerts a downward pressure on wages, just as the sudden entry of a new group of tenants tends to raise the level of rent. In both cases, the superior group—sex or race—finds the occupation or locality less attractive and tends to leave the field open to the inferior sex (or race). The downward pressure on male wages in occupations invaded by women would not occur if women could avoid flocking to a few occupations and were welcome in, and trained for, the whole range of economic activities.

In countries with a tradition of female-seclusion, there is of course a great deal of force in the appeal to women to repudiate 'mechanical equality' and instead to strive for a special position in the labour market. In India, for instance, pathetic attempts are made to find special fields for women, sheltered from male competition. The author of a book about the employment of Indian women reviews the possibilities of employing women in the transport industry and says hopefully: 'In Calcutta a few trams are reserved exclusively for women during office hours, and the conductors of these trams may one day be women.' Similarly, the author of an article about the prospects for the Indian woman in 1975 mentions an "important banking company which has done pioneering work in employing women staff and in providing special banking facilities to women. It has All Women's Banks in many urban areas staffed entirely by women." Such suggestions might be considered harmless and curious attempts to gain an advantage from the remaining examples of the seclusion of women, were it not that they contradict and weaken women's demand for general access on equal terms to the labour market. It is significant, in this connection, that an official commission reporting on women workers, should find it relevant to state that 'there are no particular jobs which can be better performed by women in the industrial field', and that one of the authoresses mentioned above should quote this statement without comment.

An investigation of opinions held by Indian women studying at American universities revealed that even they were in favour of special functions for women. They keenly denied any wish to compete for the functions traditionally performed by men: 'Hindu women today, in fact, do not see the struggle for "equal rights" as the competitive demand for the same function as those performed by men. They demand only the recognition and honour due to their role (though it is true they are entering politics and professions, feeling that they are needed in them). It is, still, a non-competitive society.' A woman said: 'Our custom is to have the husband support the family. I know that in this system the wife has very little opportunity to work outside the home and make full use of her capacities. But this arrangement keeps the harmony in the family. Both husband and wife are rulers in two different fields.'

These Indian girls were studying at an American university in the 1950s which Betty Friedan has described as the period of 'mystification of women' where many American college girls could be quoted for similar statements. But if these views were perhaps influenced by what the Indian girls thought would be well received in the host country, they are at least worth quoting for the light they throw on the in-
fluence of Western sociological theories on the elite of the developing countries.

In some countries where the tradition of the seclusion of women is strongly entrenched, the preference for secluded trades and special jobs for women combines with the fear of male unemployment to produce an extremely effective barrier against the opening of the general labour market to women. The Moroccan study... mentions that even women workers in Morocco think that women with an earning husband should refrain from ordinary employment as unskilled labourers, while teachers and nurses are more acceptable because 'they fill functions in which men would have difficulty in replacing them'.

In countries with a tradition of female trading, women are more inclined to enter the general labour market and less keen on having special rights. From Thailand come complaints that Western influence adversely affects the position of women there by making sharper distinctions between the sexes than has traditionally existed in that country. The people from the West have brought scrounging for boys, needlework for girls, special hospitals for women, public toilets separated by sex. 'All help now to emphasize a person's sex'. Like the Thai women, the Burmese women were in some ways much freer than is usual for Asian or European women, and Margaret Mead reproaches Western administrators for having failed to take into account the self-dependent role of Burmese women.

From Africa, too, come complaints that European ideas have a bad influence upon the position of women. Missionaries, Catholic as well as Protestant, are blamed for having taught the girls little more than domestic skills and for having 'more or less encouraged a stay-at-home policy of the urban women on moral grounds'. Traditionally, African women have more freedom to move around and earn money than most Asian women, but, nevertheless, their traditional status is one of subordination to men. The secretariat report to the Inter-African Conference in Lusaka in 1957 summarized the position of African women as follows: 'It is a crude generalization, but perhaps it needs to be said, that African society is a male society, in which women have a defined place and role; the place is subordinate and the role is to carry the routine daily burdens of life.'

When the tribal bonds begin to weaken, African men try to preserve their position of authority over women by substituting 'a justification of Western inspiration for the justification by tribal custom'. In other words, they claim authority and obedience on the grounds of women's educational deficiencies and not because of tribal rights. Likewise, many African men object to women having careers because it will make the urban women economically independent and unwilling to submit to male authority. In cases where the lack of qualified manpower causes educated African women to be employed in white collar jobs, it seems to be generally accepted that they must be employed in low grade jobs, while the men move up to the more responsible jobs. The ILO Report on African Women, quoted earlier, states that 'with the advancement of Africans to higher posts which used in a number of African countries to be held by Europeans, new openings are available to men and women alike', but it continues as follows: 'Men now set their sights higher, and instead of regarding a job in an office or a job in a factory as their goal, they feel they can aim at something better and do not oppose the employment of women in the posts which they formerly considered to be the exclusive field of men... General experience suggests that the higher men can go, the more opportunities will be offered to women in the lower grades.' This idea of women's role in the labour market is probably shared by most men in industrialized countries, but it is rarely set forth with such frankness as in this text which is meant as a benevolent encouragement to African women looking for a job.

Training For the Modern Sector

As long as girls remain under the twofold handicap of a family education which suppresses their self-confidence and of training facilities in schools and elsewhere which are inferior to those given to boys, they are bound to be inferior workers who contribute little to the national product despite their hard toil in many traditional tasks of low productivity. Although much lip-service has been given to the importance of women in the future and the need to give them better training, progress in this field seems to be very slow. The emphasis is still on a training which fits them only for subsistence production in their own households by teaching them better cooking, better child care, sewing and embroidery. Such subjects take up much of the time in many rural and urban primary...
schools, and the courses offered to girls and women under programmes of community development and rural extension are devoted largely to them. Even at university level, much of the teacher training of women is in fact a training for the role as instructor in home economics and similar subjects. It would be foolish to deny the importance in developing countries of more enlightened methods of cooking, more hygienic methods of child care, and so forth; nevertheless there is a danger that the striving towards making more efficient housewives will make us forget or condone the utterly feeble efforts to improve women’s professional efficiency outside the secluded professions of teaching and nursing.

Some developing countries in addition to this domestic training have programmes for training women in crafts and home industries. Where women live in seclusion, to teach them a craft which they can do at home may be the only possible first step towards bringing them into the labour market. Thus, training in hand spinning in India, and in embroidery in Tunisia, may help towards the eventual abandonment of seclusion. But the effect of offering this kind of training to women who do not live in seclusion may be to drag them into low-productivity jobs rather than to help them to find more productive and remunerative employment. Indeed, the training in crafts and home industries is frequently offered to women as a sort of compensation for the refusal to give them jobs in the modern sector and as a deliberate method of reducing the number of women competing with men for employment in the modern sector. Sometimes women insist on being taught sewing and similar crafts so as to avoid wage labour in agriculture or manufacturing industries.

Apart from the training for low-productivity activities in crafts and subsistence production, few facilities for women’s training are offered in developing countries. There are many commercial schools in Latin America, and a few in Asia and Africa. In the field of industrial training, a fair number of courses for girls are given in Latin America, although they lead mainly to work with rather limited employment prospects. Some schools of this kind exist in Asia and practically none in Africa. Finally, there are a few agricultural courses in some African countries, but none apparently in other continents.

This is a striking omission considering the prominent role women play in the agricultural labour force of many developing countries. Although the school curriculum for boys does include theoretical and practical courses in modern farming principles and techniques in some countries, this kind of instruction, which is meant to counteract the school leavers’ flight from agriculture, is not given to the girls. Instead, they have courses in nutrition, cooking, child care and other domestic subjects. Similarly, it is usual in adult training programmes to teach agricultural subjects only to men, and domestic subjects to the women.

Sometimes men come out in direct opposition to the training of women in agriculture. A report on the agricultural training of women in the Central African Republic mentions that ‘the men, particularly the young ones, seem to fear that training of women would be synonymous with emancipation of women and lead either to immorality or to a too great independence of the family authority.’ Similarly, men’s dread of women acquiring skills is apparent in a report about community development in Tanzania: ‘It was considered important not to isolate the women too much for the purpose of learning new skills, and so create the possible impression of imparting to them an exclusive mystique. Otherwise, as past experience in rural areas had shown, husbands sometimes grew suspicious that the fearful prospect of female emancipation was being subtly introduced in order to undermine their traditional masculine authority.’

The community development programmes and extension services vary widely in different countries in their emphasis or lack of emphasis on agricultural training for women. The Indian community development programme for women is designed to obtain their participation in social service activities, but so far the problem of their agricultural training does not seem to have been considered. In many African countries, on the other hand, this problem is under discussion, and in some cases community development organizations or extension services are already teaching improved agricultural methods to women.

In some African countries, the admission of women to intermediate and higher-level agricultural training is being facilitated to some extent. In colonial times, there were women instructors in East Africa. More recently, the Agricultural Education Commission of Kenya suggested that by 1980 20 percent of places in intermediate-level agricultural training institutions would have to be reserved for women.
A New Pattern For The Future?

It is difficult to foresee what will come out of the efforts to provide a future for educated women in the agricultural sector. In most countries, rural women will no doubt be concerned primarily with industries processing food and other materials of agricultural origin, with rural trade and the increasing number of rural service occupations which will appear as the villages begin to modernize... it is desirable to provide opportunities for non-agricultural work to women living in rural areas, because women migrants with some experience of non-agricultural work in their home village tend to adapt more easily to working in the towns to which they migrate. However, the primary motive of providing work for rural women—in agriculture or in non-agricultural occupations—is of course to obtain their immediate help in increasing production in the rural areas and to make sure that an improvement in men's earning power in agriculture is not offset, to an appreciable extent, by a decline in women's work participation and hence in women's earning power.

Another reason for providing attractive work opportunities for educated rural girls—in agriculture or in non-agricultural village activities—is that if such opportunities do not exist, enterprising young girls will migrate to town before marrying or will press their husbands to migrate. Therefore a policy designed to encourage the young male villager to help in the task of modernizing the rural scene has a better chance of success if it includes possibilities for the educated girl to find attractive employment in the village.

It is often pointed out that with the education of rural youth, boys as well as girls, comes the risk that the young people will refuse to stay on

... in the village, under the customary authority of village elders. This is a very real risk, but one which has to be accepted, for without education in rural areas there can be no economic uplift. Conflict seems unavoidable between the traditional village community and the young generation of both sexes. The literate young people naturally want to assert some influence in the village and they tend to leave the village if their attempts are unsuccessful. In countries where it is easy for an enterprising village girl who runs away to a neighboring town to find either a husband or a job, neglect in catering for rural girls can only jeopardize the attempts at rural uplift.

Another important factor is the advent of birth control. The spread of official propaganda for birth control cannot fail to have far-reaching effects in communities where the prestige of a woman was traditionally measured by the number of children she was able to produce. If the rearing of a numerous family is no longer to be considered a virtue, profound changes in the educational system for girls become necessary. Both rural and urban girls must be given other ideals and other ways of asserting themselves, both in their own eyes and in relation to the male members of their community. One means of achieving this is to improve educational and vocational training facilities for girls, and to encourage the girls to make use of the opportunities for careers both in rural modernization and in the modern urban sector.

In the past, because a young woman's ambition to have a career would normally conflict with the desire to rear a large family, public opinion in European countries and the United States was opposed to the idea of gainful employment for married women. Consequently, a rise in urban incomes usually reduced the proportion of married women who pursued activities other than those of a wife and mother. We shall probably not see a repeat of this pattern in the countries which become industrialized in the remaining decades of this century. As public propaganda for family limitation gradually becomes more widespread and persuasive, we shall expect to see married women in developing countries being encouraged to seek employment outside the home as a means of limiting the number of births.

Another major difference in the lot of women today and yesterday and the women of tomorrow is a result of the mechanization of much of their domestic work.
In the early days of European industrialization, a great deal of labour was required to cater for domestic needs of every family, but now, with the advent of modern domestic equipment and processed food, women can look forward to caring for their households with a fraction of the hours of work previously needed. The effect of these technical changes is now becoming apparent in the employment trends for women in industrialized countries. There can be little doubt that before long similar trends will be seen in the urban sector of many developing countries. With fewer children and lighter domestic duties, the work pattern for married women in developing countries will probably be radically different from the one seen during earlier periods of industrialization when most married women stayed at home. It follows that in the future, when a large proportion of women may have jobs, it becomes an important task to devise new educational and training programmes, which can help to reduce the productivity gap between male and female labour, thus fitting women to their new way of life.

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INTRODUCTION

To date, social research on fertility is predominantly macro-analysis of the relationship of one or more societal variables to outcome. There are few fertility studies concerned with micro-phenomena. In this paper, we develop a thesis that: (1) micro-analysis of family influence on fertility outcomes is a critical research area; (2) there is a need for more theoretically sophisticated macro-studies on fertility behavior; and (3) future research requires increasingly a theoretical synthesis of micro- and macro-phenomena.

Our basic interest is to develop guidelines for a micro-social (family) theory of fertility where the focus is on the structural properties and interaction systems of families; the role and identity changes of members; and the transactions of families with societal institutions and organizations. Fertility behavior is viewed as being primarily a decision made within the family as a consequence of interaction. In turn, the pattern of family dynamics is influenced by conditions, situations, ideologies, value systems, and institutional practices found in the larger society.

Also assumed to exist is a systems relationship among families and societal structures and such processes as economic and social development. Changes in one component of a micro-macro relational system can reorder priorities and patterns and establish new bases for bargaining, exchange, and influence exercised by participants. Also, societal developments such as family planning, civil rights, and child care legislation/programs will create conditions which favor reallocation of traditional family roles. This is the societal press on the family to modernize. Families which "break with tradition" and develop expertise in handling the normative demands of organizational bureaucracies are often scored as "high" on a family modernity scale because of their success in using available options. They in turn will create a press for societal institutions and traditional authority to "modernize" in order to consolidate their gains and enhance the possibilities of continued success.

We view this reciprocal micro-macro perspective as critical to the development of a general explanatory theory of fertility behavior concerned with relevant socio-behavioral variables.

CHANGING ROLES OF WOMEN, FAMILY DYNAMICS, AND FERTILITY

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both as consequences and determinants of fertility. Unfortunately, to date, few studies have considered this orientation in the design of fertility research. Also, the main behavioral fertility studies have treated economic and social factors affecting fertility almost exclusively as macro-variables.

One approach to development of micro-theory is to take major societal propositions of social and economic correlates of fertility, such as the changing role of women, and then integrate these problematic statements with a family dynamics/fertility relationship. This type of analysis requires examination of such major macro propositions that increasing the number of women in employment modifies the traditional pattern of high fertility; and level of education is inversely correlated with fertility. Our procedure is to review a selection of major studies which deal with family related variables with the purpose to:

1. raise questions about the contradictory research findings of accepted propositions;
2. specify how macro-variables and propositions can be reformulated to include micro dependent, independent, and intervening variables in research;
3. indicate how specific variables may influence family interaction, which in turn affects fertility outcomes; and
4. develop bases for a family theory of fertility involving synthesis of micro-phenomena within a macro contextual framework.

A basic assumption is that family dynamics intervenes in the relationship of changing women’s roles to fertility outcomes. Thus we consider family internal interaction as an intervening variable in formulations where fertility outcome is postulated as a dependent one.

Although our focus is on the roles of women, we are equally concerned with the consequences of these roles for those of men, children, and other family members. Within the family, the role of wife/mother cannot change without affecting the roles and daily life patterns of the entire family (Weller, 1968). Changes in traditional roles of women are processes which can provide compensatory options to replace large families and associated child-care and homemaking roles.

**Macro-studies**

Survey data have been used to explore the relationships of women’s roles to fertility, and the following are frequently reported correlations:

1. The greater the percentage of women employed in the labor force, the lower the fertility.
2. The greater the percentage of educated women, the lower the fertility. A corollary is: the higher the level of education of women, the lower the fertility.
3. The higher the level of societal modernization, the lower the fertility.

These hypotheses do not hold in all situations, and there is a need for further specification and elaboration. On practical grounds, two variable relationships seldom provide sufficient understanding of the phenomena for the design of effective population planning programs and policies. This becomes critical because many of these propositions have been incorporated into rationales for specific policies and programs aimed at societal development and population control. As a result, some countries have increased expenditures beyond reasonable limits for services and industrial development in a manner unsuited to available resources and their economic and social goals. To illustrate how these currently formulated propositions are subject to gross over-generalization, each one will be discussed separately.

**Gainful employment.** Labor force participation of women has long been associated with a lowered fertility rate (Jaffe, 1959; Coliver, 1968; Kasarda, 1971; Kupensky, 1971). This relationship is stronger in high rather than low economically developed countries and among white collar and non-manual workers rather than agricultural and craft workers.

Among those who accept the premise that increasing the number of women in the labor force will automatically reduce a society’s fertility rate over time, there is disagreement on how the relationship is to be interpreted. One group states that role expectations for both an occupational career and motherhood are basically incompatible (Pratt and Whelpton, 1958; Ridley, 1959; Goldberg, 1965); nonfamilial values, such as those associated with work roles and which form the rationale for activities outside the
home, are anti-familistic. Those who take a contrary position (Westoff, Potter, and Sagi, 1963; Bumpass, 1969) see no basic conflict between work and motherhood. They argue that time, the resources required to handle both roles adequately, and traditional family patterns simply prevent women from working and having children at the same time.

In general, participation of women in the labor force is seen as being incompatible with the maintenance of high fertility, since work leads to a lessened interest in childbearing and rearing. Judith Blake (1963) has called for adoption of a public policy to encourage women to work and thereby reduce the fertility rate and population growth. Ridley (1968) suggests that women's participation in the labor force leads to greater involvement with the larger society and is also likely to have equalizing effects on the statuses of men and women within society. A frequent argument is that as financial dependence on the husband is lessened, the working wife becomes more influential in the family decision-making process. This may lead to more modern, companionate marriages with greater emphasis placed on personal relationships between husband and wife. These factors seem to be associated with a small size family.

In 1969, Ridley, using U.S. fertility trend data, found that since 1940 labor force participation per se is unlikely to act as a major depressant on fertility. Although women who are not in the labor force have slightly higher levels of fertility, differentials between employed and unemployed women were somewhat narrower in 1960 than in 1950. This convergence is a consequence of greater increases in fertility by working than by non-working women. Increases in fertility for ever-married women in the labor force are of such magnitude that they completely overshadow the increases by educational attainment.

Ridley (1969) explains: (1) the high incidence of childlessness formerly observed in census data for employed women may be attributed in part to the greater likelihood of barren women to enter the labor force; (2) the number of single women employed has decreased over the past two decades as marriage rates for all women have increased; (3) an increase in family size has forced some women into the labor market.

The hypothesis that the greater the percentage of women in a society in the labor force, the lower the fertility is related to a more broadly held assumption that fertility varies positively with economic conditions. At first blush, these propositions appear to be contradictory. Gainfully employed women through their earnings presumably add to the prosperity of both the family and society. Logically, with cyclical peaks in societal affluence, the fertility of these women should generally rise. If, on the other hand, women enter the labor force during periods of economic decline or survive layoffs during business recessions and become sole breadwinners, one would expect a lower fertility. Rewards provided for working instead of childbearing and positive sanctions from society and family for roles other than motherhood are additional factors influencing the work behavior of women. Using a role incompatibility perspective, Haas (1972) suggests that a general decline in fertility may have to precede or occur simultaneously with the entrance of large numbers of women into the work force if “staying on the job” is going to follow.

Confusion over this issue is exacerbated by convincing evidence presented by adherents of a socio-economic theory of fertility (Banks, 1954; Kirk, 1960; Easterlin, 1969). In the United States, for the century before 1930, the fertility rate declined while the Gross National Product increased dramatically and real income rose. From 1930 to 1960, incomes rose in the upswings of Kuznets cycles, as did fertility, in line with Kirk and Easterlin's postulate of a positive correlation between fertility and income. During the past decade, however, fertility has declined even though income, both relative and absolute, has increased.

Sweezy (1971) examines these major postulates and demonstrates many weaknesses in explaining (1) the sharp drop in fertility in the United States in the 1920’s, prior to the great depression; (2) the occurrence of highest fertility at the upper socio-economic levels, where the percent of income rose least after World War II; and (3) the sharp decline in fertility, in spite of rising incomes, after 1962.

Sweezy’s concluding comments are pertinent to our position. He suggests that “attitudes” and “tasks” have something to do with changes in fertility as well as income. He says:

_The idea that changes in fertility are a positive function of economic conditions has such innate appeal that it is probably futile to pile up evidence against it. To reduce the credibility gap, I would like, in concluding, to repeat one disclaimer. I am not suggesting that people take no account of income and_
employment opportunities in deciding how many children to have. That would be to fly too blatantly in the face of common sense. What I am suggesting is that such considerations have been relatively minor in their influence and that changes in fertility have for the most part been the result of changes in attitudes—changes in ‘tastes’ rather than in the constraints of income and price, to use the economist’s language.

Perhaps it is fortunate that fertility is not solely, or even mainly, determined by economic factors. If prosperity always meant high fertility, we would be faced with a serious dilemma. For then there would be only two ways to stop population growth: either by keeping the economy in a perpetual state of depression, or by instituting mandatory controls on family size. But if social and psychological factors also have an important influence on fertility, other less drastic remedies may be possible (Sweezy, 1971, p. 266).

The conditions of increasing numbers of gainfully employed women in the labor force and increasing real income of families, singly or in combination, do not explain the variable patterns of fertility. Changes in value orientations and ideologies, acquisition of new tastes, satisfaction with one’s self-image and identity, challenging and rewarding work, boredom in one’s roles, patterns of familial decision-making, and availability of a modern birth control technology are likely to influence fertility patterns. We are suggesting that these phenomena have differential effects for various social strata in different societies and periods of history. A few illustrations follow.

In the United States after World War II, a strong motivating factor to increase fertility among the intelligentsia may not have been increased income and a boom economy, but a pervasive belief that by not producing more children, they were practicing class genocide. These higher socio-economic groups had the highest increase in fertility even though their income rose proportionately less than members of other strata.

Women who are in unrewarding, boring, and blocked mobility jobs such as service and menial office work may choose pregnancy and child care to escape an unpleasant situation. As governments provide more services and financial support to families, such as health care, guaranteed education for all children or annual income, the motivation of women to work in the labor force in meaningless jobs may diminish. The drive to work to provide material benefits for the family lessens. Compensatory satisfactions to employment may be found in the exchanges between mother and child or in other non-labor force roles.

The general relationship between gainful employment of women and lower fertility requires elaboration. In discussions, Aziz Bindary (1971) has noted that moving women into the labor force is a necessary but not sufficient condition to reduce fertility. He makes two distinctions: work away from home reduces fertility more than work at home; and commercial and industrial employment are more effective than rural employment. Thus, encouragement of home industry, service, and business is unlikely to reduce fertility.

Bindary’s second point on the differential effects upon fertility of commercial/industrial or agricultural employment is important to this analysis. In commercial and industrial settings, compared to agricultural ones, fertility is discouraged because child care is more difficult to arrange. It is impossible to take children to work unless the employers provide, and few do, nursery facilities. Support for these two positions is found in the work of other investigators (Tien, 1972; Goldstein, 1972; Haas, 1972; Stycos, 1965; Weller, 1971; Jaffe and Azumi, 1960).

Other events may be operating in an industrial setting to reduce fertility. For example, Andree Michel (1970) indicates that women in France often learn much of their birth control information from work colleagues. In large scale industry, business, and service occupations, women usually are exposed to a range of heterogeneous contacts across social strata, life styles, ethnic and religious backgrounds. A woman who comes into contact with people different from herself is likely to be influenced to incorporate changes into her life and that of her family (Rogers and Bhowmik, 1971). Often she is encouraged to improve the life style of her family, to raise her level of aspiration, to be imbued with a sense of need-achievement in the industrial structure, and to consider the utility of planning the size of her family. Each of these events may influence the fertility outcome (Tien, 1972).

Another and not usually studied explanation of the relationship between work and fertility is that if a woman becomes dissatisfied with her job, childbirth may become an important alternative. Harold Feldman (1970), who studied a
group of former AFDC mothers who were placed in jobs, reports that those women who became dissatisfied with their work were more apt to conceive and leave their jobs than those who had high work satisfaction. The interpretation is that low work satisfaction led them to become pregnant, so that they would no longer have to participate in the labor force.

Bruce Eckland (1970) in a longitudinal study finds that when women became blocked in job mobility, they were likely then to become pregnant. Again, this relates pregnancy among working women to job dissatisfaction, with the possible interpretation that the birth of a child is a way out of an unhappy situation.

The employment (work) variable is a very significant one under specified conditions. Such specificity is possible if the major variable of women's employment is divided into more basic elements and then organized into significant propositions. The following chart is a beginning taxonomy of work elements and propositions which signify conditions under which the significance of the women's employment to fertility can be tested. In presenting this taxonomy, we recognize both that it is incomplete and that many variables are interrelated beyond the one-to-one relationship. Obviously, studies on the women's employment/fertility issue will have to use a multi-variate design.

Fuller taxonomic development is required. This analysis is merely to suggest that the relationship between gainful employment of women and fertility needs to be more firmly established by research on relevant variables. It is our assumption that gainful employment of women will not affect fertility unless there are accompanying social-psychological changes in the women's identities and in internal family interaction patterns. Commitment to a career is a prime motivation for identity change with related consequences for reallocation of roles and tasks within the family and changes in the pattern of fertility.

Education. Although Ridley (1969) questions that women's employment exacts a declining fertility, educational differences, nevertheless, are highly influential. There is an inverse relationship between the amount of education and fertility. These differences hold for the period 1940 through 1960 in the United States. Freedman (1963) has argued that it is through education that "population becomes involved with the ideas and institutions of a larger modern society." Education is thus one means by which societies present modern alternatives to traditional ways of life. Inkeles (1969) found that education is a key factor in the shedding of traditional values and attitudes in developing societies. Education, more than occupation in both transitional and complex societies, but less so in developing societies, provides women with exposure to the available alternatives which can replace traditional feminine roles (Loewenthal, 1972).

In previous work, the authors of this paper and others have suggested the following critical indicator of societal modernization: the greater the availability of options for greater numbers of people in a society, the higher the level of modernization (Sussman et al., 1969; Cogswell, 1969); options are those alternatives available to members of a society in each life sector, such as education, occupation, leisure, religion, and welfare. It is hoped that these options will become available to a wide range of national constituents regardless of ascribed characteristics. Education may be the means by which women become aware of these options and develop the competencies in using them. Education may become the means through which women assume non-familial roles increasingly available in modernizing societies.

One explanation of why education may relate more consistently to fertility is that it is a finely graded system in which individuals at higher levels of the educational ladder have passed through all preceding stages. It presumes incremental learning of skills and competence. In contrast, some researchers in using the employment variable often employ the categories working/not working. Dichotomization of a variable is less powerful a measure of discrimination than those obtained by incremental scaling; hence, the more consistent is the finding of the educational/fertility than the occupational/fertility relationship. Even if occupational gradations are made, they are gross classifications which range from professional to manual and are extremely difficult to classify regarding the knowledge required and skill associated with each. Membership in an occupational category may be ascribed or achieved while education is essentially an achieved position.

Modernization. To effectively relate the level of modernization to fertility, it is important to have measures for societal, familial, and individual modernization. Research to date has been limited to measures of individual (Smith and
Women in Gainful Employment and Fertility:  A Beginning Taxonomy of Variable Components

<table>
<thead>
<tr>
<th>Suggested Variables</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Rewards, Conditions, Patterns</td>
<td>The amount of income earned may provide incentives or disincentives for numbers of children. Very high earners may be able to have both job and desired number of children; middle earners may find functional equivalents in material acquisitions, leisure interests; low earners may take role of &quot;working mother&quot; providing needed income to support children.</td>
</tr>
<tr>
<td>Level of income</td>
<td></td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>Greater satisfaction more likely to develop work commitment and rewards endemic to work become equivalents for the condition of pregnancy.</td>
</tr>
<tr>
<td>Job mobility</td>
<td>Blocked job mobility may be a factor in defection from the work force; stimulate a return to domestic, childbearing role.</td>
</tr>
<tr>
<td>Work continuity and interruption pattern</td>
<td>Women with in- and out-of-labor market histories are likely to have higher fertility than those who are &quot;steady&quot; workers. Long-term service with job mobility effects commitment to a career.</td>
</tr>
<tr>
<td>Job boredom</td>
<td>Greater the boredom, the more likely to defect from labor force through pregnancy.</td>
</tr>
<tr>
<td>Work Setting</td>
<td>There may be differences in fertility largely in relation to the time the gainfully employed woman has with her child (children). Consequently, the provision of child care services by the employer or other human services systems and propinquity of place of work with home are intervening variables.</td>
</tr>
<tr>
<td>Rural vs. urban</td>
<td></td>
</tr>
<tr>
<td>Family vs. bureaucratic work system</td>
<td></td>
</tr>
<tr>
<td>Child care vs. non-child care services</td>
<td></td>
</tr>
<tr>
<td>Motivation</td>
<td>Whether the woman chooses to work or is &quot;forced&quot; into the labor market because of economic deprivation (desires to be at home) has consequences for fertility.</td>
</tr>
<tr>
<td>Work is desired or required</td>
<td></td>
</tr>
<tr>
<td>(&quot;Pull&quot; factors such as status, pay, mobility, and security rewards; and &quot;push&quot; factors, dissatisfaction with status, role rewards, desire to make a contribution to family exchequer, quest for exciting or social useful work.)</td>
<td></td>
</tr>
<tr>
<td>Resources for Child Care and Socialization</td>
<td>These resources singly or in combination are related to differential fertility to gainfully employed women.</td>
</tr>
<tr>
<td>Kin networks</td>
<td></td>
</tr>
<tr>
<td>Child care facilities (ability to pay)</td>
<td></td>
</tr>
<tr>
<td>Health care services for family including family planning; availability and cost</td>
<td></td>
</tr>
<tr>
<td>Types of Jobs</td>
<td>Does the woman have a future oriented commitment and emotional investment in her work as opposed to a short or fixed term perspective and minimal psychic reward.</td>
</tr>
<tr>
<td>&quot;Careers&quot; vs. jobs</td>
<td>Women competitive in male-dominated occupations are likely to have lower fertility than those in traditional female occupations.</td>
</tr>
<tr>
<td>Stereotypical male or female occupations</td>
<td>This involves a potential power shift in marital and family relationships.</td>
</tr>
<tr>
<td>Family Structure and Dynamics</td>
<td>If the woman has to do both jobs, home and outside employment, she may opt for the home which then increases the probabilities for higher fertility.</td>
</tr>
<tr>
<td>Decision making regarding use of earnings</td>
<td></td>
</tr>
<tr>
<td>Responsiveness of husband to shift in performance of household tasks and roles as a consequence of gainful employment of wife.</td>
<td>If cultural emphasis is on &quot;maleness&quot; and expression of it through work concurrent with a view that a gainfully employed wife is ego deflating to the male, then the stay in the work force is either likely to be limited, with wife returning to homemaking roles and consequential fertility, or disruption of the marriage.</td>
</tr>
<tr>
<td>Status orientation of male work role</td>
<td></td>
</tr>
</tbody>
</table>
Women in Gainful Employment and Fertility: A Beginning Taxonomy of Variable Components (continued)

<table>
<thead>
<tr>
<th>Suggested Variables</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generational aspirations</td>
<td>Families where women are gainfully employed and who have high aspirations for their children are likely to have lower fertility than similar families with lesser aspirations.</td>
</tr>
<tr>
<td>Sex role orientations of male</td>
<td>Where wife in gainful employment is viewed by husband as threat to sexual exclusivity, the greater his attempt to get her to quit work, the more likely the resultant male pattern of “keep them at home—barefoot and pregnant.”</td>
</tr>
</tbody>
</table>

Inkeles, 1966) and societal modernization. Operational definitions and measures of societal modernization are primarily based on socioeconomic variables such as Gross National Product (GNP), percentage of urban population, percentage in the non-agricultural labor force, percentage literate, miles of highway and railroad, or number of books published. Scales using these and similar items, while useful for gross classifications of societies, tend to be too product-oriented to yield behaviorally defined explanations or predictions. Although societal modernization is assumed to be closely related to greater role options for women and lower fertility, current measures are not adequate to forge meaningful links between these variables.

Elise Boulding (1972) finds that the recency of urbanization is critical in determining the impact of city life on the roles of women.

Centuries-long urbanization persisting through the turbulent rise and fall of many empires, accompanied by the development of highly institutionalized religious bureaucracies, have generated rigid confinement patterns for women. Such patterns of urban confinement establish a vicious downward spiral for the status of women. (p. 30)

According to Boulding, more recent urbanization seems to have liberalizing effects on the roles of women. In some instances, increasing industrialization yields decreasing employment opportunities for women and in others results in replacement of traditional higher status employment with lower status modern jobs. Contrary to expectation, industrialization can narrow the range of job opportunities for women and reduce the degree of autonomy and independence in the work setting.

Although current operational definitions of societal modernization may not be completely useful in predicting liberation of women or their competitive status in the occupational world, more industrialized nations do have lowered birth rates than those which are predominantly agricultural. While this relationship exists currently, it does not mean that urbanization and concomitant industrialization will have a depressant effect on fertility. Developing nations which expend a major portion of their resources for industrialization do not have to start from zero as was the case with Western Europe, the United States, and Japan. That is, they do not have to invent the cotton gin, steamboat, or assembly line. If resources are available, a country can import modern industrial equipment, techniques, and managers. Perhaps as a result, some developing countries that have attempted to industrialize certain areas do not find concomitant decreases in fertility. They are unable to fund adequately services which were concomitant with Western industrialization such as health, welfare, and education which may in turn reduce fertility. This suggests a working hypothesis: while a pattern of Western industrialization with annual increments in GNP and supportive human service institutions may decrease fertility, a “non-evolutionary” pattern of development involving importation of industrial technology for selected development may be less effective.

Similarly, developing countries which effectively reduce mortality using modern medicine, without policies and programs to reduce fertility, often find that the population increases at such a rapid rate that educational institutions are inadequate. Consequently, large numbers of surviving children remain uneducated.

For some investigators, modernization is tantamount to industrialization and urbanization to which is associated declining fertility. The relationship of modernization to fertility is easily confounded because most modernization indices are based on economic values and do not account for values and associations vital to individuals.
Changing Traditions...

Tien (1972) indicates that among residents in urban areas of Asia, a large proportion of city dwellers retains folk characteristics which are continuations of traditional structural arrangements. Inhabitants of Asian cities form village agglomerations within the city, a pattern also noted by students of immigration to the United States. The regrouping of "kinsmen" in neighborhoods is not conducive to effective socializing of individuals into modern ways. Boulding (1969) suggests that even if the family is situated in a neighborhood containing many kinfolk who have similarly migrated to the city from rural areas, these relatives cannot serve as a resource for modernizing the family. Only if one relative or family member has special aptitudes for "making it" in the city does the kinsmen become helpful in promoting family and individual modernization. Tien (1972) relates this insularity or families to high fertility in Singapore. He speculates that the erosion of family insularity, rather than modernization in the economic sense, contributed to fertility reduction in the West.

In summary, in the United States, education is probably the best societal indicator of fertility (Ridley, 1969). However, if education is based on a rationale to prepare women as well as men for work and imbues a positive orientation toward gainful employment, women may revert to pregnancy if unable to find a job in those societies where jobs for women are scarce. Education does not have to be oriented toward gainful employment but instead can be the means by which society presents alternatives to the traditional ways of life. If this is the case, then education alone may tend to decrease fertility. This brief discussion suggests that if a societal objective is reduced fertility, then universal education in societies where women do not have good job opportunities should be general rather than occupationally specific, or the society should have specific policies, legislation and programs to open the job market for women.

Micro-Analysis of the Family System and Fertility

In the final analysis, decisions, or often more accurately, non-decisions, about pregnancy occur within the family. Thus, adequate understanding of fertility behavior requires the study of family micro-social processes, in particular, analyses of role change and adaptation as a consequence of societal change and alternative rewards which replace the "need" to have large numbers of children. Although macro-analysis of variables relevant to fertility outcomes is both necessary and revealing, it is insufficient to provide guidance for effective population policy decisions and program design. We also need to know the perspectives of individuals and families on childbearing and compensatory options. Only then can intervention programs be designed which are relevant and meaningful to the participants.

There are several reasons why the family is a significant unit of research for understanding the relationship between women's roles and fertility behavior:

1. Traditionally, women's roles have been defined within the boundaries of the family. This tradition still pertains for the great majority of women in developing societies today. Even in developed societies where one finds a rhetoric of equality for women, the evidence remains that their social identities (Goodenough, 1963) are grounded in familial roles of wives and mothers. Even enthusiastic participants in the women's liberation movement who maintain personal identities as liberated women find that their social identity is frequently cast in familial terms.

Value orientations of most societies provide strong rationales to support the family as a basic societal institution. Childbearing and rearing are valued family activities, and traditionally are considered to be important roles for women. Even if the strong societal and institutional supports were removed, women's traditional roles would not be altered radically without concomitant changes within family groups. Women for whom motherhood and all its obligations remain central to their personal sense of worth, values, security, and identity are less likely to be family planning acceptors. Therefore, to attain lower fertility, there must be both societal and familial redefinitions of women's roles. There is a need to increase the number and availability of meaningful role options for women.

*Goodenough makes the distinction between personal and social identity. He defines personal identity as that which a person perceives about himself, his self-image. On the other hand, social identity is one's public image as perceived and defined by others.*
women; and family role changes are necessary if women are to perceive and make use of these increased options.

2. Since the family operates as a small social system, it follows that if within-family roles of one member change, the roles of other family members will also change. Redefinition of the role of wife/mother will involve redefinition and evaluation of the roles of husband, children and extended kin. Within the family system there may be a redistribution of power, reallocation of tasks, new patterns of participation and interaction, and changes in levels of motivation and aspiration.

3. Although not impossible, it is difficult for a woman to take on new, non-familial roles without the support and validation of these roles by other family members. Urban living in contrast to village life has a complexity which affords anonymity and privacy to individuals and permits compartmentalization of life sectors. A family member such as a child may be unaware of the nature of his parents’ occupations, knowing only that parents are absent from the home each working day. This pattern of separating role clusters and maintaining one’s privacy and autonomy is characteristic of modern life. There is the tendency of all family members to lead separate lives with the family’s approval. Discontinuities in role complexes are being accommodated. John Useem (1963) gives a useful example: Asian women in professional occupations leave home in the morning in Western dress and assume the role of authority and competence within the professional setting. But in the evening, these women return home, change to traditional dress, and behave subserviently in the traditional wife/mother role.

We see this also in many American dual-work families where both spouses are gainfully employed but maintain traditional marital roles at home. In essence, the wife has two full-time jobs—employee and housewife—while the husband has only one. At the other extreme, although the number is perhaps still few, we find androgynous marriages with non-sex-differentiated familial roles (O’Neil, 1972; Osofsky, 1971). Compartmentalization of work and family roles supported by family norms may mean that the work role has little effect on fertility. It is our conclusion that there must be fundamental changes in the value system of the family with a new formulation of egalitarianism in roles and family responsibility if fertility is to be affected.

4. The family is the arena where decisions to limit family size are made. Families, of course, can have many children with no conscious decision-making process occurring; but setting aside the exceptions where one of the marriage couple is sterile, ill, or disabled, limitation of family size rarely occurs without a conscious decision being made. The minimum number of people involved in such decisions would be husband and wife. However, in extended kin families, the pressure of the older generation for large numbers of grandchildren is often difficult for the couple to ignore. On the other hand, a woman who has the support of her family in limiting the number of births and for assuming non-familial roles is in a much better position to maintain low fertility than a woman who lacks such support or whose family and kin favor a large number of children.

Family recognition of costs of additional children. In the design of a family planning study proposed by the Social Research Center of the American University in Cairo (1971), emphasis is that changes in family dynamics may lead to lower fertility. One hypothesis is that the effective use of contraception will increase only if individual families perceive the economic and social costs of repeated pregnancies and large numbers of children. A corollary is that fertility is already low among segments of the population where perceived economic and social costs of children are relatively high. In this low fertility group, one expects to find families in which wives have paying jobs and engage in non-familial roles; parents desire as much education as possible for their children; there are expenditures and aspirations for new life styles; the extended family pattern has been broken so that grandmothers and other female relatives are not available to help care for children; and families are affected by inheritance laws which require equal distribution among children of money, goods, and land.

The Egyptian research team suggests a related hypothesis which, if valid, should be incorporated into every family life and population education program—the earlier and greater the investment (emotional, economic, and social) of
the parents in each individual child, the lower the fertility. (Social Research Center, American University, Cairo, 1971)

Family compensation for large numbers of children. Family size can be reduced by increasing the role options of women and by redefining women's roles within the family. Increased role options pertain to those beyond mother/homemaker and are largely outside the home, such as worker in the labor force, participant in voluntary associations, worker in a literacy program, activist in women's rights groups, campaigner for a political party, member of recreation clubs and sports teams. To date, research findings are not supportive of the notion that outside activities effect lowered fertility (Loewenthal, 1972). The primary reason is that researchers do not differentiate the conditions under which women seek such non-homemaking roles. To act as fertility depressants, however, roles outside the home must be self-satisfying to the woman and provide the family as well with compensations for large numbers of children.

In keeping with the ideology of the women's liberation movement, most discussions of women's roles emphasize needed freedom and equality and the psychic rewards of this changed status. Few have been concerned with the benefits that would accrue to the family. We can speculate about possible compensations:

1. The family would receive increased economic and social resources. If the woman is gainfully employed, there is added income for basic needs or extra purchases. If she is not gainfully employed, but takes on non-work roles such as community service or political action, the woman can provide options for other family members such as in becoming an "expert" and making available to them community resources and means for their use.

2. Another compensation is that the wife would be a more effective socialization agent by involving herself in outside roles. She can qualitatively enhance the socialization process by bringing into the home more alternatives for children to use in developing their competencies in interpersonal relationships and self identities. Socialization for social competence, we feel, is the priority function of the family in both transitional and complex societies.

3. With outside roles there is potentially less incidence of mental illness as a consequence of the wife's frustration and boredom. Non-working U.S. suburban homemakers are in the greatest risk group for neuroses and allergies. We hypothesize that accompanying active roles outside the home there are increased gratifications and improved self-images which will have a synergistic effect on the family interaction system.

4. With the wife working, the husband would be freed from complete dedication to striving for income, with consequential less rigidity in family role assignments along sex lines and age grades. The implication is that a more effective family structure would develop to accommodate the various capabilities, potentialities, and idiosyncrasies of the individual family members. An authoritarian childrearing system is less likely. Thus, children are likely to become more self-reliant and have stronger self-identity.

5. If the woman is gainfully employed, there would be the potential for greater social prestige and improved level of living for the family from the personal accomplishments of both spouses and the combined incomes.

6. Potentially there could be more effective use of leisure and non-working time. With both spouses working, time becomes a precious commodity not to be wasted, and consequently there might be better planning of family activities.

Work is one role option which may or may not be a tradeoff for a large-sized family. In the economic or work sector the increasing availability of jobs for women may be an option which, if taken, may or may not be a functional equivalent for fertility. The income, experiences, and conditions of entry into work as well as the work situation determine the importance of this role option for fertility.

Changing roles of women and fertility behavior. Adequate understanding of fertility behavior is impossible unless micro-studies of family structures and processes, development, and uses of options are placed within the context of macro-analysis of societies and their institutions. Below is a diagram which expresses this position.

As societies modernize, societal complexity increases and more options become available for work, leisure, group association, membership, health care, and education. The mere presence of options, however, does not necessarily mean that individual members of societies have equal
access to them. Often societal norms block access to individuals who have certain ascribed and attained characteristics. This is why we choose to include in a definition of modernization an increase in options for all societal members—women, men, and children.

Increased societal options for women

Impact on men's, children's, and other significant family members' roles

Perception and utilization of options

Changes in family dynamics

Compensation for the family

Lower fertility outcome

In societies where the traditional constraints on women are diminishing, women will still exhibit wide variation in their perception and use of options. This is illustrated by many rural migrants to urban settings who are unaware of activities and events that occur in the city. Some of the literature on poverty groups in the United States suggests that these people have a cognitive style which tends to preclude their perceiving and thinking in terms of options; choices are more apt to be yes/no decisions rather than weighing and selecting among alternatives.

For those women who do enter non-familial roles outside the home, one can expect changes in internal family structure and dynamics, and determine whether compensations for large families develop consequently. However, behavioral scientists know little about either of these processes. Although a few studies can be cited, the actual number in the field is small. Tien (1972), one of the few students of fertility to emphasize the family group, hypothesizes that fertility varies positively with (a) the degree that the family is a boundary-maintaining system, and (b) the degree of continuity in the stages of the family life cycle; on the other hand, fertility varies negatively with (c) the degree of diversity in the role cluster of husband and wife.

To the last proposition can be added the diversity in the role cluster of children. The fertility rate is influenced by the degree to which children play roles outside the family, and their awareness of options and benefits found in the outside world. This is because in many families the child is considered in the "cost/benefit" decision to have another child. Indirectly, a child who sees advantages to vocational training or a college education might, by voicing and planning these alternatives, influence parents to have fewer children. Directly, we know of illustrative cases where young girls attempt to persuade their mothers to use contraceptives. Among poverty-level single-parent families in the United States, large families are common; by the age of twelve, the oldest girl often cares for the younger children while the mother works. Since the young girl has to assume primary responsibility for daily care of siblings, she feels that she has a right to demand that her mother limit her pregnancies. Hill (1968) has indicated that good communication, equalitarian decision-making, and accuracy of spouses in perceiving each other's desires may result in lower fertility. In addition to effective dyadic interaction, the influence upon fertility decisions of existing children and extended kin needs to be considered in any research or demonstration program.

SUMMARY

In summary, internal family dynamics is viewed as an important intervening variable between changing roles of women and their fertility behavior. How important and powerful an influence this variable is will remain problematical until investigators develop a body of research on micro-analysis of family processes and fertility. In such studies emphasis should be placed on variations in family structure and marriage styles. There is an urgent need for comparative analysis of family systems within countries (Tien, 1972) as well as the need for cross-national studies on internal family dynamics, changing roles, and fertility.

REFERENCES


INTRODUCTION
In considering the plight of rural women in West Africa, several issues need to be given attention. What role do rural women and girls, who occupy more than half of the farm labor force in this region play in agriculture production and in the general management of the home and what are the implications of the attitudes and practices of this labor force for family planning? Also, as a challenge to home economists— who have the greatest single educational influence on women—what is the effect of family planning education on women's traditional, productive and distributive role in West Africa?

As very little research has been carried out on this in the specific region, the purpose of this paper is not to answer these questions but to consider women's economic roles as they exist and to indicate areas requiring further consideration by interested researchers. No consideration will be given to the role of women in wage-employment, in self-employment or to the school-leaver girl. This presentation is based mainly on rural women in West Africa.

Traditional Role
Traditionally in Africa, women's role in life has been limited to a great extent in domestic affairs. With the farm family as an economic unit of the rural community, women perform a variety of tasks both in the home and in the farm. In a family, a woman is expected to play the successive roles of a daughter, a wife, a daughter-in-law, a mother, a mother-in-law and a grandmother. She is expected to produce children and if she does not, this is frowned upon. She should be a good mother taking care of the children, cleaning the home, preparing food and working in the farm. She is prepared for this role as a wife and mother before marriage both in the home and in traditional institutions such as "secret societies." In some countries where traditional institutions are stronger and more advanced and in which women are very much involved in local trade as petty traders and business women, they form groups and develop thrift and credit societies on a large scale, with great success. Rural women are also grouped for handicraft, for marketing and forming cooperatives. As a result of the remarkable progress in development in African countries, traditional institutions are today becoming more and more affected, and women face and adapt themselves to the resulting complex patterns of living. However, in rural areas today, women are still strictly organized, and their attitude to pressures and changes of present day living is chiefly defined by their customs and traditional rules.
Women in Labor Force

In West Africa, where shifting cultivation is still practiced, the agricultural labor force is predominantly female. Women are the backbone of all agricultural work, spending 60% of their time doing so and sharing as high as 60-80% of the farm work. In most cases they work longer hours and more days than men. A farm management study in Sierra Leone (FAO/IDA) indicates that in a selected area the actual time devoted by women and girls exclusively to farm work in one working day was:

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Time Devoted (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-14 Years</td>
<td>45%</td>
</tr>
<tr>
<td>15-59 Years</td>
<td>50%</td>
</tr>
<tr>
<td>60+ Years</td>
<td>65%</td>
</tr>
</tbody>
</table>

These figures may not be statistically valid but they nevertheless provide an indication that rural women and girls make a considerable contribution to agriculture production and hence the economic development of their country. Apart from clearing of forests and farms and other physically demanding tasks, women undertake all the planting, weeding and harvesting processes. Regular and continuous farming for the production of subsistence crops have been their job, while the male members limit their participation to perform the heavy tasks such as felling trees and removing stumps. Also under the system of land tenure, polygamy is practiced as additional wives are an economical asset which helps the family to expand its production. There is also some relationship between the size of the farm and the number of wives and children in the family.

Agriculture, therefore, seems to be the major area in which the role of women would affect the economic development of African countries. When agricultural activities are improved by the introduction of innovations of modern technology, one would expect that family life would improve as the income of the farm family increases. However, when mechanized farm systems are introduced in place of shifting cultivation, female farm systems seem to disappear and the women are left to solve the state of jeopardy in which they find themselves. This change in farming system is usually brought about by increases in population density which make it impossible to continue with shifting cultivation to meet the increasing demands for production. Less hands are needed for mechanical farming and the men take over the ploughing which was originally women's work. What happens then to rural women when they are removed from the farm force? At what rate is the process of development affecting this role? What percentage of women are being affected?

These are the questions that need to be answered. It is generally felt that by lifting their burdens and increasing the productivity of their labors, women may have more time to spend as wives and mothers. Do they actually gainfully use this time? There are several obvious ways for rural women to engage themselves in their free time. They may become petty traders or engage in cottage industries; they may migrate to towns and cities as traders or to seek housekeeping jobs; they may live an unproductive life of leisure in their homes merely rearing and caring for their children. For those who find themselves as traders and business women their participation in economic activities outside the domestic sphere increases tremendously. Women traders of West Africa are legendary. Many of them are the sole support not only of themselves but of their children, who depend on them for livelihood and education. However, the percentage of women in this category is still small, the larger percentage continues to live in the rural areas, still engaged in traditional farming methods and still require large families to assist with farm work.

A second major role of women affecting economic development because of its relationship to their role as farmers is their role in child-bearing. As one would expect when women raise large families by repeated pregnancies at too frequent intervals, this would necessitate their withdrawal from the farm force a few months before and after delivery, thus affecting the economic productivity of this farm labor.

Though women in their role as a farm force represent an important element for the economic development of their societies, agriculture and socio-economic development in these countries, according to the prevailing conditions, is experienced as a slow process as development is nullified by too rapid population growth. Africa has been considered to be one of the highest fertility areas of the world. Several countries to date have a population and family
planning policy and in others non-governmental agencies sponsor family planning activities in a small scale. How effective are these in relation to reduction of the fertility level of rural farm women?

It is an extremely difficult task to relate development to fertility as so many factors are involved. It is usually said that in less developed countries where fertility is initially high, improving economic and social conditions is likely to have little effect on fertility until a certain economic and social level is reached. Once this level is reached, fertility is likely to decline and continue downwards until it is stabilized at a much lower plane. If through family planning education, the majority of rural families can be persuaded to adopt change in fertility and to space their children, thus improving the health of the mothers and increasing the chances of education of their children, a more promising outlook to socio-economic development of these countries may result. Family planning can only make this contribution to economic development to the extent that it brings about a modification of the attitude of rural women towards better family living and small family norms.

A Pilot Study

In a pilot study to test a questionnaire on family living and the activities of rural women in their home, carried out in Sierra Leone recently, all the women reported that they had farms and were engaged in farming. Fifty-three percent of them also reared chickens, goats and sheep which were considered as a source of income as well as food for the family during special ceremonies or occasions. They all had backyard gardens where they grew vegetables and fruit trees for home consumption or for sale to increase their income. All of them belonged to the extended family system which also practiced polygamy. The largest family consisted of 30 persons and the average number per household was 12 persons. Thirty percent of the women reported that though their husbands provided money for food and clothing and decided how the money should be spent, the amount they received was inadequate and they had to contribute to the family income by petty-trading, by cottage-industries, by selling the produce from their gardens and by various other enterprises.

With regard to family size, the general attitude in rural areas of West Africa is that large families, in keeping with custom, are desirable. In many areas people with large families are still regarded with high esteem and in areas with subsistence agriculture children are seen as assets. The more children in the family, the more hands are available for agriculture and the better are the chances of ensuring increased family income. A more important reason for the desire for large families is the prevalence of high rates of infant mortality in rural areas. Under the prevailing conditions in which the women live it

Size and Occupational Distribution of the Female Labor Force in Sierra Leone, 1963

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employers, own-account workers and family aids</th>
<th>Total</th>
<th>Employers</th>
<th>own-account workers and family aids</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Agriculture</td>
<td>41.9</td>
<td>41.9</td>
<td>5</td>
<td>43</td>
<td>42</td>
</tr>
<tr>
<td>2. Industry and construction</td>
<td>0.1</td>
<td>0.9</td>
<td>2</td>
<td>15</td>
<td>19</td>
</tr>
<tr>
<td>3. Mining, transport</td>
<td>0.1</td>
<td>0.1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4. Trade</td>
<td>0.1</td>
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* The number of adult women (i.e. women of 15 years and over) was 0.7 million or 51 percent of all adults
* Including animal husbandry, hunting, fishing and forestry
* Including unemployed persons
is advisable to have as many children as possible as insurance against losses through infant mortality.

The pilot study mentioned earlier was also designed to provide evidence of this. The women reported that they depended on their children for support in old age, as they had no form of savings and depended on the well-to-do members of the family to help during financial crises. They considered children as “God's blessing for mankind” and as company and security for old age. Seventy percent however, said they wanted no more children, their main reason being fear of poor health from frequent pregnancies. Among those who wanted more children, their main reason was a desire for a second son. If they did not have a second son they would stop having children only after they have had 5 daughters. When they were asked how many children they would like to have if they were just married, 30% said they would like three children including a son; 20% would like as many as 7, 8, or 9 children while the rest (30%) said they would have as many as God would give them. The majority of women who wanted more children wanted more hands to do the farm work or to make sure that at least some would survive to take care of them at old age. Those who wanted less than four children said they were not in a financial position to support many children. The role of women in almost all societies in Africa can therefore be seen as bearers of children who derive their main satisfaction from this function in maintaining high fertility patterns. Several studies have stated that with increasing numbers of children women tend to become more positively inclined towards family planning. The majority of women in this study, however, were at first unable to conceive of the economic stresses brought about by large families. Rather, to them large families were considered an asset. Children meant more to them because of the help they gave on the farm and in the home—children were a labor force. Having many children is advantageous both for the immediate social and economic reasons, and because of the persisting risk that the offspring will not survive to adulthood.

If rural women were relieved of their burden in the farm and from household tasks by use of modern technological and labor-saving devices would they adopt family planning and limit or space the children they have? Only 10% of the women in this study used methods of contraception—mainly traditional methods such as use of strong herbs. Eighty percent never discussed family planning with their husbands, because they might raise doubts of infidelity. However, they stated that family planning was not new to them because after they gave birth they had to abstain from relationships with their husbands for several months by living with their mothers and in this way spaced their pregnancies. Also breast feeding their babies did not allow them to have relationships with their husbands for as long as two years. Their husbands’ desire was usually satisfied by other wives. Seventy percent approved of family planning and would use the services if they were available and if their husbands consented. Their desire for family planning was based on the high cost of present day living. Thirty percent felt that a woman should have as many children as ‘God wishes her to have.’ The majority also felt that the best interval for spacing of births was two years. It is clear then that the desire for large families by rural women is being tempered or affected by how much it costs to rear children, the likely survival of children to adulthood and the benefits which healthy grown children are likely to provide.

Closely linked with the progress of rural women and their participation in economic development is their opportunity of becoming educated and their access to training programs. As women become more educated they tend to seek employment outside the home. When a woman’s responsibility as a mother conflicts with her employment a significant relationship appears to exist between fertility and employment. There is a tendency to smaller families when they are educated and employed. Today with the gradual rise in the level of education, the social and economic consciousness among women is increasing and women are gradually given positions of equal status with men. Also, traditional practices of child-marriage and polygamy are slowly being abolished as women are becoming educated through extension programs for better home and family living. They are gradually assuming their rights in their societies and making some contribution to the development of their communities. While stressing the importance of training women and girls for better home and family life there is a parallel necessity for educating them in family planning and at the same time making the services available to them. This will assist in motivating the female human resources to use their potential to the fullest capacity, in the rural areas...
where they have the major responsibility for productivity.

**Micro-Studies and Communications**

Demographers have naturally tended to concentrate their attention on macro-studies on the natural and ultimate effects of rapid population growth. They have long known that with sufficient economic progress, high birth rates fall sharply. This seems to be having little or no relevance to less developed countries where the majority of the population still lives in extreme poverty and where there is wide disparity of income and limited access to social services. Only a small section of the population in these countries benefit from family planning services and from the modern social and economic systems. The rest of the society living at subsistence level accounts for the high average birth rates. If women in less developed countries are to be convinced of the need for family limitation and spacing of children then micro-studies are probably more important than the existing macro-studies.

Research in these countries needs to be directed to solving the problems of the farm families so that skillful communication programs could be developed motivating the ordinary farmer and his wife to take rational steps towards solving the pending population problems. Family planning programs can succeed if the needs and problems are identified and conditions of living of the families are improved.

Rural women and men should be helped to understand that large and closely spaced families may have their advantages to them for reasons already mentioned, but that they also have long term adverse effects on the distribution of family income and family resources. Farm women as well as their husbands need to be sufficiently motivated to make improved decisions regarding the size of their families, the spacing of their children and to appreciate the resultant effects of their decisions on their health; family well-being and on the economic development of their countries.

**SUMMARY**

The combined pressures of poverty, ignorance, malnutrition and population growth in the less developed countries are intensely felt at the family and individual levels. Families living without adequate food, education, employment or health care have little future security. Many parents still conceive that having many children is advantageous for them, both for immediate economic and social reasons and because of the persisting risk that their offspring will not survive to adulthood. This conviction sustains high birth rates in those countries where malnutrition and poverty are pressing problems. Unless there is greater acceptance of the need for fewer children by the majority of rural women in Africa, efforts to stabilize population growth will not result in the desired outcomes. If less developed countries are to escape the threats of rapid population growth, families must not only be provided with the means to limit birth but also acquire the motivation to do so. There is in-

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**Demographic Information on Selected African Countries**

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Increasing evidence that economic development is an important condition to the reduction of birth. Though the relationship is admittedly complex, the development factor which may do the most to create an environment conducive to planning smaller families is the expansion of a variety of interests and satisfaction beyond the traditional family. Because women have to engage in farming to increase the family income, they tend to have many children to participate in the labor force. Improvements in agricultural technology in rural areas may lead to lower fertility of rural women if they are educated for their new role as homemakers and as wage-earners parallel to the provision of health, social welfare and family planning services which will enable them not only to widen their interests, but also provide the necessary inputs to enable them to make rational decisions towards better family living. It seems therefore, that strategies which bring about the greatest improvement in the welfare of the entire population in Africa are the same strategies with the greatest long-term effect in reducing fertility and population growth.

REFERENCES

3. A Pilot study on family living in Sierra Leone. Home Economics Department, University of Sierra Leone, 1973.
INTRODUCTION

Our cultural influences are very varied and our Hemisphere very vast. While we have multiple regional customs, there have been and continue to be—without our pinpointing them geographically—common phenomena that shape the social reality of Latin America. Many of the aboriginal cultures have had an influence on the national characteristics, inasmuch as the Iberian cultural contribution, though it had to adapt itself to the climate and to the structure of indigenous societies, turned out to be basically uniform for the entire region. The social makeup we find today was further molded by the forced immigration of slaves and the voluntary immigration of thousands of colonists from other areas. From this rich variety of typical cultural profiles we can distinguish outstanding aspects of great relevance to the destiny of the Latin American woman throughout our history.

The Woman in Indian Societies

The position of the Indian woman at the time of the Spaniards’ arrival generally corresponded to the individual characteristics of the fundamentally agricultural civilizations. The great empires such as the Aztec and the Inca were stratified societies with religions whose rites contributed to establishing the governing standards. As members of the family, women were treated in accordance with the importance of their husbands. In some groups the wife of the chief received a title, was carried on a litter or a hammock, and on her husband’s death even served as chief until a new one could be named. The virgins chosen to be sacrificed to the gods occupied a privileged position and received exceptional education and treatment.

Aboriginal traditions and the texts of the Spanish chroniclers make reference to facts and situations in which certain women played roles of decisive importance. A few examples bear out this point, among the oldest ones the cases of Mama Oclo, wife of the Inca Manco Capac, founder of the Tahuantinsuyo Empire, and Mama Huaco, second wife of Manco Capac. Shortly after the beginning of the conquest of Hispaniola, chroniclers reported that Anacaona, an Indian princess, reigned in Jaragua and that she was hanged by the Spaniards in 1500, having been accused of directing the slaughter of the garrison Columbus had left at Fort Natividad. Two of the greatest enterprises of the conquest, those of Mexico and Peru, were carried out with the personal cooperation given their captains by Indian women: Marina (La Malinche) and La Capillana, who aided Cortez and Pizarro, respectively.
Indian women were of great importance in the relations between the Spaniards and the Indians. Frequently they served as “tongues,” or translators. To ensure peace, the chiefs offered their daughters and sisters as wives for the conquistadors, who sometimes married them legally and other times kept them as concubines. The sons of these unions were recognized as sons of the Spaniard, and the daughters were given in marriage as a way of preserving peace among the conquerors. It is interesting to note that the woman was utilized as part of the machinery to institutionalize relations; she was considered to have a passive nature, never an active one.

The Woman in Colonial Times

Shortly after the colonization began, the Spaniards brought over their Spanish wives and maidens to accompany them. Throughout the colonies the kings granted dispositions to stimulate the travel of women to America.

The first noteworthy case of large-scale female immigration took place in connection with the establishment of the Viceroyalty of Diego Columbus, son of the Discoverer, in the first New World capital, Santo Domingo de Guzmán. Don Diego wanted to raise the society of the recently conquered island to the level of his rank, and as he began construction of a grandiose castle, the Alcázar, to house his court, he sent to Spain for his wife, María de Toledo, and a large contingent of marriageable, refined, and dignified future wives of future captains. The young ladies were lodged on a street that today still bears the high-sounding name of Calle de las Damas [Street of the Ladies].

The woman as such was not excluded from holding high titles nor, should the occasion arise, from filling very important positions of command in those New World territories, just as she was not excluded in Spain, where, indeed, the material and spiritual direction of the great discovering and conquering enterprise was provided by a woman, Isabel the Catholic. As examples we might cite Beatriz de la Cueva, who inherited the governorship of the Captaincy-General of Guatemala from her husband; Isabel Manrique, governor of the island of Margarita; Isabel Pedrarias, whose husband, Governor Hernando de Soto, left her in charge of the affairs of Cuba when he went off to explore the lands of Florida, where he met his death; Catalina de Saavedra, wife of Pedro de los Ríos, Pedrarias’ successor; and María Peñalosa, mother of the Contreras brothers.

The list of names is not very long, for the chroniclers generally failed to include women. Only when something extraordinary occurred concerning women—a shipwreck, and armed conflict, an especially bloody death—are they mentioned.

The styles of dress, social etiquette, enrichment of daily life, development of culinary arts, education of children, and other aspects all give us a clear picture of the influence of the woman during the colonial era. From the beginning of the conquest, there existed in effect a double standard of morality. Generally speaking, only those women of the upper classes married legally. In truth, a lack of legal structures—which even today affects the popular masses of many Latin American countries—is a condition inherited from colonial times.

The mixture of races and the mobility of the population in search of a better life were factors that contributed to that lack of family integration. Negro slaves of both sexes and their children were the property of their masters, who did with them what they wished with no consideration for blood ties. Uprisings and escapes by slaves who fled from the populated areas into the jungle carried these human groups far from the influence of society. In addition, the conquistadors and colonizers had no qualms about taking women other than their wives along on their adventures and explorations. This custom continued throughout the wars for independence.

Lima, Quito, Santa Fe de Bogotá, and Mexico City were the centers of greatest culture and luxury during the sixteenth, seventeenth, and eighteenth centuries. Among other chroniclers, Ricardo Palma, author of Tradiciones Peruanas, gives us access through his tales to many picturesque customs and more than a few dramatic episodes in which women of the epoch were central characters. The famous topúlas of Lima suggest a desire to frustrate curiosity and avoid the censure of an excessively conservative and rigid society. The institution of the duenna was intended to keep strict control over women.

A few women did manage to gain fame or notoriety during the colonial period. Sor Juana Inés de la Cruz, the greatest Mexican woman poet, was one of the first. Her virtue and her influence on literature stand in direct contrast to the dissipation and social power of Micaela Villegas (La Perricholi), lover of Viceroy Amat of Peru. There were also women who, in spite of the rigidity of the customs, gloried in their per-
sonal worth and leadership abilities. Such was the case of Isabel Barreto, the Peruvian noblewoman who took part in Alvaro de Mendana's expedition to Asia and, on his death during the crossing, assumed command of the mission and guided it safely to Manila, discovering the Marquesas Islands in the process. A Columbia woman of incredible courage, Manuela Beltrán, defied colonial authorities during the Commoners Movement in 1781 by publicly tearing up an edict raising taxes to abusive levels.

The behavior of Brazilian heroine Rosa Maria Sequeira, born in Sao Paulo in 1690, was no less spectacular. She was accompanying her husband on a journey when three Algerian pirate ships came into view. To the surprise of the crew, which had already decided to surrender, Rosa Maria bravely took over the defense of the ship and, after two days of fighting, forced the attackers to flee.

As we have said, these examples are exceptions rather than the rule, for in colonial society everything was aimed at reducing the role of the woman to that of a submissive, hidden away daughter and wife. Women were normally allowed to venture outside the household only to run a school, take care of the sick, help in charity hospitals, give food to the destitute, and the like—jobs that women largely continue to do today.

The Independence Movement

The awakening of a nationalist consciousness affected both men and women, but among the latter patriotic feeling served as a stimulus for venting secret and long suppressed rebellion, now fully justified in accordance with the revolutionary ideas.

In effect, never before in the New World had the woman found her own setting, and it is perhaps for this reason that every country of the Hemisphere, without exception, has examples of heroines who placed patriotic impulse above all the traditional limitations and restraints.

A list of women who during an entire century of rebellions and uprisings—not always successful—stand as testaments to efficiency and valor would be endless. Stories and documented proof that there were indeed many abound; but for the ends of this study we will make mention of only a few memorable facts and names; Mercedes Abrego and Carlota Armero, Colombian patriots, both shot to death by the Spaniards; Dolores Bedoya, who worked zealously for the independence of Central America; Andrea Parado de Bellido, liaison for the liberating armies, killed by the Spaniards in Ayacucho, Peru, in 1822; Luisa Cáceres, a heroic Venezuelan who, with her husband, the patriot Juan B. Arismendi, played a decisive role in liberating the eastern part of the country; Manuela Cañizares, an outstanding figure in the Ecuadorian revolution of August 10, 1809; Manuela Sáenz, known as the General, who accompanied Bolivar on many of his campaigns, worked diligently for independence, and despite the censure of Quito society, secured its aid for the cause; Pancha Carrasco, Costa Rican heroine who distinguished herself in the 1856 struggle against filibuster William Walker; the Chilean Javiera Carrera, sister of three heroes, who induced them to rebel against the Spaniards; Manuela Medina and Mariana Mendizábal, both Mexicans, who fought for the cause of independence; Josefa Ortiz, also a Mexican, known by the nickname "the Corregidora of Querétaro"; Candelaria Pérez, called the Sergeant, a title she was awarded for her fighting for Chile's independence; Pola Salavarrieta, executed by the Spaniards in her country, Colombia, in 1816; Mariquita Sánchez and Maria Remedios Valle, Argentine patriots of heroic stature; La Varona, the valiant Cuban who, captured by the Spaniards and placed before their troops as a protective shield, shouted "Fire, you patriots!" to her comrades; and finally, to end this already lengthy list, another Cuban symbol of heroism, Mariana Grajales, the mother of the Maceo brothers.

The Republican Era

Independence in itself did not automatically bring any new rights for women. In most of the countries the incorporation process was very slow, due more to class prejudices than sex prejudices. It was the expansion of educational opportunities for women that had the greatest influence on their social destiny.

But even today it has been proved that there are more female than male illiterates and that women's technical and occupational training is inferior to that of men. This point should be stressed, since education continues to be the factor with most impact in promoting the advancement of the Latin American woman.

The first feminist movements began around the middle of the nineteenth century in countries with more developed legal and economic structures. Women, in addition to the personal
Influence they might exercise within the family or the community, began demanding their legal rights and new socio-economic conditions to improve their existence. Leaders motivated by the unjust discrimination that imprisoned them fought bravely from then on for the liberation of half the human race.

In Latin America that movement began later, after the turn of the century. Some women such as Flora Tristan, a Peruvian who lived in France, wrote on the subject. Others earned reputations as professionals and creative artists and, without referring specifically to the problems of women, opened up avenues for their solution. Gertrudis Gómez de Avellaneda (Cuban), Gabriela Mistral (Chilean), Victoria Ocampo (Argentine), Alfonsina Storni (Argentine), Juana de Ibarbourou (Uruguayan), and Amanda Labarca (Chilean) were leaders in this field. Among the Spanish authors of the era who exerted an influence on the cause in Latin America mention should be made of Concepción Arenal, Fernán Caballero, and Gregorio Martínez Sierra.

There were also feminist parties in some Latin American countries. In Argentina Julieta Lanteri founded one in 1919, and in Panama Clara González organized another in 1925. But at the end of World War I a few countries had conferred the right of suffrage on women.

The Panorama Today

It is an undeniable fact that, in spite of the battles won—and not without effort—during the last decades, the Latin American woman has not made sufficient progress to put her on a par with her equals in the more developed societies of Europe and, indeed, our own Hemisphere.

In effect, the Latin American woman continues to be hindered by a social atmosphere that could be classified as traditional. The principles and standards of conduct that reigned in the last century continue to affect large groups of the female population, especially those as yet untouched by the technical developments that have come about in major Latin American cities. It is true that women may now attend school with less difficulty, and that the number of women working in offices or in the business world and attaining positions of responsibility and leadership in both areas has increased considerably. But this continues to be the exception rather than the rule, and holds true only for the cultured minorities. While legal definitions of equality are recognized and proclaimed as a matter of course, the practical application of that parity generally speaking does not exist, since inherited social prejudices remain as barriers to the process of fully incorporating women into national development. The Latin American woman has not yet reached the position where absolute equality of possibilities with her male counterparts exists, and as an inevitable consequence her potential for constructive initiative and work is not yet taken advantage of completely for the benefit of society as a whole. The migratory trend from the country to the city brings many people of both sexes to the metropolises who lack the specific technical skills to qualify them for rewarding, adequately paid jobs. Out of this legion come the thousands of domestic servants who, once settled in the cities, rarely manage to improve their conditions by getting better paying, more secure jobs in workshops, commercial establishments, and public institutions. This is in no small part due to the fact that there is a lack of schools for adults and of specialized training to help this mass of workers achieve the advancement they deserve. In some cases there is not even any legislation to regulate domestic work.

The points we have mentioned are but one aspect of the problems of women within the complex of social relations in the countries of Latin America. The great movement of inter-American cooperation that fixed new goals of socio-economic development for the Hemisphere and that is today the major preoccupation of our governments inadvertently had an effect on the situation of the woman, as it emphasized the contribution her active participation could make to the development process. But the fact that women had been inactive in all constructive economic and political activity for such a long time had all but converted the female population into a weakened social sector, inept at the performance of non-traditional jobs. Thus was pointed out the necessity of giving specific treatment to that social group by means of a coordinated action of both official and private initiatives and efforts, at the national as well as the international level.

Inter-American Commission of Women (CIM)

The year 1928 is of great importance in the history of the feminist movement in the Hemisphere. It was then that the Sixth Inter-American Conference of American States, which met in Havana, Cuba, reached the first consen-
sus of opinion favorable to the need of officially promoting the conquest of the civil, political, and economic rights of women. The creation of the Inter-American Commission of Women was, in effect, the first Hemispheric response to the great problems facing the woman in Latin America. This Conference also resolved that the twenty-one American republics that made up the OAS at that time be officially represented in the new organization. Later, in June 1953 the Commission became a Specialized Organization, a status ratified by the Tenth Inter-American Conference, meeting in Caracas, Venezuela, in 1954.

Originally, the primary function of the Inter-American Commission of Women was to work for the extension of the civil and political rights of women in the Americas. For a long time the Commission waged a campaign specifically directed at obtaining the right to vote for each and every woman in the member countries of the inter-American system. Today all the countries of the Hemisphere have recognized the right of suffrage for women. The new Organic Statute of the Commission, revised in 1968, lists as a chief function "to work for the extension of civil, political, economic, social, and cultural rights to the women of America."

A series of seminars yielded data of great usefulness for the identification of the specific problems in the various countries of the Hemisphere, and by 1966 the first Course for the Training of Women Leaders took place, followed by other courses in different specialties. In 1971 National Courses began to be held on a regular basis, and in 1972 the Inter-American Specialized Conference on the Integral Education of Women was held with the cooperation of the Inter-American Council for Education, Science, and Culture of the OAS.

The Commission has always held that one of the most urgent and badly needed priorities in an overall approach is that of intensifying participation in the national life at both the national and regional levels. To that end, the CIM holds courses especially designed to train rural women to achieve effective participation and an active consciousness in the life of their communities and their countries.

Seminar on the Incorporation of Rural Women into the Development of Their Community: The Commission has always held that one of the most urgent and badly needed priorities in an overall approach is that of intensifying participation in the national life at both the national and regional levels. To that end, the CIM holds courses especially designed to train rural women to achieve effective participation and an active consciousness in the life of their communities and their countries.

Seminar on Problems of Indian Women: These seminars are designed to study the problems facing Indian women and to analyze the programs carried on to benefit this sector. Practices to be followed are determined on the basis of this exchange of knowledge and experiences.
Seminars on Latin American Integration: Dedicated to promote greater cooperation by women in the process of Latin American integration, these seminars are especially concerned with the diffusion of the principles, purposes, and goals of the integration process.

Seminars on the Woman Folk Artist: Recognizing the need to give specific treatment to the woman folk artist, many of whom are rural and Indian women, these meetings were begun to examine the problems peculiar to this activity and propose solutions for those problems, bearing in mind national characteristics and priorities.

National Seminars on the Problems of Young Women: The aim of these seminars is to examine, at a national level, the problems that face the young woman. Young people in Latin America constitute more than one fifth of the total population and, according to demographic projections, that percentage is increasing at a spectacular rate.

Coordination of Efforts

International initiatives and agreements would be useless if they were not backed up by their indispensable counterparts: the cooperation and encouragement provided at the national level. The CIM considers it a basic part of its strategy to seek and obtain the necessary cooperation of each and every member country of the OAS through every possible means. In this sense, the CIM seeks the concerted and combined action of all the substantive areas of the General Secretariat, of the various Councils, of other Specialized Organizations, and of governmental and non-governmental entities, in order to avoid duplication of efforts and thereby achieve efficient and integral development in all our countries.

Revision of Civil Codes

At the end of the 1960's, the Inter-American Commission of Women started a campaign for the revision of the civil codes of the member states, in order to eliminate from them discriminations against women or provisions that might lend themselves to discriminatory practices and in so doing bring the de facto situation in line with the de jure condition.

Women's Bureaus

Since 1949 the CIM has been working to persuade the governments of the Americas to establish Women's Bureaus, charged with the basic responsibilities of improving the juridical and social situation of working women, who constitute a great part of the human resources needed by our countries. Among their functions are:

1) to assure compliance with laws governing work by women; 2) to make sure that women working are not subjected to discriminatory practices; 3) to study and find solutions for the problems of working women and promote betterment of their economic, social, and cultural conditions; 4) to provide work and technical training to women in order that they may have better opportunities for employment; and 5) to carry out any activities that tend toward incorporating the woman into all levels of national life, as well as into drawing up and executing development plans.

Both the Third and Fourth Inter-American Conferences of Ministers of Labor, as well as the Eighth Meeting of the Inter-American Economic and Social Council, have recommended the establishment of Women's Bureaus where they do not exist and the strengthening of those already in existence, as viable means for improving the situation of the working woman, achieving her incorporation into the labor force, and optimizing her usefulness as a human resource by providing courses for technical training, among other measures.

Applied Laboratory on Technical Education of Women

The Inter-American Commission of Women is convinced of the need to train the women of the Americas so that they may achieve positions of leadership in all aspects of social, economic, political, and cultural life, in order to promote their effective and permanent participation in the planning and carrying out of programs and projects aimed at promoting the overall development of the American nations. It is of primary importance that the working woman receive technical training that will qualify her to join the labor force of her country and thus contribute to the development of her homeland in a more effective manner.

Bearing this in mind, a project for an Applied Laboratory on Technical Education of Women is being organized under the Regional Educational Development Program, in cooperation with the Department of Educational Affairs of the Organization of American States and the Government of Argentina. It will promote activities destined to open up technical careers at the intermediate level to women, in order that there may be a greater participation by women in the labor force.

National Committees of Cooperation

The National Committees of Cooperation are of a statutory nature and carry out the functions...
of the CIM at the national level. They are presided over by the Principal Delegate of each country to the Commission, who in turn directs the activities of the committees and appoints their members from among the outstanding women from different fields of interest in national activities.

From the foregoing, we can easily see the decisive importance of the National Committees of Cooperation—which are truly in charge of implementing the programs drawn up at the international level—in women's quest for their legitimate aspirations. Among their duties are to work for the elimination of all kinds of discrimination for reasons of sex; to see that the educational systems give access to women to study for technical professions and in professional training programs; and, finally, to foster a more active social, civic, and political participation by women in their respective countries, in order that they may attain the highest levels of responsibility.
Part II

Family Planning/Population Education
POPULATION EDUCATION

Family planning programmes are oriented to the future quality of the life of individual families and of nations. In spite of this orientation toward the future, the current generation of young people who will make up a significant portion of the adult population in the next decades has received little attention in family planning programmes. With the reduction in infant mortality and control of early childhood diseases, over 40 per cent of the population in many developing countries is under 16 years of age. The reproductive behaviour of this group when it reaches maturity will be of central importance in the effort to control the rate of population growth.

Priority in existing family planning programmes has been given to sectors of the population in the reproductive age levels. The KAP studies have indicated that programmes of action could reach these sectors with some degree of success, and so first attention has been focussed on those who were currently having children. Since financial and personnel resources are limited, the setting of priorities has of course been necessary.

In addition to this priority problem, other factors have diverted attention away from young people. Among these factors are the following: (1) the problem of family planning may seem to be of little concern to young people who are preoccupied with other more immediate interests; (2) attention to any area of knowledge closely associated with family planning among the immature might place in jeopardy basic social values pertaining to sex and family life; (3) the clinical orientation of most family planning programmes with the focus on providing an immediate service to clients has tended to shape the thinking about family planning, so that education or long-range considerations have low saliency. Since children and young people have no reason to be clients in family planning clinics, they can be ignored until they are producing children of their own.

For reasons such as these, children and young people have been reached only as an unintended by-product of diffuse efforts and in particular by exposure to mass media addressed to adult audiences. The audience reached by mass media cannot be tightly controlled. And so radio and television, road-side billboards, travelling displays, picture magazines, and even the public meetings in the village usually reach people without prior selection except as the media selects the audience through physical accessibility or literacy or language skills. Children and
young people may not fully understand the message being transmitted, but they are frequently exposed nevertheless.

In view of the need to reach young people and the factors which have in the past restricted attention to this age group, an educational programme carried out through the formal education system is an approach which seems to hold particular promise. Many of the issues and problems noted above which have restricted attention are precisely the kinds of issues and problems educational systems have been created to solve.

Educational systems are (1) future-oriented; (2) they develop skills, competencies, and attitudes which other institutions in a society need but cannot themselves afford to assume the responsibility of developing as a first priority; (3) they are constantly confronted with the task of working with the immature and inexperienced to prepare them for adult roles which are beyond their chronological age or experience; and (4) they know how to deal with a problem educationally when the clinical approach is not relevant. In summary, education systems can make the kind of educational contribution to young people for future family roles that it makes for other future adult roles, e.g., occupations or citizenship.

In the consideration of an education programme designed to attain the family planning goals noted above, educators frequently hold two preconceptions which need to be explicitly examined. These two assumptions are that an education programme in the schools must mean a focus on (1) instruction in schools in the use of special means of contraception; or (2) a programme in sex education. Neither of these is necessarily involved in an education programme, but since these are commonly assumed as central features of an education programme, it is important to examine the reasons for and the consequences of such assumptions.

The preconception that an education programme in schools related to family planning objectives would of necessity focus on instruction in contraceptives is based in part on the history of the family planning movement, and in particular the models established by pioneering voluntary agencies. Family planning has come to be identified with clinical services to individual clients and particularly to women. Educational activities for such clients have been directed to encouraging clients to go for clinical services and to informing such clients about the alternative means of contraception.

The KAP studies in country after country demonstrated that a significant proportion of married adults wanted assistance, and it is assumed that the latent desires of many others will become manifest as a result of effective communication.

With these assumptions, comprehensive population policies have not been seen as necessary. In this framework public action is focused on the provision of clinical services and contraceptive supplies, supplemented by necessary administrative arrangements and mass communication efforts. Other types of public action such as revision of tax structures, new social security arrangements, housing policies, new inheritance laws, or school programmes have not seemed necessary or have at best a very low priority.

Educators in such a setting are likely to assume that they have no legitimate role to play since an education programme focused on a clinical approach to contraception is not appropriate for young people. Since many educators have made the assumptions noted above, they have not given attention to some of the significant aspects of population and family life which are within the legitimate domain of the education system.

The second incorrect assumption which some educators make is that the educational counterpart for young people of family planning education for adults is sex education. This assumption is likely to be held by educators in developing countries who are quite familiar with education in some European countries and in the United States.

The factors which have led to the initiation of programmes in sex education in western countries are essentially unrelated to the factors which have led to serious public concern with population growth in developing countries. Interest in sex education has developed in countries in which family planning is already extensively practised, rates of population growth are relatively small, nuclear families are prevalent, considerable movement toward the emancipation of women has occurred, and familial constraints on young people have been considerably reduced.

Sex education as it has developed in the West is very much oriented to the special problem associated with that social structure, and as such, encompasses many elements which are of limited concern for societies with different
structures. In addition, it is focused on the individual and largely ignores family or national problems associated with a given level of birth rate.

Interest in unplanned births is largely focused on illegitimate births. For this reason educators or family planning leaders in developing countries should not assume that the potential contribution of educational systems lies in the institution of a sex education programme as it has been developed in the West.

In the analysis presented above, it was shown that the terms "family planning education" and "sex education" do not identify the appropriate content for the education system. There is no widely used term or phrase currently in use which denotes the relevant scope and limits suggested above. We shall use the terms National and Family Population Education, and Population Education for short. The significance of reproduction behaviour for both the individual family and for the nation can be subsumed under such a general heading.

The specific form which population education might take in any particular setting would need to reflect consideration of both the population policies and the characteristics of the education system of that country. The listing given below of possible foci of attention are presented as examples and they are described in general terms. In some instances, reference is made to grade levels and subject areas in order to make the illustration clearer.

Basic Instruction in Population Dynamics

Students can be instructed in the pattern of population growth with particular attention to birth and death rates and rates of population increase in their own countries. As the students progress through the schools, the world-wide picture of population growth can be examined. In classes in national, regional, or world history, in geography, and in civics, the significance of population growth can be studied. Routine problems in arithmetic exercises using population data can provide incidental learnings.

Development of Basic Understanding of the Process of Human Reproduction

This can be achieved progressively at different grade levels as the interests and maturity of students permit. Specific artifacts of contraception need not be presented but factors which facilitate or impede reproduction in various forms of life can be identified. The science curriculum is a natural setting for such instruction. For some age levels and in some schools, health education or domestic science classes may be appropriate. It is assumed that both boys and girls would be reached in instructional settings where the materials that are introduced will seem to fit naturally into the sequence of study.

Understanding of Health Problems Associated with Childbearing

Several well-established clinical findings could be examined here concerning the health risks of morbidity and mortality of the mother associated with:

(a) Pregnancy of the young mother and the older mother.

(b) Short intervals between pregnancies.

(c) High parity.

The health problems of children born under the same three conditions should also be considered. From such an examination the health values for mother and the children involved in marriage at a mature age, of spacing, and of limitation in the size of the family could be shown. The propositions here are sufficiently simple to be considered in health education classes in the lower grades but could also be examined in more detail in high level health education and science classes. Both boys and girls should be equally concerned since the future father's stake in the health of his wife and children is no less important than that of the future mother.

Appreciation of the Relationship Between Quality of Life for a Family and its Size

In addition to the health values noted earlier, consideration needs to be given to the economic and social consequences for a family of the presence of a number of children. With a given level of resources and earning power, the larger the family, the smaller the share per child. This is particularly true for the town and city family. The consequences are felt not only for housing and food but also in terms of the family's ability to provide for the education, health, and other needs of children. The analysis of these problems
can be viewed both in terms of the individual family and in terms of a community or total society.

The location of the area in the curriculum presents some problems. At the upper primary schools, the community study in social studies may be an appropriate place, and civic classes, economic classes, and geography classes in the middle and secondary schools may be the best locations. In the schools with domestic science for girls, this problem may be easily fitted in.

Appreciation of the Significance of Population Characteristics and Policies for Social and Economic Development

This problem is a more complex and abstract problem and may not be pursued seriously in the lower grades. Here the impact of rate of growth, of age structure, of urban migration and similar demographic characteristics for economic development and for the ability of the society to provide personnel and facilities for public services such as education and health need to be fully understood. Of special interest for a number of countries is the problem of an adequate food supply which will not only permit a minimum diet for all, but make possible some progress toward improvement in the quality of the diet. This is not only a health need as such but basic for a population which wants to be more energetic and productive economically.

In the secondary schools where national history and current development problems are considered, one could expect that adequate treatment of population could be included. Similarly in geography, more serious attention to population is possible. In the lower schools, a selected set of basic ideas could be included with emphasis on the local community, particularly in the social studies classes.

Familiarity with the Population Policies and Family Planning Programme of One’s Own Country

In the context of becoming socialized for adult citizenship roles, each student can be made familiar with the implicit or explicit national population policies and programme in family planning. In the lower grades, the presence of family planning facilities and symbols can be treated along with other community resources. A fuller explanation of the factors which have led to the development of current policies and programme can be handled in increasing depth at the upper school levels.

Students should know enough about the purpose and resources of local family planning clinics, public and private, so that they will be in a position to take advantage of its facilities if they should want to when they are married. Knowledge of the purpose and availability of clinics can be transmitted without teaching about specific contraception methods, particularly in view of the rapidly changing nature of contraceptives.

Educators interested in population education are at a disadvantage as compared with other professionals involved in family planning because the body of experience in education is very limited. No models are available to adapt to local circumstances. During the past few years a number of specific education projects have been undertaken at various places but none of these represents a comprehensive programme. The list given below is illustrative.

1. The syllabi of courses as established by the government are being examined in East and West Pakistan to determine the degree of correspondence of such syllabi with the national objective in family planning.
2. In Korea, a committee of education and family planning specialists has reviewed the textbooks currently in use, as a step in the direction of insuring that the content is consistent with the public policy on family planning.
3. Special materials are being prepared in India for the neo-literates which deal in various ways with population and family planning.
4. Experimental and pilot projects for pre-service teachers have been held in Colombia, India, and Pakistan.
5. Special programmes for school-leavers have been held from time to time in Singapore.
6. Several local schools in the United States, e.g., Baltimore, Maryland, have developed special units of study at the secondary level dealing with population problems in the United States and around the world. Special packets of instructional materials dealing with population education have been assembled and sent to a number of secondary schools in the United States by
the private association Planned Parenthood-World Population.

7. UNESCO has taken action which recognizes the role of education in this field and proposes to assist countries requesting educational aid.

These illustrations indicate that education and family planning specialists are beginning to initiate special activities. However, the steps which have been taken are not necessarily a part of a fully developed programme. The formulation and implementation of a population education programme is not an easy task since serious innovations in education require supporting changes at a number of different parts of the education system. An identification of at least some of these different parts will aid in understanding the recommendations which are made below.

In order for population education to be firmly established, changes at all of the following points must be made:

1. official syllabi for courses
2. content of approved textbooks
3. content of certain external examinations
4. content of work of the inspectors and supervisors
5. pre-service education of new teachers
6. in-service education of experienced teachers

The problem is further complicated by the fact that population education involves changes in a number of different courses and levels rather than at one point in the system. For a number of reasons, population education cannot be presented as a course of study at a given grade level, as so many different courses and levels are involved.

Special characteristics of the education system of a particular country will influence the character of the programme which is developed. The following are some such characteristics:

1. Drop-out or stagnation pattern: If the rate is very high in the primary level, attention to some aspects of population may need to be placed at that level even though the educator might believe that it could be better handled at a later age.
2. Size of school units: Large school units permit a finer division of labour with specialists in different subject areas. In a country with many small schools, a higher proportion of all teachers would need special preparation.
3. Curriculum emphasis: National education systems differ in the extent to which they deal explicitly with problems of contemporary social concern. In a system which does attend to current concerns, the curriculum pattern is more easily adjusted to include an area such as population education.

4. Pattern of centralization: Although education in many developing countries has a high degree of centralization, a number of countries leave major control or administration to districts or states, e.g., India or Pakistan. An innovation in education is: the decentralized settings require special planning in each of the separate units. Differences in these units in language and culture may require somewhat distinctive approaches within a general national framework.

5. Specialized schools: At the secondary level, the presence of specialized schools poses a special problem because of their distinct curricula. The number of students in vocational, religious or other such special schools may be relatively small. However, the curriculum of such schools are frequently less rigid than those schools closely linked with university requirements. In addition, some specialized schools such as home economics or domestic science schools may have special relevance for population education.

Strategies for Change

As noted earlier, there are no models of population education in any part of the world to which an educator can refer. Even the choice among proto-type instructional materials is limited. The suggestions presented below are designed to recognize some of the general features of education systems and the conception of population education discussed previously.

1. Organized linkage of Education and the Family Planning Agency: Inter-agency cooperation and action is almost always difficult to organize and carry through. In this instance, the major planning and implementation must be under the control of education. Family Planning programmes are typically under the administration of Ministries of Health. Some linkage with education may already exist in the field of health education, but these are likely not to
be strong links because of the low priority given to health education in most education systems.

On the basis of these factors, it seems wise to provide for a special structure in the leadership of the Ministry of Education. In addition to the educators, resource persons such as family planning specialists, demographers, manpower planners, and family life specialists should be included. In some countries such resource personnel may be attached to the family planning agency or they may be in other ministries.

This inter-agency group is a logical unit for planning the development of population education programmes. It may choose to develop pilot projects as a setting within which to test various procedures and instructional materials. The experience of evaluation specialists in the family planning agency may be useful at this stage.

Population education, however, is different from family planning programming and the family planning personnel needs to be on guard against trying to impose their approach on the educators. Clarification of the special education goals or objectives is an important first step since the content for schools will be different at many points from that of the usual adult programmes.

2. Teacher Education as a high priority: Early attention should be given to teacher-training institutions and particularly the institutions training elementary school teachers. The control of elementary teacher training institutions is typically in the Ministry of Education and changes are more easily made there than in the universities and their affiliates where secondary school teachers are usually trained.

The approach to teachers has several dimensions. Population education should be a part of the general education of all teachers. In addition, those teachers whose assignments may include some aspect of population education will need special instruction. Furthermore, consideration of the pedagogical problem involved in providing effective education in population can be worked on in teacher-training institutions.

3. Knowledge and attitude studies: The KAP studies which have proved useful for the adult programme can be adapted for studying the knowledge and attitudes of young people who are in school. Collaboration between research sections in Education and the Family Planning Agency may be useful. The results of such research would help the educators to identify the nature and magnitude of the education needs which the population education programme should meet.

4. Publication of basic reference book: The preparation of instructional materials for population education is of special importance because of the great reliance on textbooks for instructional purposes. It has been noted earlier that a special course is not seen as feasible and so modifications will need to be made in materials for a number of different courses. However, the preparation of a book dealing with various aspects of population education, written for the secondary level student, should be given careful consideration. Such a book would bring together data about the particular country as well as reference to data from other countries. This volume would be useful for teachers and students as well as a section of the adult population. It would also serve as a reference book for textbook writers who are not population education specialists and who will need assistance in the preparation of materials for the various grade levels and courses.

5. Linking Population Education to current curricular revisions: Given the range in grade levels and courses in which population should be taught, a comprehensive programme cannot likely be introduced at one point in time. One basis for selecting the initial area of attention is the identification of an aspect of the curriculum which is currently being revised; for example, if the courses in the social sciences are in the process of review, selected aspects of population education may be included along with other changes.

6. Training of specialists in population education: An early step in many planning programmes has been the provision of specialized training for professional personnel for work in this field. A similar process may be necessary in population education since this is not a traditional speciality for educators. It is not assumed that a long period of training would be necessary but
the length and the type of training would depend on the background of the persons selected. In many countries, the training can be provided through facilities already available but in other instances, at least part of the training may need to be obtained in another country.

Conclusions

Population education has been presented here as the school's counterpart to the family planning programme for adults in the reproductive ages. The potential content of such education has been identified, and some of the problems to be considered in introducing the field have been noted. In addition, some suggestions have been made as to the organizational arrangements and possible first steps.

In the field of population education, as in other areas of education, an evaluation of the consequences of education for adult behaviour and attitudes is not easy to make. However the population problem is a serious one and under the best of circumstances, the changes needed will require a number of years. With an effective education programme, the process of change should be facilitated.
TOWARDS A BROADER DEFINITION
OF POPULATION EDUCATION

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Population change occurs through births, deaths and migration. Populations may grow, decline or stabilize. These processes and changes have a wide range of causes and effects, perceived and interpreted differently by individuals, communities, nations, and the world. Yet a review of popular literature on population leaves the impression that there is only one significant population 'problem'—growth. Accordingly, in the popular mind, there is only one important 'solution', variously called birth control, family planning, or population control.

It is fairly well established that individuals tend to deny or reject information which conflicts with their own perceptions of reality. Therefore, to reduce the population situation to a singular matter of growth may have the effect of turning people away from discussions of other population issues and processes which may be important for their individual and communal lives. Can an individual living in an area that has undergone significant depopulation take seriously problems of rapid population growth in areas some distance from him? Does the urban dweller whose city has the potential for doubling in ten years or less as a result of extensive immigration exhibit great concern for problems of fertility limitation, particularly when the latter may conflict with his cultural values? It would appear that he would not, at least without some form of educational intervention that increases his understanding of the nature of the changes that are occurring, and their interrelationships with other aspects of his life experience. The role of population-education programmes, therefore, is to heighten awareness and to broaden rather than to limit both the perspective and perception of population issues. At their best, educational efforts can assist individuals in defining the nature of their population problems and in helping them to understand their personal and social roles in working toward the solutions of these problems.

On Problem Definition

In 1943 two American demographers, Frank Lorimer and Frederick Osborn, urged the inclusion of material on population in the curricula of American schools. The population of the United States at that time was 135,700,000. Noting the nineteenth-century concern with the population problem as defined by Malthus, they observed that:

Today many thoughtful people in Europe and some in the United States are again talking about 'the population problem' or 'the population crisis'; but what they fear is exactly the opposite to that which Malthus and his disciples feared. They find that the nations of Western Europe face the prospect of decreasing population in the immediate future. It is also becoming clear that America and, in fact, all nations
with advanced economy and culture must take account of a trend toward population decrease... and the decrease may become more precipitous as time goes on.1

Thus, what was probably the first call for population education was the product of a situation perceived very differently from that which confronts much of the world today. The 'problem' then was population decline rather than population growth.

By the early 1960's the perception of the problem had changed and another American demographer, Philip Hauser, was calling the attention of educators to the population gap in the curriculum. He observed that:

The ignorance of demography in the school curriculum is particularly astonishing in view of the fact that the schools themselves have been hard hit by rapid population changes... (notably) the tidal wave of postwar babies... The facts about population change—global, international, national and local... constitute essential elements of a general education in providing the student with significant perspectives on man, his relation to the earth, and his relation to his fellows... It is about time for twentieth-century school curricula to incorporate twentieth-century demographic findings in the context of their twentieth-century implications.2

That the problems of population were defined differently in 1943 and in 1962 does not obviate the legitimacy of developing a population education programme in response; instead, it underlines the validity of an open-ended approach. Rather than being simply a response to a particular crisis, population education programmes are more likely to serve the best interests of the learner if they focus on problem definition as a prelude to problem solution. They must be responsive to and develop an understanding of both past and present situations as well as possible future trends of the entire range of population processes and characteristics at both micro- and macro-levels.

All too often problem-oriented education programmes, in population as well as in other fields, start with the assumption that the nature and dimensions of the problem are adequately understood and generally accepted. The educator's responsibility then is assumed to be in providing the answers. But in most cases there is no real agreement on the nature of the problem, except perhaps at the most macro-level. Furthermore, the educational value of problem definition and learner involvement is lost.

What is needed for problem definition? First, the individual must be assisted in framing a vision of the future, in defining a standard or ideal which will be his frame of reference. This is necessary in order to obtain a sense of direction. Second, he must be assisted in asking the right questions concerning his present situation. The learner must assess the actual nature of the environment in which he lives.

The distance between the individual's vision of the future and the reality in which he finds himself constitutes the definition of his 'problem'. His population problems are those elements of the total which can be attributed to demographic phenomena—births and deaths, and migration, and demographic characteristics—size, distribution and composition. The assessment of these provides him with a basis for an understanding of what actions he might take to alleviate the situation. The same process, with considerably greater complexity, occurs at the community or national level.

Because population education programmes should begin with problem definition, their content must focus on the whole range of population processes and characteristics that might be relevant to an understanding of population problems. In order to enhance learner involvement and the retention of learning, educational efforts should strive to develop a sense of the personal meaning of population change for the individual within a familiar context. This entails a focus, at least initially, on the consequences of population changes for the quality of life at a micro-level—the family and the community. Thereafter, the learner is more likely to be able to become seriously concerned about more global issues, and to avoid what is particularly common in industrialized nations, namely the assumption that population is only a problem of the poor and non-industrialized. Unfortunately, until recently, most demographic and other social science research on population has tended to focus on the determinants of change at the macro-level. Therefore, more research is urgently needed on micro-level consequences of population change.

The need to develop a sense of the personal meaning of population change is particularly important because population events lack drama, despite such slogans as 'the population explosion' and 'the population bomb'. The slowness of population change also makes it difficult to sustain the interest of all but the most committed individuals, unless the issues are seen as meaningful to them.

The retention of learner interest and the development of a sense of mastery and personal efficacy are intimately related. The learner must assume that there are things that he or others
can do to change the population situation assuming that he sees the need for change. In addition, he must be aware of the potential effectiveness of these actions. The educational programme, therefore, must assist him in developing personally meaningful criteria for decision making as an individual and as a member of a larger community. This implies a concern for both macro- and micro-levels of analysis, and an understanding of the ways that population affects and is affected by other social and developmental concerns. Effective decision making involves an assessment of population concerns within a total environmental and life context.

The goal of such an educational process is to produce people who, by virtue of their having gained population literacy, will be able to be responsible population actors. First, the individual would understand how their own actions affect population processes and characteristics. Stress would be placed on the individual as a population actor constantly involved in a wide range of decisions which have direct or indirect population consequences. Among these, for example, would be decisions concerning age at marriage, family size, choice of residence, and continuance of education or employment. Second, the person would understand how population phenomena affect him and society. Here the focus would be on how such things as the size and rate of growth and the composition and distribution of the population affect such things as the political system, resource utilization, subjective feelings of crowding, and the availability of social services. Finally, the programmes would assist the development of the knowledge and skills necessary to evaluate the impact of personal and public decisions affecting population change. Involvement is some understanding of basic demographic concepts. In addition, the learner must be assisted in the development of skills so that he can evaluate various population policy proposals both in terms of their potential effectiveness and in terms of their relationship to societal values and norms, and so that he can apply these skills to actual decision making.  

Population education is not a euphemism for birth control or family planning education, although information concerning both might be included in the content of the programme. Similarly it is not a programme designed to persuade people to have a particular size family, either large or small. It is hoped, however, that participants in an educational programme might reach family-size decisions that are seen as effective responses to population issues as they perceive them. Nor would population education programmes preach an end to rural-urban migration, although an understanding of the consequences of that migratory pattern, and governmental actions developed in response to that understanding, might have some impact on the problem over a period. Population education is not, or at least should not be a euphemism for population-control education; it should, however, assist individuals in controlling their own population actions. Population-education programmes are an effort to show the interrelations between the public and the personal in the hope that individual and public decisions will result in an enhanced quality of life for all; they are educational programmes for social responsibility.

In light of this discussion of the nature of the field, a definition is in order. Population education may be defined as an educational process which assists persons (a) to learn the probable causes and consequences of population phenomena for themselves and their communities (including the world); (b) to define for themselves and their communities the nature of the problems associated with population processes and characteristics; and (c) to assess the possible effective means by which the society as a whole and he as an individual can respond to and influence these processes in order to enhance the quality of life now and in the future.

In attempting to achieve these population-related goals through education, population-education programmes would inevitably contribute, as well, to general innovation within the educational system. The way the programmes and materials are organized, structured and presented will, of necessity, be different from what is most common in educational settings both in the developed and developing world. Instead of knowledge for its own sake, this educational process seeks to present relevant knowledge for its potential contribution to social responsibility. Instead of teaching certainty, as if all that we need to know were known, it assists the learner to prepare for the uncertainties of the future.

Policy Issues and Research Needs

Definitions are important in the development of any field for they provide structure and direction to the activity. A definition may be either a description of what is or a statement of
what might be. Those familiar with the development of population education to date are aware that what has been defined so far falls in the latter category, a ‘vision of the future’ rather than a picture of the present.

Impetus for the development of population education programmes in most countries originally arose not from within the educational system but from outside. The private and public family planning programmes usually took the lead. They focused their attention initially on the schools, reasoning that the schools already existed and that large numbers of children passed through them, if only for short periods of time. Their goal, variously stated, was ‘to make family planning a way of life’. In large measure then, population education was seen by many as ‘family planning for children’. And because many Africans or Latin Americans perceived the nature of their population situation differently, they were less likely to see population education, defined in this way, as responsive to their national needs. Thus, at least initially, population education was largely an Asian interest, with pockets of interest in the United States as well.

This initial focus on the schools, and on a modified form of family planning education, created a number of problems for the development of the field. Since in most of the developing world only a small proportion of the children who enter school are retained beyond the sixth year, the question was what can they be taught. Rather than viewing the school as simply one part of a total educational setting, the school and education were equated; where the one ended, so too did the other. No assessment was made of the strengths and weaknesses of the formal school’s and particularly the primary school’s ability to fulﬁl the role that was being thrust upon it. It was assumed that the school could respond to any new content demands. Similarly, few questions were raised concerning the child’s capacity at primary-age levels to absorb various content areas. In an attempt to be simple, some programmes bordered on the simple minded.

As educators became more involved in population-education activities the focus on these issues became sharper, even if solutions were not, and are still not, forthcoming. Some continue to argue for an initial focus on the primary level in school population education. They observe that in addition to the numbers who are, in effect, captive, the primary schools in the developing world have an important impact on the life and values of the villages in which they are located, often being the only educational contact of the village. They further note that those who go on to secondary education are unlikely to return to the villages from which they migrated, and thus are not likely to have any impact on the population behaviour of those areas which suffer so much from migration and change. And, finally, they argue that family size values and norms are formed early in life, and therefore interventions must begin early.

Other educators have suggested that, given limited funds and personnel, priority should be placed initially on the secondary school. Without denying the validity of some of the arguments presented, they have raised questions concerning the young child’s time horizon. Do we know what to teach and how to teach population-related materials at an early age and in such a way that they are personally meaningful and useful to the student while learning, and also retained for future use? Certainly evidence concerning the retention of literacy and numeracy is not compelling. Although there is some evidence that children may be socialized fairly early in life to such population-related issues as family size, the evidence is far from conclusive that changes are not possible or likely later in life. Much research is needed on the nature and stages of population learning, and on population socialization, before a definitive population education planning strategy can be evolved.

In the meantime, attention to the secondary school can be justified, even accepting the much smaller numbers of students reached. It is a fact that these students, by virtue of their having been retained by the system, are likely to play important future roles in the society. They will be the teachers, the journalists, the civil servants, the businessmen, the legislators of the next generation. The beginnings of their population education, rather than being focused on personal fertility related behaviour, can be seen as preparation for their various population policy-related roles in adult life.

The debate among school educators concerning the level at which to begin population education provides a useful focus for two issues of importance in the development of the field. First, educational planners must consider what is the proper and possible role of the school. In addition, the limited reach of the schools to youth and adults who dropped out of school, directs
attention to the role of other educational settings in population education activities.

It has been common in the developed world, and is becoming increasingly common in the developing world, to ask schools to respond to society's perception of new social problems, and to contribute to their solutions. In addition to being conservers of the traditions and values of society, schools are asked to serve a potentially conflicting role as agents of change and modernization. And these demands are usually made without assessing the limitations of schooling for the desired changes.

Societies, or at least schooling, has been associated with a variety of attitudes and values usually associated with modernization. Thus formal education beyond the primary level is usually correlated with reduced fertility, despite the fact that the content of educational programmes has had no direct focus on fertility related matters. While the nature of the causal relationship between education and fertility is not known, it is assumed that formal education assists the individual in developing a sense of mastery over his own destiny, of future orientation, of potential achievement, and an individualistic orientation. And it is these values and attitudes that are associated with fertility reduction. The influence of the educational process therefore has been indirect; the end product is, in effect, serendipitous. To the extent that schools may attempt to deal directly and frontally with values they appear to be less successful, particularly when the desired end is not supported by societal norms and values. Schools are not independent institutions where the issues of attitude or behaviour change, as opposed to knowledge transmission, are concerned. Society, or at least a sizable majority within a society, must really want the changed behaviour and must be prepared to support the schools in that endeavour, before the school can become a reasonably efficient instrument of planned behavioral change. Even if a government, for example, has adopted the small-family norm as its goal, the schools may not be an effective instrument of change in that direction, unless societal values also support the change.

Schools can, however, transmit knowledge and information with relative ease and efficiency. The rhetoric of many educational plans notwithstanding, that is what they can do best and presumably should be called upon to do. Rather than denying the importance of the school within a total population education programme, recognition of the school's strengths and weaknesses simply suggests that like other institutions in society, it has a specific role for certain groups of people, to attain certain clearly defined ends.

If the assumption is made that all population actors must be informed if they are to act freely and with an awareness of the possible consequences of their actions, then the importance of total educational system planning for effective population education becomes clear. The audience for programmes includes school children, but must also extend to out-of-school youth. In addition, adults, in a variety of settings, from literacy programmes to programmes for legislators and government leaders, should receive the attention of population educators.

To meet the needs of these audiences, population-education programmes should, in principle, address themselves to a wide range of content, well beyond a focus on growth or family planning. On the one hand, or formal demography, on the other hand. The over-all content of population education, from which the content for population-education programmes will be derived, ranges extensively over the social and biological sciences. This knowledge base includes information on the population situation, such as size, growth, migration, distribution, composition, trends; on the relationship between population and the quality of life now and in the future, with respect to such topics as food, health, education, employment, urbanization, the environment, socio-economic development, the political system, and family life; on possible action programmes at both the governmental level and on the personal level; and on human reproduction as a means of implementing one aspect of individual action, covering physiology, sexuality, and family planning including contraception, and ways of dealing with infertility, as appropriate. Data at both the macro- and micro-levels would be included as appropriate. The learning process would also include the exploration of values and attitudes as they relate to these content areas.

The educational settings which have a role to play in a total population-education programme are varied. Primary and secondary schools, teacher-training institutions and universities have always been a focus of attention. But increasingly, in the developed and the developing world, interest is being expanded to include extension programmes (both in New York State and Maharashtra State), literacy programmes,
home economics, community development, labour education, and the like. It is unlikely that any single institution can handle the entire range of content effectively and appropriately given the different stages of development of the learners and their particular interests and life circumstances. The planner's task, therefore, to determine the educational settings that exist or might need to be created, and the content most appropriate to each.

Figure 1 presents a schematic matrix for analysing and planning the content for population-education programmes at the national level. The columns represent a suggested content of population education. The rows represent the various educational settings into which population-education content may be introduced. This is divided, in turn, to suggest that within a country the content may vary between urban and rural areas. Other variations, as appropriate to the particular country, might be regional or tribal or religious, or some combination of these. The determination of which cells to fill and which to leave blank will require the collaboration of educators and researchers.

The first step in the planning process entails the development of a broad and encompassing set of goals and objectives for the system as a whole, and for each of its component parts. Every effort must be made to ensure that they are realistic and attainable. Furthermore, they must be sufficiently flexible to be responsive to the findings of research.

Research needs for planning the content for population-education programmes can be classified under five headings, although a number of them are interrelated. They are research on the socio-cultural characteristics of the society, on the learner's perceptions of population issues, on sources of population information, on the nature of population learning and population socialization, and on the strengths and weaknesses of the various settings within the educational system for fulfilling different roles within the total population-education programme. Some of these needs by definition are country specific, whereas others can benefit from cross-cultural research.

Information is needed on the socio-cultural characteristics of the society to ensure that the content of the programmes is meaningful within the range of existing social norms and values. The folk demography of groups within the society—that is, 'the portion of the total set of norms, customs, folk beliefs, and perceptions of

<table>
<thead>
<tr>
<th>The content of population education</th>
<th>The population situation</th>
<th>Population and the quality of life including</th>
<th>Action programmes</th>
<th>Human reproduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universities</td>
<td>Secondary schools</td>
<td>Adult education</td>
<td>Primary schools</td>
<td>Community development</td>
</tr>
<tr>
<td>Teacher training institutions</td>
<td>Urban</td>
<td>Out-of-school youth programmes</td>
<td>Literacy programmes</td>
<td>As above, plus</td>
</tr>
<tr>
<td>Secondary schools</td>
<td></td>
<td>Adult education</td>
<td>Community development</td>
<td>Agricultural extension</td>
</tr>
<tr>
<td>Primary schools</td>
<td></td>
<td>Adult education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Out-of-school youth programmes</td>
<td></td>
<td>Adult education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult education</td>
<td></td>
<td>Adult education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literacy programmes</td>
<td></td>
<td>Adult education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community development</td>
<td></td>
<td>Adult education</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FIG. 1. Matrix for analysing and planning the content for population education programmes.
a given group of people which pertain to population matters—must be made explicit. For example, how are children valued? What is the significance of ancestral burying grounds in terms of choice of residence? Where considerable ethnic, religious, regional or tribal diversity exists, the differences between groups must also be ascertained.

Data must also be collected on the perceptions of population issues within the society as a whole, and within sub-groups both regionally and ethnically defined. City dwellers, and particularly recent migrants, may perceive matters very differently from those still living in the villages from which the migrants came. Some nations, or at least significant groups within nations, define their population problems as deriving not from too many people but from too few. To many people, the problems of population are not the size and rate of growth of the country, but are rather rural-urban migration and population distribution. Unless the programme planner is aware of the learner's knowledge of and attitudes towards population issues and of his perception of the relationship of these issues to his life, the content of the programme is likely to be too abstract to be meaningful.

Recognizing that learning takes place both in and outside of the educational system, the planner must ascertain the sources of the learner's information. Thus, for example, village children in India received more population and family planning information from family planning workers coming to the village to speak with their parents, than they did from the schools. Programme planning must take cognizance of the entire range of messages, channels of communication and audiences.

Basic and applied research must also be initiated, both nationally and cross-culturally, on how people become socialized to and learn about population phenomena. This knowledge is necessary for proper placement of content so that it will be personally meaningful and comprehensible. It is also important in order to ascertain what knowledge and attitudes and values may be necessary for or associated with being a responsible population actor.

Finally, research is needed to assess the strengths and weaknesses of various educational settings within the system with respect to the goals that have been set and with respect to the particular content. In a number of countries, for example, programmes for out-of-school youth may be more appropriate for highly affective content than school programmes. In planning the content for population-education programmes the initial assumption is made that each learner should be provided with the maximum amount of information compatible with the level of his intellectual development and capabilities, in order to maximize his freedom as a decision-maker.

Outcomes

Broadly defined there is probably population-related information in the education programmes of most societies. Reviews of texts in a number of countries prior to the development of population-education programmes have revealed this to be true for schools. But the development of national population-education programmes, which are by definition planned and sequential as opposed to random efforts, is fairly recent, having its beginnings in the early 1970s, with the establishment of the population education cell in the National Council for Educational Research and Training in New Delhi. Population-education efforts in non-formal settings are of even more recent origin. Thus, in terms of results no matter how defined, it is too early for anything definitive to be said.

School programmes are aimed over the middle to long term. How they will affect fertility behaviour, or even if they will at all (as many hope), cannot be determined with any degree of certitude now. Whether they will create a constituency for population policy also remains to be seen. Perhaps they will serve to sensitize the learners to be more receptive to population information which reaches them later in life. Certainly a school's inclusion of population content in the curriculum can serve to legitimize it as a subject of discussion in the society at large.

Where the goal is explicitly to create a smaller family size norm, as it is in many of the school programmes in Asia, the likelihood of establishing some relationship between the programme and the outcome is not great. Even where primary students are older because of late enrollment and repetition of grades, the time between school-leaving and population action—either fertility or migration-related—is considerable. There are too many intervening variables to ascertain the effect of schooling.

In the case of non-formal education the stated goals are usually less ambitious than they are for school programmes that are more distantly future-oriented. They tend to focus attention on more immediate population-related aspects of
the learner's life, such as the relationship between population growth, distribution and composition and the availability of social services, and on family size and welfare. Thus, in principle if not yet in fact, the results of the programmes can be more easily ascertained.

In spite of the uncertainty of the outcomes of the programmes begun to date, and those that are now being planned, support for the further development of these activities is in order. Population education is a part of educational policy, and provides impetus for change within the educational system. Population education is also a part of population policy, and provides support for it. In population terms population-education programmes have been designed to give each population actor greater mastery over his actions through greater awareness and understanding of the consequences of his actions for himself and others, and the knowledge necessary to take steps open to him and the society to influence population trends. If we value freedom this is an admirable goal. If we wish to avoid always having to respond to crises, we have no other choice.

Acknowledgements
The author wishes to thank C. Stephen Baldwin, Andrew Leighton and, particularly, Michael Beldoch for their many helpful comments and suggestions.

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8. See, for example, Bom Mo Chung et al., Psychological Perspectives: Family Planning in Korea, Seoul, Korea, Korean Institute for Research in the Behavioral Sciences, 1972.
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THE RELATIONSHIP OF FAMILY PLANNING TO SAVINGS AND CONSUMPTION IN TAIWAN

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Ann Arbor

A great deal of research has been done on the determinants of fertility behavior, but the focus has been primarily on sociological and demographic factors. For example, little work has been done on the psychological factors which lead couples to want children or to use contraceptives effectively to have their desired number (Fawcett, 1970, pp. 1-5). Although it is generally recognized that economic factors can affect family size decisions, many fertility surveys limit their investigation of economic variables to a single query about family income.

This paper presents a modest empirical analysis of the relationship of economic behavior to family planning practices. For a sample of couples in Taichung, Taiwan, who said that they wanted no more children, we shall find that saving and modern consumption does distinguish those who have used contraception and have been successful in avoiding unwanted children. Further, these results are not a function of differences in family income, wife's education, wife's age, or duration of marriage.

The data come from a longitudinal study of a sample of 300 Taichung couples with wives in the childbearing years. The wives were interviewed in 1962 with regard to their birth and contraception histories, desired family size, and a variety of other demographic and socio-economic measures. A rough measure of family
income was obtained, as well as an ownership inventory for nine modern consumer durables: electric fan, electric iron, clock or watch, radio, record player, sewing machine, electric rice cooker, bicycle, and motorcycle. After three years—in 1965—the husbands in these families were interviewed to record the family's fertility and family planning experience during the inter-survey period and to obtain additional economic data. The sample of 300 families was a subsample of a fertility survey sample of 2713 Taichung families; the original sample was stratified for income and education and the reinterview sample was drawn randomly from within those strata.

Two main measures of modern economic behavior were used: (a) saving—limiting present consumption to attain desired objectives later—which involves rational planning and is characterized as "modern"; (b) the ownership of modern durable consumer goods, which involves the desire and ability to enter the modern economy with respect to consumption. While some economists and planners see the consumption of modern durables as detracting from the savings needed for development, the author has demonstrated elsewhere (Freedman, 1970) that in Taichung the ownership of modern consumer durables is positively correlated with saving and other modern economic behavior, independently of income, education, and stage of the family life cycle. It is of both theoretical and practical interest then to establish whether couples who plan their fertility effectively are modern in their savings and consumption behavior and whether they manage to achieve both concurrently.

The measure of savings is rather crude. Husbands who reported having savings in any of the savings media used in Taiwan were classified as savers. Thirty-six percent of the sample families had such savings. Consumption of modern durables is measured in several ways. One measure is the mean number owned, both at the original interview and at the reinterview, of the nine consumer durables listed in the original inventory. This list had proved to be a reasonably good choice for the larger sample of 2713 families interviewed in 1962; it yielded a mean of 4.5 objects owned with a considerable dispersion (standard deviation of 2.0). Since many of the items on the list had only recently become available in 1962, it seemed useful also to have a measure of ownership in 1965. To highlight those couples who had very low ownership of the objects, the percentage of those who owned fewer than three objects is also used as a consumption measure; such families are designated "low owners". Between 1962 and 1965 several new, large consumer durables came on the market: refrigerators, television sets, and gas burners. There is a briefer treatment of ownership of these items.

This analysis is limited to the 238 couples who had in 1965 all or more than the number of children reported as wanted three years earlier in 1962. The use of a 1962 measure of desired family size avoids the tendency of couples to rationalize their achieved family size as exactly what they wanted. The couples were classified into three groups—those who as of 1965 had: (1) fewer children than they wanted in 1962; (2) just the number wanted in 1962; (3) more than the number wanted in 1962. The 236 couples in the last two groups had reached the point of having all the children they wanted by 1965 or earlier and so were motivated, to a greater or lesser degree, to stop with the desired number, presumably by the use of contraception. Our question is whether stopping with the desired number and using contraception (including sterilization) are related to the couple's economic behavior.

The couples are classified into four family planning categories:

1. Users with no excess fertility, i.e., those who had just the desired number of children and were using contraception in 1965.
2. Users with excess fertility, i.e., those who had more than the desired number of children, but were using contraception in 1965.
3. Non-users with no excess fertility.
4. Non-users with excess fertility.

The purpose was to see whether families who differed with respect to excess fertility status, with current usage held constant, also differed in their economic behavior; the same question was posed for current users as against non-users.

The four different planning-use groups are compared in Table 1 with respect to five economic measures: the percentage who had accumulated savings, mean ownership of modern objects and the percentage of families who were low owners. Income, education, age of wife, and duration of marriage are related both to family planning...
TABLE 1

<table>
<thead>
<tr>
<th>Fertility planning status</th>
<th>No.</th>
<th>Percentage who save</th>
<th>Mean ownership</th>
<th>Percentage of low owners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (all couples)</td>
<td>238</td>
<td>37</td>
<td>4.6 5.6</td>
<td>33 11</td>
</tr>
<tr>
<td>Unadjusted values</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No excess fertility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Currently using contraception</td>
<td>76</td>
<td>49</td>
<td>6.2</td>
<td>24 5</td>
</tr>
<tr>
<td>Excess fertility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Currently using contraception</td>
<td>65</td>
<td>31</td>
<td>5.5</td>
<td>31 11</td>
</tr>
<tr>
<td>No excess fertility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No current use</td>
<td>55</td>
<td>30</td>
<td>5.2</td>
<td>42 21</td>
</tr>
<tr>
<td>Excess fertility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No current use</td>
<td>42</td>
<td>33</td>
<td>5.3</td>
<td>41 19</td>
</tr>
<tr>
<td>Adjusted for income</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No excess fertility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Currently using contraception</td>
<td>76</td>
<td>48</td>
<td>6.1</td>
<td>24 6</td>
</tr>
<tr>
<td>Excess fertility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Currently using contraception</td>
<td>65</td>
<td>31</td>
<td>5.5</td>
<td>31 10</td>
</tr>
<tr>
<td>No excess fertility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No current use</td>
<td>55</td>
<td>29</td>
<td>5.2</td>
<td>42 13</td>
</tr>
<tr>
<td>Excess fertility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No current use</td>
<td>42</td>
<td>34</td>
<td>5.2</td>
<td>40 10</td>
</tr>
</tbody>
</table>

status and the economic variables. Therefore, a multiple classification analysis (Andrews, Morgan, and Sonquist, 1967) was used so that the relation of fertility planning status and the economic measures could be ascertained after an adjustment for each of these other possibly pertinent variables. In view of the small size of the sample, these added variables were controlled successively rather than concurrently. Controlling for these independent variables had only minimal effects on the relationship of the economic variables to fertility planning.

Users with no excess fertility—the most successful planners—are distinctively and consistently toward the more modern side on all the economic variables (see Table 1). The other three fertility planning groups are fairly similar with regard to the economic variables at a level consistently below that of the successful planners. The two non-user groups are almost identical; whether or not they have avoided unwanted births has little relation to their economic status. The excess fertility users are somewhat higher than the two non-user groups on the consumption measures, but either similar or lower with regard to savings. The results of the multiple classification, which controlled for income, education, age of wife, and duration of marriage, did not appreciably alter the relationships. Table 1 shows the effect of the income control.
The crucial economic distinction apparently is between the couples who were the most successful planners and all others. Therefore, Table 2 (column 1) shows the five economic measures for these two broad family planning behavior groups—the successful planners, and all the other couples who either have more children than they want, are not currently using contraception, or both. The successful planners are more likely to be savers. About half of the successful planners but slightly less than a third of the other couples have savings. The successful planner group also ranks considerably higher on all the consumption measures. Successful planners owned 5.2 items at the original interview while all other families owned only 4.3 items. At the reinterview the difference in ownership was identical but each group had increased its mean ownership by one item. It is not too surprising that successful planners did not increase their ownership level more than others in the inter-survey period. Families undoubtedly purchase the most desired items first, and once a certain level has been reached, their lesser interest in some of the remaining items may deter new acquisitions. In fact, we shall see that families who already had many of the listed items in 1962 were most likely to have acquired newly marketed durables during the inter-survey period. Relatively few successful

**TABLE 2**

Saving and Consumption Measures for Families Who Want No More Children, by Success in Family Planning, Before and After Adjusting for Wife's Education, Family Income, Wife's Age, and Duration of Marriage

<table>
<thead>
<tr>
<th>Success in family planning</th>
<th>Unadjusted sample mean or percentage (1)</th>
<th>Sample mean or percentage after adjustment for Wife's education (2)</th>
<th>Family income (3)</th>
<th>Wife's age (4)</th>
<th>Duration of marriage (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Successful planners</td>
<td>76</td>
<td>5.2</td>
<td>5.0</td>
<td>5.2</td>
<td>5.2</td>
</tr>
<tr>
<td>Others</td>
<td>162</td>
<td>4.3</td>
<td>4.4</td>
<td>4.3</td>
<td>4.3</td>
</tr>
<tr>
<td>Percentage who save</td>
<td>76</td>
<td>49</td>
<td>47</td>
<td>48</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>162</td>
<td>31</td>
<td>32</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>Mean number of modern objects owned in 1962</td>
<td>76</td>
<td>4.2</td>
<td>4.0</td>
<td>4.2</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td>162</td>
<td>3.3</td>
<td>3.3</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Mean number of modern objects owned in 1965</td>
<td>76</td>
<td>6.2</td>
<td>6.0</td>
<td>6.2</td>
<td>6.2</td>
</tr>
<tr>
<td></td>
<td>162</td>
<td>5.3</td>
<td>5.4</td>
<td>5.3</td>
<td>5.3</td>
</tr>
<tr>
<td>Percentage of low owners in 1962</td>
<td>76</td>
<td>24</td>
<td>27</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>162</td>
<td>37</td>
<td>35</td>
<td>37</td>
<td>37</td>
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<tr>
<td>Percentage of low owners in 1965</td>
<td>76</td>
<td>5</td>
<td>7</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>162</td>
<td>14</td>
<td>13</td>
<td>13</td>
<td>13</td>
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</table>
planners owned less than three items at either survey. In the 1962 survey, 24 percent of the successful planners were "low owners" as compared with 37 percent of the other couples. By 1965 the respective percentages were five and 14 percent. The differentials in savings and ownership remained substantially unchanged when adjustments were made, in turn, by multiple classification analysis, for family income, wife's age, wife's education, and duration of marriage (see Table 2, columns 2-5). Successful planners are younger, have a shorter marriage duration and a slightly higher family income, and are considerably better educated. But these factors have almost no effect on the relationship between the economic variables and being a successful planner.

In 1965 ownership of a refrigerator, television set, or gas burner was still infrequent because these items were expensive and had become readily available only during the inter-survey period. For the two family planning status groups the percentage owning each of these newer items is shown in Table 3.

TABLE 3

Percentage Owning Selected Items by Family Planning Status

<table>
<thead>
<tr>
<th>Selected Items</th>
<th>Successful planners</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refrigerator</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td>Television set</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Gas burner</td>
<td>14</td>
<td>6</td>
</tr>
</tbody>
</table>

The data, then, do show that couples who are the most modern in their family planning behavior are also more modern both with regard to saving and to consumption. This is not true of couples who are modern in only one aspect of family planning behavior, either avoiding unwanted births or using contraception. Only couples who are modern in both aspects of their family planning behavior are distinctively characterized by modern economic behavior. Not only are these couples more likely to save, but their higher savings is accomplished without sacrificing the purchase of modern durables. After adjusting for income, the successful planners rank high both as savers and as consumers.

The demonstration of a positive association between successful family planning and modern economic behavior does not establish a causal relationship. In fact, various different lines of causality can be suggested. One possibility is that both fertility and consumption are affected by the labor force status of the wives. For example, if couples successfully planned small families, wives could more easily work, increasing consumption possibilities. Alternatively, the desire of wives to work could lead to effective family planning and one by-product could be increased consumption. This is probably not an important consideration, since a multivariate analysis of the determinants of wife's labor force status in Taiwan showed the number of children and the age of the youngest child to have only a small impact on wife's labor force participation (Mueller, 1972). Many married women do work but they usually work in a family business or farm; only infrequently do they work outside the home. In this situation, additional children less often prevent a mother from working, since she can provide care for her children even while she works.

A more conventional interpretation of these data would be that economic growth fosters new aspirations and these aspirations, both for consumer durables and for savings, motivate couples to restrict their family size so that their income will provide a better standard of living. However, it may be that the line of causation goes, at least to some extent, in the other direction. If couples are successful in planning in one important area of their lives, namely, in achieving their desired family size, they may be encouraged to strive for other goals, including new levels of consumption and savings. Such an interpretation would have important policy implications with regard to the value of family planning programs.

Although it is impossible to establish causal relationships with these data, they do support the hypothesis that the planning-motivation syndrome which enables a couple to successfully plan their family size also enables them to accumulate savings, even while they purchase more of the goods which provide some of the immediate material gratifications of modernization. The ability to think ahead and act in the present to attain future goals presumably is a quality crucial both for effective family planning and the economic behavior we have measured.
Obviously, the size of a family's income will affect their ability both to save and consume; but our results suggest that the ability to save also depends on the couple's ability to think and plan ahead. Certainly the couples who reveal this quality in their ability to successfully plan family size are, after adjusting for the effects of income, the ones more likely to save and, at the same time, to own more modern consumer durables. Though this study was modest and exploratory, the results suggest the value of additional research in this area.

ACKNOWLEDGMENTS

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REFERENCES