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# **Rural Development, Women's Roles and Fertility in Developing Countries: Review of the Literature**

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**Conducted by  
Research Triangle Institute  
and  
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RURAL DEVELOPMENT, WOMEN'S ROLES AND  
FERTILITY IN DEVELOPING COUNTRIES:  
REVIEW OF THE LITERATURE

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## FOREWORD

This report is part of a series of State-of-the-Art Papers called for under AID Project 931-1170, Rural Development and Fertility. The Project was designed to assist AID officials, overseas and in Washington, to comply with the mandate included in the 1975 Foreign Assistance Act, Section 104d. That section stipulates that "(1) Assistance . . . . shall be administered so as to give particular attention to the interrelationships between (a) population growth, and (b) development and overall improvement in living standards in developing countries, and to the impact of all programs, projects, and activities on population growth. All appropriate activities proposed for financing under this chapter shall be designed to build motivation for smaller families through modification of economic and social conditions supportive of the desire for large families, in programs such as education in and out of school, nutrition, disease control, maternal and child health services, improvements in the status and employment of women, agricultural production, rural development and assistance to the urban poor." The amendment to the FAA continues to authorize the President "...to study the complex factors affecting population growth in developing countries and to identify factors which might motivate people to plan family size or space their children."

These papers examine the extensive literature which encompasses rural development and fertility relationships. Seven State-of-the-Art Papers (SOAPs) were produced: addressing the primary determinants of fertility. From this research base the second phase of the project will "...study the complex factors affecting population growth..." in operational settings, particularly through the medium of project implementation. Case studies will be designed to examine development in rural areas and to isolate the fertility implications of changes in the socio-economic environment. Translating the results of this investigation to decision makers in developing nations and within donor organizations is also

a primary goal of the Project. In addition to publications, a series of seminars, workshops, and intensive technical assistance in participating countries are planned as part of an outreach component of the Project.

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The views and interpretations in this publication are those of the author(s) and should not be attributed to the Agency for International Development or to any individual acting in their behalf.

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The SOAPS reflect the comments of the review panel: however, responsibility for content rests with the authors.

## Chapter 1

### General Objectives And Conceptual Framework

#### INTRODUCTION

The interplay between the role of women and fertility is a complex one involving women's education and work status as well as domestic roles in the home. The status and roles of women, in turn, are affected by economic development and the strategies to accomplish such development. Since the publication of Ester Boserup's book, Women's Role in Economic Development (1970), much needed attention has been paid to the differential effects of development on women. Most of the commentary would agree with Tinker's (1976) assessment that development schemes have failed to consider the role of women, particularly their traditional roles, and have therefore even undercut these traditional social and economic roles. Yet interest in the fertility of women has been a long-standing concern of planners, but the focus has usually been on women as targets of family planning. Thus, few studies have attempted to examine the equation involving rural development strategies, the role of women and fertility. There are two central questions to be addressed in this relationship:

- 1) How are the roles of rural women likely to change as the result of rural development?
- 2) What are the consequences of such changes on fertility-related behavior?

This report reviews the state of knowledge on the impacts of rural development on fertility in the developing regions of Africa, Asia, Latin America, and the Middle East and North Africa, especially as specific types of externally introduced rural development activities produce changes in women's familial, economic, and other roles. A wide range of published

and unpublished cross-disciplinary sources, including theoretical and empirical studies of rural development, women's roles and fertility, as well as reports on completed rural development projects and research proposals, will be examined. The immediate objective of the paper is to generate an inventory of testable hypotheses about the magnitude and direction of the development-role-fertility linkages that would inform population policy and program implementation.

Analysis of the literature would focus on the impact of six types of rural development activities on the shifts from traditional to non-traditional roles of women and the fertility implications of these changes. These activities are:

1. Participation of the rural poor, particularly women, in the design, financing and implementation of rural development and related projects
2. Off-farm employment for women
3. Extension of social service activities in rural areas
4. Rural marketing systems
5. Rural financial markets
6. Area development

The inventory and discussion of the hypotheses linking rural development, female roles and fertility will be organized both at the level of LDC's in general and of specific regions. In both the general and region-specific sections, the key variables mediating the hypothesized effects of rural development on women's roles directly and on fertility indirectly, are put forth. Empirical evidence supporting the hypotheses are examined for each region.

## THE CONCEPTUAL FRAMEWORK

One of the important predicted outcomes of rural development is the promotion of women's status and roles in the family and in society as women benefit from the increased opportunities for education, as they acquire marketable skills for off-farm employment, and as technology lightens their house-and farmwork and provides them time for self-improvement and for participation in various family and community activities. These changes in women's roles are expected, in turn, to impact on fertility by providing socially acceptable options to motherhood, by increasing the age at marriage, and by increasing the cost of children, both in terms of opportunity cost for the woman and emphasis on higher quality of children.

On the other hand, there is some research evidence that development may have the unexpected, if not intended, consequence of further lowering, rather than elevating, the status of women in developing societies. There is increasing documentation of the adverse effects of externally-introduced intervention strategies on women's roles in these countries (Boulding, 1975; Boserup, 1970; Buvinic, 1976; Germain, 1974; Lindenbaum, 1974; Riegelman, 1975; U.N. Economic Commission for Africa, 1974, 1975; Van Allen, 1974, among others). Studies suggest that even where women are active participants and decisionmakers in productive work, they have been systematically excluded in the planning and design of development projects; their needs are seldom taken into account in technology or skills transfer, and they are likely to be displaced by machine and men. Rural development, thus, at least in some cases, has promoted the economic dependency by the woman on her husband or male relatives by both

precluding her participation in non-traditional economic activities through inadvertently widening the gap in levels of knowledge and training between males and females (Boserup, 1970) and also by depriving her of her important, although sometimes invisible, traditional economic role.

## THE KEY VARIABLES

In order to understand regional, country-wide, and subcultural similarities and variabilities in the impacts of rural development on fertility through the changes in women's roles, the conceptual framework identifies several types of factors that may mediate the development-roles-fertility linkages. These are classified into economic, demographic, cultural-religious, social psychological, political/conjugal power, stratification and family planning variables.

### The Economic Variables

These would include traditional female economic activities and the conditions of labor supply and demand in a given rural area.

#### 1. Traditional Female Economic Activities

Although many of the economic activities of women are excluded from traditional measures of the gross national product, rural women traditionally have performed a variety of extra-familial roles - as paid or unpaid food producers, processors, and marketers, as cottage industry workers, as petty traders - in addition to their roles as wife and mother (The Agricultural Development Council, Inc., 1975; Caton and Van Haeften, 1974; Rihani, 1978). The extent, nature, and visibility of these economic roles vary widely across regions, across countries in the same region, as well as across subcultural categories

within countries. Extreme regional differences range from the relatively low, largely invisible, unpaid participation in economic activities defined as an extension of their household chores among women in the Middle East region, (Smock and Youssef, 1977) to the highly visible, dominant, independent income-generating activities of African women on and off the farm (U.N. Economic Commission for Africa, 1974, 1975; Van Allen, 1974). Country-wide variabilities within a given region may also be substantial, particularly in Asia. Thus, the economic contributions of Bangladeshi women are largely invisible, if not insignificant (Alamgir, 1977). On the other hand, the female labor force participation rate for Thailand is 73.2 percent for those 15 years and older (Meesook, 1976). Finally, subcultural variations in the extent and nature of female economic participation are evident in some countries. In India, for example, the participation rate, particularly for female hired farm workers, is substantially higher in the south than in the north (Leonard, 1978).

Equally important to consider are the shared characteristics and experiences of economically active women in developing societies. These include the following (Birdsall and McGreevey, 1978; Caton and Van Haeften, 1974; Fagley, 1975; Palmer, 1976):

1. A gender-based occupational segregation which relegates women to the low-prestige, low-skilled, and low-paying occupations.
2. Income discrimination on or off the farm.
3. Severe underemployment and higher unemployment rate than men.
4. Overburdening with multiple roles as wife-mother and worker.

Unlike men, rural (and urban) women acquire the work role as an addition, rather than as a substitute, to the housework/childcare roles; the tradeoff is between the additional income and leisure time.

## 2. Conditions of Labor Supply and Demand

Regional differences in the structure of labor demand is another factor that would influence the hypothesized linkages between rural development, women's roles and fertility. Traditionally, women in Asia (with the exception of Indonesia and the Philippines) have a greater share in agricultural than non-agricultural employment. The reverse is true for Latin America and the Middle East, although women are employed largely as unpaid workers in family enterprises or domestic work. The pattern is mixed in Africa. Zaire, for example, has less than 1.0 percent of the female labor force in non-agricultural employment, in contrast to Ghana and Nigeria with 42.2 and 43.4 percent, respectively, of women in the non-agricultural sector of the rural economy (Durand, 1975). The relative expansion of the non-agricultural sector of the rural economy, thus, would increase female labor force participation rates in almost all of Latin America and the Middle East and would have a generally depressing effect on the economic participation of women in Asia (Durand, 1975). On the other hand, development of rural industry and commerce in Asia and some African countries may help absorb excess female agricultural labor supply displaced by the introduction of modern farm technology (which has accompanied shifts from subsistence farming to cash cropping).

## The Demographic Variables

The demographic variables that have been identified in the literature as having a mediating influence on the relationship between rural development, female roles and fertility are age at marriage, marital dissolution and remarriage patterns, prevalence of consensual unions in contrast to church or legal marriages, migration patterns and type of family system.

### 1. Age at Marriage

There is a great deal of variation in age at marriage across countries and regions. The United Nations (1975) reports, for example, that over 70 percent of females 15-20 years old were ever married during the period 1960-71 in Chad, India, Mali, Nepal, the Niger, Pakistan, and Tanzania. On the other hand, the comparable figure for Korea was 3.9 percent. Several Latin American countries had 10 percent or less of the females of the same age groups who were ever married during the same period--Chile, Argentina, Uruguay, and the Bahamas (United Nations, 1975, Table 6).

Early and universal marriages are an important indicator of the status of women in a given country. This demographic factor is usually accompanied by a dependence on the family as a direct unit of production (thus making children highly valuable as unpaid household workers and as social security insurance), a high value placed on virginity, and a large age gap between husband and wife. The latter, in turn, affects couple decisionmaking. The female-role and fertility implications of early marriage would be great particularly if marital

birth control is not widely practiced and/or if the illegitimacy rate is low (Dixon, 1975; United Nations, 1975).

## 2. Divorce and Separation

The impact of marital dissolution due to divorce, annulment or separation on women's roles and fertility depends on a number of factors, among which are: the probability and timing of remarriage or entry into another sexual union; the woman's legal rights to financial support for herself and her children after a marital dissolution; her right to initiate divorce, and probably her perception of the ease or difficulty of obtaining a divorce. The United Nations (1975) notes, concerning the latter, that the husband's arbitrary right to divorce his wife in some countries, such as the case in most Muslim countries, would have a pro-natalist effect since the threat of divorce may frighten the wife into excessive childbearing in order to keep her marriage. The husband's arbitrary right to divorce, which is an indicator of the low status of women in society, may perpetuate such depressed status by effectively precluding the woman's participation in non-familial roles.

## 3. De Facto Marriages

Consensual unions or de facto marriages are more frequent in Latin America and the Caribbean. According to a United Nations (1975) report, they constitute more than half of all unions. Consensual or more casual visiting unions are entered into by the rural or urban poor because of the "high expectations for dowries, housing, employment and general levels of living considered appropriate to married life" (United Nations, 1975:53). Reviews of empirical evidence relating

type of sexual union to completed fertility have elicited contradictory results (Mason et al., 1971; McGreevey and Birdsall, 1974). Thus some studies report a positive correlation between legal or church unions and fertility while others have findings showing the opposite, i.e., higher fertility in consensual unions, or no relationship at all.

#### 4. Migration

Rural-urban migration patterns are expected to impact on women's roles in several ways: migration of either spouse reduces the amount of exposure to sexual intercourse and childbearing; when the man migrates, the wife left in the rural area may have to perform at least some of the male roles in the household, on the farm and/or in the community (which may enhance her status); when the woman migrates, she may be exposed to the modern influences of the city or town which may be relatively feminist and anti-natalist.

#### 5. Family Structure

The empirical evidence relating family structure and female roles and fertility is inconsistent and contradictory (Mason et al., 1971; United Nations, 1975). Mason et al. (1971) suggests that functional inclusiveness (which is only weakly correlated with structural inclusiveness) may be a more important factor influencing women's role and fertility. Macro-level data, however, suggest some relationship between family structure and female status. In the Middle East and North Africa and some countries in Asia e.g., India, where the patriarchal extended family system is predominant (Timur, 1978), the status of women is very depressed and marriages are arranged when the women

are still very young. The extended family may have a positive impact on fertility, aside from encouraging early marriage, in several ways: it facilitates childrearing; grandparents may put pressure on the young couple to have many children; the woman's status in the household depends on the number of children, particularly sons, she is able to have. On the other hand, egalitarian conjugal family structure has been found to be positively related to contraception in some studies although in other studies, the relationship between the two is problematic (Mason et al., 1971).

#### 6. Polygamy

There are marked regional differences in prevalence of polygamous unions. It is most widely practiced in Africa, e.g., as high as 63 percent in some parts of Nigeria and 45 percent in Uganda. The rates of polygamous marriages are quite low in Asia (e.g., 3 percent in Pakistan and Indonesia) and the Middle East (e.g., 4 percent in Egypt and 2 percent in Algeria) and non-existent in Latin America (Boserup, 1970). While the fertility per woman in polygamous marriages is lower than in monogamous unions (United Nations, 1975:61), the completed fertility per husband would, of course be considerably higher.

#### The Cultural Variables

Cultural values and attitudes related to motherhood, women's seclusion and restricted mobility, son preference, and male dominance may effectively weaken, if not totally negate, the impact of rural development on women's roles and fertility.

#### 1. Motherhood

As Newland (1977) notes, in many societies cultural rewards

are bestowed on women with large numbers of children because children are considered as a sign of good fortune, virtue and wealth. And even where women are economically active, motherhood is still considered as their primary role.

## 2. Female Seclusion and Restricted Mobility

Cultural constraints on female mobility and female seclusion are very marked in the Middle East region and in most of South Asia while minimal in Africa, Southeast Asia and Latin America.

## 3. Son Preference

Where restrictions on female mobility also severely limit their participation in productive activities and, therefore, their economic utility to the families of origin and procreation, son preference is apparent. The consequences on the woman's status of this cultural preference of male children are reflected in the higher mortality rates, poorer nutritional and health conditions, and lower literacy and school attendance rates for females in some countries in the Middle East and South Asia (United Nations, 1975). The pro-natalist effects of son preference, however, are problematic (McGreevey and Birdsall, 1974; United Nations, 1975).

## 4. Male Dominance

Cultural values supporting male dominance, privilege and prerogative have been hypothesized as being a source of female oppression and as providing considerable negative influence on the acceptance of family planning in many developing societies (United Nations, 1975). Although the pro-natalist implications of male dominance have not been empirically supported at the micro level, a comparative analysis of

fertility rates between Muslim countries (where cultural values strongly supportive of male dominance are prevalent) and non-Muslim countries shows higher fertility rates for the former (Youssef, 1974).

#### Social Psychological Variables

Some studies suggest that changes in perception, motivations, and attitudes would probably mediate the relationships between rural development and women's roles and fertility. In a review of the literature on modernism and fertility, Mason et al. (1971) identify such modern attitudes as "broader understanding of the world," "more interest and concern with their own and their children's future," "a greater sense of efficacy and willingness to plan to achieve aspirations," and "an openness to change and to the outside world" as probably being associated with small desired and achieved family size. They also note studies suggesting that such modern behaviors as work commitment and approval of maternal participation in non-familial activities outside the home are negatively related to fertility. McGreevey and Birdsall (1974), in an earlier review of some of the same studies, have noted the importance of these modern behaviors on family size and contraception. Birdsall (1976) suggests that maternal employment would reduce fertility if it results in role extensiveness, i.e., "a concept of her role extending beyond that of wife and mother," which would reduce her interest in having a large number of children.

#### Political and Conjugal Power

The women's right to choose her mate, her rights within marriage and after the marriage is dissolved by divorce, separation or death, have important implications on her roles and fertility (Dixon, 1975;

United Nations, 1975). Arranged marriages, for example, which are prevalent in the Middle East, South Asia and some parts of Africa, are associated with early and universal marriage, a large age gap between the husband and the wife, and a subordinate position for the woman. These are conditions conducive to high levels of fertility, particularly where marital birth control is not widely practiced and where de facto marriages are not prevalent. Egalitarian marital relationships are associated with a high degree of communication between the spouses about sex, small family size desires and family formation planning, and a lower gap between desired and actual family size. The husband's arbitrary right to divorce his wife, as noted earlier, may force her into excessive childbearing to protect her marital status. The relationships between women's rights to property, financial support, child custody, and remarriage upon dissolution of the marital union are hypothesized to affect her status and roles within the family and society and her fertility. The empirical evidence clarifying these relationships is not available, however.

#### The Stratification Variables

Social differentiation factors, particularly those based on ownership of land, may be expected to have implications for women's status and roles, as well as on their reproductive behavior. Sex role segregation and definitions of the appropriateness of agricultural work differ by social class. Sex role differentiation is marked among the upper strata but minimal among the lower classes. Men and women of landless families equally share most agricultural work

and decisionmaking concerning the disposition of farm produce and income. Women of landowning farm families, on the other hand, experience restrictions on the use of farm implements and tools and on decisionmaking related to agricultural production and marketing (Deere, 1978; Young, 1977).

Youssef (1979)<sup>1</sup> summarizes the effects of social class, specifically the emergence of private ownership of land on the status of rural upper and middle class women, as follows:

1. Restriction of women's roles in the economic productivity process, by strictly defining what are "appropriate" activities for women;
2. Exacerbation of women's economic dependency on and subordination to their menfolk (through parental control of marriage, the dowry system, etc.);
3. Fostering of a highly sex segregated division of labor, which relegates women to home activities and encourages seclusion and veiling practices;
4. Loss of women's control over the proceeds of her productive work and over vital input in to the household;
5. Reinforcement of an ideology in which women become valued solely because of their reproductive capacities.

On the basis of these effects of social class on women's status and roles, Youssef (1979) hypothesizes that women from the landless and wage labor class would have lower fertility than women from the middle and upper peasantry. However, the research evidence supporting

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<sup>1</sup>The above discussion is largely based on the critique of the paper by Nadia H. Youssef, International Center for Research on Women, Washington, D. C., April 1979.

a positive relationship between social class and fertility suggests that the negative effects of rural poverty on fertility is partly due (independent of female status and work roles) to high frequency of marital disruption, secondary sterility, subfecundity, miscarriages, stillbirths, and post-partum abstinence (Hull, 1977; Conception, 1974, and Schulz, 1972, cited in Youssef, 1979). As noted elsewhere in this paper, moreover, there is also research evidence of a negative relationship between social class and fertility. The negative effects of social class on fertility are due to several factors, including differential access to family planning information and services partly because of illiteracy among the poor, and the need to work to help support a large family.

#### The Family Planning Variables

There are marked regional differences in family planning efforts and goals in developing societies. According to a United Nations family planning programs which are demographic oriented are unique to the Asia region (although, as Rodriguez, 1978, notes, service to the Asia region (although, as Rodriguez, 1978, notes, service delivery may not be efficient in some areas, e.g., Nepal). In Latin America and the Caribbean, most countries have government or private-sponsored family planning programs. Some of these have as their primary objective the improvement of maternal and child health while others are concerned with demographic factors. About half of the African countries have pro-natalist policies. In the Middle East and North Africa, only several countries (Iran, Egypt,

Turkey, Morocco, and Tunisia) had government-sponsored family planning programs in 1972.

The accessibility of family planning services is an important factor that would influence the impact of rural development on women's roles and fertility. As several sources (Dixon, 1975; United Nations, 1975) have noted, the woman's ability to plan the number and spacing of her children is an important prerequisite to her attaining social and economic equality. Several other studies and supplies does enable women to reduce the gap between desired and actual family size (Berelson, 1974; Mauldin, 1975; Ridker, 1976) and has a significant effect on child birth reduction and contraception independent of education, urban residence, and other socioeconomic factors (Brackett, 1978; Mauldin and Berelson, 1978; Rodriguez, 1978). However, as Mauldin and Berelson (1978) further point out, those countries which are both relatively high in development and family planning service indicators have the highest decline in child birth rate.

Youssef (1979) summarizes significant data from studies of family planning in the rural areas in developing societies as follows:

1. In rural areas of many developing countries, Family Planning Programs have not effectively reduced fertility.
2. Family Planning Programs, however, appear to have been successful in some countries, particularly in Asia:

Twenty-one percent of the urban and seventeen percent

of the rural fertility declines in South Korea were reported to be due to family planning and abortion. (Worth et al, 1971, as cited in McGreevey & Birdsall, 1974)

In Taiwan (1968) family planning programs had significant effects on fertility declines even "where socioeconomic factors are operating." (Hermalin, 1968 - cited in McGreevey & Birdsall, 1974)

In India, it was found that "33.4% of the eligible couples in the village of Singur were contraceptive acceptors." (Sha, 1971)

In Iran, it is reported that the villages with health workers had a total of 270 women-years of use and 69 terminations in the first year giving a termination rate of 26 per 100 women-years of use for the first year. The rural midwife villages had a total 245 women-years of use and 70 terminations giving a termination rate of 30 per 100 women-years for the control group." (Zeighami et al, 1977)

3. The reported urban-rural differential in contraceptive usage is substantial for countries in different regions.

In Latin America's major cities 15% or more women use two or more contraceptives, as compared to less than 5% in the rural areas. Urban women not only use a wider array of contraceptives than rural women; they also use the more effective ones. (Miro & Mertens, 1968)

In Pakistan, in a Family Planning Program which, in 1968-69, established 15% - 20% target rates, the actual percentage of users was 10% nationwide and 4% among rural women. (Sirageldin, Norris & Hardee, 1976)

The World Fertility Survey (Nortman, 1977) shows that urban/rural differentials in contraceptive usage among married women of reproductive ages vary from a range of 12 percentage point differences in Pakistan, 16% in Colombia, 29% in Thailand, and 40% in Turkey. This gap is explained by the lack of accessible family planning programs to women in rural areas.

4. There is some debate as to whether the low acceptor rate in rural areas is due to (a) lack of accessibility to family planning programs, (b) lack of knowledge of family planning programs, or (c) lack of demand for family planning services. Each one of these has different implications for policy.

The Reporting on the Danfa Rural Health/Family Planning

project in Ghana indicates that women generally are unwilling to travel very far for family planning services. (Neumann et al, 1976)

Some studies in Ghana and in Egypt suggest that knowledge of contraception was obtained through family and friends. Formal sources such as family planning clinics and mass media did not have a great impact on rural women in these countries with regard to knowledge of services. (Neumann et al, 1976)

Still other studies in Egypt and Jordan find that the knowledge of women in rural areas regarding family planning is not far behind those of women in urban areas. (Rizk, 1977; Sirageldin, et al, 1976)

5. The lack of demand for family planning services among rural women is attributed to the following:

In countries such as Ghana, despite widespread approval of family planning, there was little use of contraception because large family size desires still persisted. (Belcher, et al, 1978)

In the case of Ghana high infant and child mortality rates was a major impediment to contraceptive use. (Neumann, et al, 1976)

In Pakistan, lack of accessibility and cultural and social constraints seem to have hindered program acceptance. An important constraint was the husband's opinion of family planning. (Sirageldin, Norris & Hardee, 1976)

Poor management of family planning clinics located in rural areas discourages women from seeking contraceptive advice. In Jamaica, rural women were found to wait longer (up to two hours and more) than urban women to obtain services in clinics. They were much less likely to be examined by a doctor. Rural women were more likely than urban women to report "that they not like family planning less than before". (Bracken, 1977)

At present considerable efforts are being extended at the "grass roots" level to integrate family planning programs into other women's programs. An evaluation of the outcome of such programs, particularly insofar as fertility is concerned, are crucial. For instance, in order to enhance the status of women as a means to "complement, support, and accelerate the acceptance of planned parenthood," the IPPF has established the "Planned Parenthood and Women's Development Programme". The programme offers technical and financial assistance to organizations aiming to improve health, nutrition, economic and educational aspects of women's situation where family planning is concerned. Included in the IPPF program are

at least eight rural projects in Africa, two in the Far East, three in South Asia and three in North Africa and in the Middle East. These programs would provide an interesting "experimental" context in the near future in which to test the relative impact of women's status on desired family size and on family planning programs.

#### THE HYPOTHESES

In this section, we shall put together eight general hypotheses which will be tested in each of the four regional sections. It is expected that the differential operation of the key variables discussed earlier would influence the variations in the impact of rural development on women's roles and fertility in these regions. The team decided to focus on the economic roles of women, for as Moore (1974) notes:

The major determinant of women's status, both cross-culturally and intra-culturally, is the power that accrues to women from participation in extra-domestic economic activities.

Changes in women's economic roles, more than any other roles, may be expected to have the greatest impact on her fertility. The hypotheses are:

1. Women's participation in subsistence agriculture is compatible with high fertility.
2. Women's participation in cash cropping is compatible with high fertility.
3. Women's employment in off-farm industry would have a negative impact on fertility.
4. Women's participation in home-based industry is compatible with high fertility.
5. Women's employment in trading and commerce is not necessarily

incompatible with high fertility.

6. Women's access to resources (land, technology, training, and credit) will decrease her desired family size.

7. Literacy training will lead to declines in desired family size.

8. Non-formal, vocational training will reduce desired family size if it strengthens women's income-generating activities.

### RURAL DEVELOPMENT STRATEGIES

In the next several pages, the hypothesized impact of six types of rural development activities on women's roles and fertility in the light of the key variables and the hypotheses above will be discussed.

#### Participation of the Rural Poor.

Rural development strategies that specifically integrate the rural poor women as decisionmakers as well as beneficiaries would produce more immediate and direct social and economic changes than comparable programs which are primarily directed at men (Dixon, 1978). On the other hand, externally introduced development programs which are based on the Western model of male provider exclude women from decisionmaking and, thus, women are precluded from participating or benefiting from these programs (Boulding, 1975; Simmons, n.d.). An outcome of such an ethnocentric bias is the erosion of women's participation in countries where women have traditionally played active roles as workers and decisionmakers (Riegelman, 1975; Skonsber, n.d.). The resulting loss in economic independence among

women would further depress rather than elevate their status and restrict rather than expand opportunities for engaging in non-familial roles. Since women's status and roles in the household derive in part from their position in society, this negative impact of modernization may affect their right to determine the timing and size of their families.

#### Off-farm Employment

Increasing opportunities for any type of off-farm employment may be hypothesized to have immediate and significant effects on women's roles in developing countries where two-thirds to almost all of the economically active women are in agriculture, such as in parts of Africa, e.g., Sierra Leone, 89%, Liberia, 93%; Gabon 94%; Botswana, 95% and Nigeria, 96%; some Asian countries, e.g., India 82%, Thailand, 86%; Pakistan, 86%; Malaysia, about 92%; and Nepal, 97%; and parts of the Middle East, e.g., Cyprus, 63% and Syria, 94% (United Nations, 1975, Table 5). In these areas, expansion of off-farm employment opportunities for women would absorb the excess female agricultural labor supply which has resulted from shifts from subsistence agriculture to cash cropping, and the displacement of female workers by men and technology. Downward trends in economic participation by women have been noted in Egypt, India, Pakistan (Durand, 1975), Peru and Guatemala (Hewland, 1977). Moreover, declines in rates of labor force participation by females in the prime of their childbearing years are projected in all

major regions of Asia and parts of the Middle East and in Africa. No change is predicted in Latin America and the Caribbean (ILO, 1971; United Nations, 1975) where the great majority (from 68 to 98 percent) of the employed women are in non-agriculture (United Nations, 1975) but mostly in family enterprises and domestic work. The creation of higher-level and better-paying jobs in this region would draw women employed in family enterprises and domestic work which may be compatible with childrearing.

Studies on the impacts of female employment on fertility in the rural area are reviewed by Birdsall (1976), Dixon, (1978), McGreevey and Birdsall, (1974), Newland (1977), and the United Nations (1975). Most of the studies reviewed suggest that in the rural area, female employment either has no effect or is positively related to fertility. In the latter case, a higher income due to female contribution to the household earnings enables couples to enlarge their families. On the other hand, a large number of children may force the mother into the labor force. In some cases, however, a negative relationship between female employment, even in agriculture, and fertility is found (Germain, 1975). This is especially true where female seclusion and severe restrictions on female mobility are practiced, as in Bangladesh where the Germain study was conducted. In this case, just being able to get out of the house broadens a woman's horizons, changes her self-concept and her relationship with her husband (Newland, 1977).

According to Dixon (1978), particularly with reference to Muslim countries where traditional cultural and social constraints on female mobility and activities are very strong, off-farm employment should incorporate all of the following features if it is to have maximum impact on social, economic, and demographic behavior.

1. Produce income over which women have some control
2. Provide employment in small towns and villages
3. Create jobs outside the agricultural sector
4. Introduce small-scale, labor-intensive light industries
5. Locate production in a central workplace outside the home
6. Recruit new workers, especially those women in their early reproductive years
7. Organize production on principles of economic and social cooperation
8. Offer additional services and incentives

Providing opportunities for off-farm employment to young unmarried women may indirectly reduce fertility by delaying age at marriage. Parents of income-producing daughters would not hasten to arrange or encourage their early marriage (Newland, 1977). Moreover, premarital work has been shown as the consistently most powerful predictor of marital employment, as least in West Malaysia (Fong, 1974).

#### Extension of Social Services

A variety of supportive action programs, such as health and nutritional services and training, literacy training and non-formal

education and agricultural extension services fall under the rubric "social services."

The improvement of women's physical wellbeing is a necessary pre-condition to their integration in the development process, especially since such participation means the assumption of multiple roles rather than the substitution of childcare and housework roles with the worker role (Birdsall and McGreevey, 1978; Caton and Van Haeften, 1974). The upgrading of maternal health status would have both pro-natalist and antinatalist consequences. Improved health, thus, will increase fecundity and, therefore, fertility if family planning is not widely practiced. On the other hand, a healthy woman is likely to give birth to healthy children. The positive relationship between fertility and infant and child mortality has been amply documented (Ballweg and Ward, 1976).

According to a United Nations (1975) report, "even the transition from illiteracy to literacy resulting from low levels of schooling" is associated with lower family size. The rare exceptions where illiterate rural women have smaller family size (Goldstein, 1972) are due to the poorer health and subfecundity among these women. Education, formal or non-formal, will not contribute to fertility reduction if curriculum and style of instruction emphasize women's familial rather than economic role (U. N. Commission for Latin America, 1975) and if a woman acquiring marketable skills is not able to find gainful employment (United Nations, 1975).

World Education (1975) suggests, from a preliminary study, that nonformal education for rural women would increase their interest and participation and bring about attitude and behavior change if:

- a. learning experiences are designed to encourage maximum participation of the women in the educational process;
- b. content reflects the expressed interests and concerns of the learning group, including their current or potential economic activities;
- c. education is taken to where women normally congregate either during leisure time or daily activities, rather than occurring in a classroom setting;
- d. rural women from the barrios are trained as paraprofessionals playing an important role in needs assessment, curriculum development, and evaluation.

Agricultural extension services that take into account the level and nature of female economic activity would serve to integrate women in the development process rather than be displaced by men and machine, as has been noted earlier in this paper. As a number of authors also have noted (e.g., Birdsall and McGreevey, 1978; Burke, 1978, Fagley, 1976; Fischer, 1978), the introduction of appropriate technology and the building of more accessible water wells would markedly reduce the drudgery of women's farm and housework. One of the consistently identified needs of rural women is for "light transport facilities for the portage of water, wood, farm produce and other loads" (Fagley, 1975). Although the evidence, noted earlier in the paper, is overwhelming that agricultural work

is compatible with high fertility, extending agricultural services to women may help increase their share of decisionmaking at home and this may have anti-natalist implications. Moreover, strengthening women's income-producing capacity as farmers and farm workers may help reduce son preference and parental pressure toward early marriages for their daughters.

### Marketing Systems

Another frequently cited need of rural women is the provision of marketing facilities, channels and skills that would allow them, rather than middle men or their husbands or male relatives, to profit from their labor. The need for direct marketing channels is particularly great in parts of Asia and the Middle East, where seclusion and severe constraints on female mobility prevail. Women in these areas, therefore, are totally dependent on their husbands or male relatives for marketing their farm produce or handicrafts. Feasibility studies for cottage industries to insure that there is a market for the products should be a component of development strategies if these industries are to lead to gainful employment for rural women.

Where commerce is a traditional woman's role, as in Southeast Asia and parts of Africa, improving transport facilities and roads would enable women to take their trade to the towns and longer distances. Thus, in a sense, marketing-oriented development programs would be anti-natalist.

### Area Development

Area development projects that incorporate women and participants and beneficiaries would enhance women's status in the family and in the community by expanding the range of roles they can assume (Ahmed, 1975; Boulding 1975). Area development strategies that incorporate support services e.g., child care facilities and formal and non-formal education would maximize female participation (Boulding, 1975). An upgraded standard of living resulting from area development intervention may have both pro- and anti-natalist effects. A better standard of living may raise parental aspirations for themselves and for their children. Thus, parents may trade off a larger number of children for a few ones of "better quality." On the other hand, general physical and economic wellbeing may increase virility and frequency of intercourse and fecundity.

### Rural Financial Markets

Socio-cultural attitudes and practices precluding female ownership of land and property and transacting business without the husband's consent have effectively hampered women's access to legitimate sources of credit and financing. Development projects extending credit to rural female food producers and processors, cottage industry workers, and traders are needed to break through these traditional obstacles to women's access to credit and bank loans (Ahmed, 1975; Boulding, 1975). Programs

creating or supporting existing female-controlled financial cooperatives in the Middle East and parts of Asia where women have the least right to property and least independent access to banking and credit facilities, would help encourage and strengthen women's participation in economic activities. These activities may range from tending vegetable gardens and animals for home use and cash to cottage and small-scale industries.

Even where women's economic participation as farm or cottage industry workers or traders is highly visible and considerable, as in Southeast Asia and Africa, their access to legitimate sources of credit and loans is largely restricted by male control of these resources. Development programs that are geared to facilitating and guaranteeing access to credit and bank loans by these economically active women would maintain and strengthen their economic independence from their husbands or male relatives and, therefore, may have anti-natalist effects.

#### SUMMARY

This section presents the conceptual framework for examining the effects of rural development strategies on fertility through their impacts on women's roles in the developing regions of Africa, Asia, Latin America, and the Middle East and North Africa. Key variables that support or negate the effects of development on women's roles and fertility are identified. These variables are classified into the following categories:

1. economic variables, including patterns of female labor force participation, conditions of labor demand and supply in the rural area, female ownership or access to land.
2. demographic variables, including age at marriage, marital dissolution and remarriage patterns, type of marital unions and family systems, and migration patterns.
3. cultural variables, including attitudes and values related to motherhood, seclusion, son preference, and male dominance.
4. social psychological variables, including attitudes related to work, changes in self-concept, and role extensiveness.
5. political variables, including patterns of conjugal decisionmaking and female participation in community activities.
6. family planning variables, specifically accessibility of family planning information and services and population policies of governments in these regions.

Taking into account the primary importance of women's economic role as a determinant of their status in the family, eight general hypotheses focussing on the economic roles of women are set forth. These will be examined under each of the regional sections.

1. Women's participation in subsistence agriculture is compatible with high fertility.
2. Women's participation in cash cropping is compatible with high fertility.
3. Women's employment in off-farm industry would have a negative impact on fertility.
4. Women's employment in home-based industry is compatible with high fertility.
5. Women's employment in trade and commerce is not necessarily incompatible with high fertility.
6. Women's access to resources (land, technology, training and credit) will decrease her desired family size.
7. Literacy training will lead to declines in desired family size.
8. Non-formal, vocational training will reduce family size if it strengthens women's income-generating activities.

General hypothesized impacts on women's roles and fertility of six rural development activities, taking into account the mediating influence of the key variables on the economic participation of women in these developing regions are discussed. The differential impacts of these rural development strategies for each region will be discussed in detail under the appropriate sections. These development strategies are:

1. participation of the rural poor

2. off-farm employment of women
3. extension of social services
4. marketing systems
5. area development
6. rural financial markets

## Chapter 2

### Rural Development, Women's Roles And Fertility In Africa

#### INTRODUCTION

Agriculture in Africa has traditionally been the primary domain of women. Where shifting cultivation was practiced, women were responsible for removing and burning trees, sowing and planting, weeding, harvesting, carrying and processing (Boserup, 1970). Although population pressure and other economic factors have encouraged sedentary farming, African women still begin to participate in agriculture early in life, put more time proportionally than men into farming (UNECA, 1974b) and tend to be superior agriculturalists (Boulding, 1975). Their primary economic role, however, has not kept them from maintaining one of the highest fertility rates in the world. African women have never viewed their roles as workers and mothers as mutually exclusive (Ware, 1977). In this sense, the African situation defies the notion that female employment is inherently anti-natalist. To explore this relationship, it is more appropriate to examine how the role of worker, and how the role of mother have changed as a result of development.

In many parts of rural Africa women support themselves as well as their children as they have always done (Boserup, 1970). As a result of development and recent shifts in production patterns, however, woman's access to resources, paid employment and education is not comparable to her male counterparts. With economic development increasingly focused on cash cropping, industry and mining activities in Africa, and a developmental blind-spot for women's participation in

these sectors, women's economic mobility has decreased (Boserup, 1970; Palmer, 1972; Tinker et al., 1976; Van Allen, 1974). The discrepancy between women's actual participation in the productive sector of rural Africa and access to nonformal education to improve her skills are illustrated in Table I. These estimates reflect a perception of women's roles which has been translated into development programs and policies. As shown in the right-hand column, these programs and policies are not reflective of the African woman's actual place in traditional modernizing economies (Pala, 1976).

Several authors have postulated that this trend is responsible, in large part, for economic and social stagnation in rural Africa. Women are at the core of the rural subsistence economy, which feeds and supports a sizable proportion of the African population (UNECA, 1976b). The marginal support women have received in the course of development is reflected in the marginal growth of rural Africa in terms of quality of life for individuals or self sufficiency for nations (Van Allen, 1974; UNECA, 1975a). Simply stated, the impact that development is having on women is twofold:

1. It is reducing their economic viability and mobility by limiting their access to education, skills, and employment;
2. It is increasing their laborload by drawing men away from subsistence production (still at the core of African society) (UNECA, 1975) and household tasks into cash cropping and urban industrial jobs (Pala, 1974).

Women in many parts of Africa continue to cultivate, harvest, haul water, cook, etc. in primitive, time-consuming ways (Van Allen, 1974). The incentive for bearing many children to help them is

TABLE I  
 WOMEN'S PARTICIPATION IN RURAL ECONOMICS  
 AND  
 ACCESS TO NON-FORMAL EDUCATION IN AFRICA

Responsibility			
<u>Production/Supply/ Distribution</u>	<u>Unit of Participation</u>	<u>Areas of Access to Non-Formal Education</u>	<u>Units of Participation</u>
Food Production	0.70	Agriculture	0.15
Domestic Food Storage	0.50	Animal Husbandry	0.20
Food Processing	1.00	Cooperatives	0.10
Animal Husbandry	0.50	Arts and Crafts	0.50
Marketing	0.60	Nutrition	0.90
Brewing	0.90	Home Economics	1.00
Water Supply	0.90		
Fuel Supply	0.80		

Units of participation are calculated on the basis of estimates of women's time as a percentage of all the time expended in a particular task. Units of participation were proposed in the Data Base for Discussion on the Interrelations between Women in Development, their Situation, and Population Factors, UNECA, June 1974. Data are from: The Changing and Contemporary Role of Women in African Development, UNECA, 1974; Country Reports on Vocational and Technical Training for Girls and Women, UNECA, 1972-74; studies, mission reports, discussions. Units of participation were determined first for areas within countries, then for countries, then for Africa.

Source: ECA/FAO, Women's Programme Unit, Rome.

logical. Rather than preventing women from working, children in rural areas represent economic and social support for women whose husbands may be absent (Bo'serup, 1970).

Some authors have suggested that women's production represents the unremunerated balance of their husband's income which is not substantial enough to support the whole family (Deere, 1975). This has two results:

1. As the benefits of development accumulate outside of the productive family unit, the aspirations for a better life based on improved standards of living (which characteristically precede a drop in the desired number of children) does not occur (Mueller, 1975).
2. As women remain in a stagnant rural economy their traditional attitudes and incentives for many children do not change (Pala, 1974).

As illustrated in Table I, education and extension services directed at women are often focused on domestic skills rather than building on income-producing potentials (Boulding, 1975). As a result female participation in income-generating employment is considerably lower than men's (Dixon, 1975). With limited access to extension services, education and credit, rural women have become more dependent on their husbands than they were in the past (Opong, 1976). Their ability to support themselves and their children has diminished. Their potential for gaining a strong foothold in the cash economy is leaking away (UNECA, 1974b).

#### THE KEY VARIABLES

##### Economic Variables

As discussed above, women have always played important roles

in the economies of Africa. The majority of African women today are self-employed in agriculture, petty trading, handicrafts, and cottage industries in the traditional sector (UNECA, 1976). Women are not well represented in analogous occupations in the modern sector (UNECA, 1974b).

This discrepancy has been attributed to:

1. Lack of adequate education and skills (UNECA, 1974a; 1976);
2. Cultural biases against women in executive, administrative and managerial positions;
3. Lack of access to resources (land, credit, technologies) (Fortmann, 1978) and markets;
4. Breakdown of the extended family and male migration which puts more production and childcare demands on women effectively leaving them little time to develop income-generating skills (UNECA, 1974a; 1976).

Women's work is supporting a growing modern economy in which men receive income for the same work that women provide for minimal remuneration (as with subsistence agriculture vs. cash cropping) (Snyder, 1975). Women are being squeezed out of their traditional income-generating activities by competition with industry, imported goods, or larger, nationally supported enterprises (as with petty trading and handicrafts vs. industrial products or "supermarkets") (UNECA, 1974a). Some of the specific aspects of women's employment will be considered below.

## 1. Agriculture

It has been estimated that women are responsible for 60-80% of the agricultural labor in Africa (UNECA, 1974a). Many studies of what women in rural Africa actually do remark on the large amounts of time that women spend doing burdensome tasks such as hauling water and wood, pounding grains and legumes, as well as all of the subsistence farming activities which are often done with primitive tools (UNECA, 1974a).

Much of this activity is not considered in employment statistics, nor do women receive substantial cash remuneration for such tasks. Women often assist their husbands in cash-cropping activities but most studies suggest that they receive little if any income for their labor (Deere, 1975; UNECA, 1975). For women involved in agriculture, their sole source of income is often the extra food which they can grow and market.

Technological innovations and extension services are a mixed blessing to African women in rural areas. On the one hand, improved water supplies and mechanized grinding mills may save women hours of back-breaking labor (Ward, 1970). On the other hand, women's subsistence labor often increases as men enter the paid labor force (as a result of extension training and new employment opportunities) or children go off to school (UNECA, 1974a). One study noted that women perform more agricultural

labor in villages where improved farming techniques were introduced. "The reason for this was that women had to do most of the new types of work, while the men had reacted to the higher yields from the new methods by reducing the area of land prepared for cultivation. . .below the amount usual in the old-fashioned village" (Georges and Guet, 1961).

## 2. Marketing and Commerce

Where there is information on women in marketing and commerce, studies and statistics indicate that a high percentage of women, particularly in West and Central Africa are involved in marketing either full-time or in conjunction with their agricultural activities. In Nigeria women make up 70% of those participating in marketing. In Ghana it is as high as 84%. In Somalia, women dominate the open markets (UNECA, 1974a).

In many cases, women may elect to go into trading because it is less physically taxing than farming, and allows more time flexibility in terms of child care (Boserup, 1970). For illiterate women, marketing may be their only alternative to agriculture (Boserup, 1970; UNECA, 1974a).

The level of capital investment and gain from marketing activities varies considerably in different regions of Africa. In some communities women have organized powerful cooperatives whereas in other areas, women may travel long distances to trade

low volumes at low profits (UNECA, 1974a). This will be considered in more depth in the following section of Off-Farm Employment.

In places where marketing is a full-time occupation, such as in West Africa, the capital for initial investments may come from the woman's family or husband. In most societies, women keep the proceeds from sales of their own produce. This may include processed foods, woven baskets, etc. However, when women transport and market cash crops such as cocoa, or coffee, they often hand over the proceeds to their husbands (UNECA, 1974a).

### 3. Wage Employment in the Modernizing Sector

As a rule women's participation in all sectors of the modern economies of African countries is low. The exception to this is seen in professional and technical fields where African women with high levels of education have established a small niche (UNECA, 1974a).

For the majority of rural women who are illiterate or have received little education or training, access to wage employment in industry is difficult. This low representation has been attributed, as well, to frequency of childbirth which may bias employers against hiring women (UNECA, 1974a). In Sierra Leone and Liberia only 2% of those employed in industrial occupations are women (Boserup, 1970).

TABLE II

## WOMEN IN THE MODERN ECONOMY

GHANA - Percentages OF Women Among High Level Workers  
1960 and 1967\*

<u>Year</u>	<u>Sector and Percent Female</u>	
	<u>Professional, technical and related fields (%)</u>	<u>Administrative, executive and managerial (%)</u>
1960	19.4	3.1
1967	19.1	4.2

KENYA - Percentage of Women in Formal Sector Wage  
Employment, by Economic Sector, 1963 - 1970+

<u>Sector</u>	<u>1963</u>	<u>1966</u>	<u>1969a/</u>	<u>1970</u>
Agriculture	19	18	15	16
Manufacturing	6	6	5	6
Commerce	10	10	9	10
Transport	5	5	3	5
Services	16	16	22	20
All Sectors <sup>b/</sup>				

\*Source: Year Book of Labour Statistics, 1967, ILO, Geneva.  
Labour Statistics, Government of Ghana, 1967.

+Source: Employment, Incomes and Equality, ILO, Geneva, 1972.

a/ Includes public sector.

b/ The coverage of these overall figures includes a number of sectors in which very few women are employed, and which are not listed elsewhere in the table.

A recent UN publication commented that "percentages of women in the industrial labor force increase almost exclusively when the total economy, or some sectors of it, is growing rapidly, or when jobs are implicitly or explicitly identified by employers, policymakers and planners as feminine fields" (UNECA, 1974a). This is exemplified in Table II.

#### Demographic Variables

The aspects of women's status which are critical determinants of fertility have been outlined in the introduction. In this section the demographic "variables" which are critical to the question of how rural development activities may effect fertility in the context of rural Africa will be discussed.

##### 1. Age at Marriage

Traditionally, African women were married soon after puberty; men married at a slightly older age. Data on current trends in rural areas is scarce, but it is clear that delayed age at marriage in urban areas is one factor accounting for rural-urban fertility differences (Caldwell, 1975).

##### 2. Divorce

According to tribal custom, husbands pay a bride price for their wives. This is because women represent an economic asset to the family. In most of Africa, it is customary that a woman may leave her husband if she can pay back the bride price.

Boserup comments "this makes older men take an interest, on one

hand, in keeping bride prices at a level which makes it difficult for women to earn enough to pay them back and on the other hand in preventing their young wives (in the context of polygamy) from obtaining money incomes" (Boserup, 1970:47). The latter throws an interesting light on the cultural obstacles hindering the integration of women into the paid labor force. In some places divorce rights are exclusively men's (Mbilinyi, 1974).

### 3. Polygamy

In her chapter "The Economics of Polygamy" Boserup (1970) describes the economic and social reasons why polygamy has been and still is a common form of marriage in Africa. Shifting cultivation, the most common form of farming until very recently was almost solely the responsibility of women and younger men-- often sons. Land ownership was based, traditionally, on the ability to cultivate the land. Hence many wives and many children were an economic asset to husbands and tribes. A large number of women and children made it unnecessary to employ wage labor (Little, 1930; Boserup, 1970). Although the prevalence of polygamy has declined in recent years, an estimated 22% of all marriages in Senegal are polygamous; 51% in Sierra Leone; 63% in one region of Nigeria and 45% in one region of Uganda (Boserup, 1970).

Polygamy is not practiced purely for economic reasons. It may also allow the husband to enjoy more leisure or increase his progeny (Boserup, 1970). In Africa women in polygamous marriages are responsible for providing for themselves, their children and portions of their husbands needs as well. For women, co-wives are welcomed to share the burden of daily work. Women have traditionally enjoyed considerable economic and social independence from their husbands (Ocloo, 1974; Boserup, 1970).

Polygamous marriages typically show lower fertility rates per female. Caldwell (1975) cites two reasons for this: (1) lower coital frequency and (2) the age discrepancy between older males and younger second and third wives whose fertility may be lower (based on the reduced fertility of their husbands) than younger women in monogamous marriages.

#### 4. Female Headed Housholds

A recent study estimated that twenty-two percent of all families in subsaharan Africa are headed by women without husbands (Buvinic and Youssef, 1978). In Kenya more than one-third of rural households are headed by women (UNECA, 1974; Buvinic and Youssef, 1978). In Botswana, the proportion of single women with children is as high as 45% (Buvinic and Youssef, 1978). This phenomenon can be traced to development. National dependence on

cash cropping, mining, and small scale industry have allocated resources into export production. As a rule, the technologies and skills necessary for employment in the cash economy have been reserved for men. As a result more men than women migrate to centers of production. "Women stay behind in the rural area, where their tilling of land provides social security for the whole family, should the husband or father lose his job through unemployment, ill health or retirement. Sometimes a portion of the men's wage is sent back to the farm but often the mother is left to try to make ends meet." (UNECA, 1974 a, pg. 17; Pala, 1976).

In Ethiopia, Madagascar, and Tanzania there is higher rural-to-urban migration among females than males and a high percentage of female headed households in urban areas (UNECA, 1974a; UNECA, 1972).

### Education

#### 1. Formal

Women's educational status is probably the best indicator of her economic and social status as well as her fertility. The performance of children in school has also been strongly correlated with the education of the mother (Dixon, 1978).

Although a high percentage of rural African women are illiterate, this trend is changing in the context of a push on

the part of many African governments to raise the educational levels of poor rural women. On the average, girls constitute 30% of primary and 25% of secondary school students in Africa. In Swaziland, Botswana and Lesotho, it is as high as 40-60% (UNECA, 1974a). In general, the drop-out rate for girls is higher than for boys. Girls may leave school because of pregnancy or early marriage. Often their duties in assisting their mothers on the farm and at home prevent them from ever attending school. Boys are usually given preference in terms of demands on their time and family resources allocated toward their education (UNECA, 1974a).

According to UNESCO statistics for 1969, women's participation in higher education is under 20%. University women tend to gravitate towards the arts and biological sciences rather than, for instance, business administration or engineering which are in high demand in their countries (UNECA, 1974a).

## 2. Nonformal

Although women's enrollment in formal education is rising, the percentage of women involved in vocational or technical training is still low. Only 3 of 14 African countries studied (Ivory Coast, Senegal and Dahomey) reported 30-40% of women and girls involved in vocational education. The other countries fell below this (UNECA, 1974a).

The number of women and girls involved in types of training which might improve their access to paid employment of income-generating activities in the modern sector is even lower. Most vocational courses offered to women and girls are areas considered to be "feminine fields" such as sewing, child-care, embroidery (see Table 1).

#### Cultural/Psychological Aspects of Women's Role

The literature which discusses women's status as it relates to her roles as provider and childbearer affirms that women have historically derived status from both forms of activity (Ware, 1977). High mortality rates and sparsely populated lands allowed women as much status for their reproductive as for their productive capacities (Pala, 1976). As a result of their economic and social responsibilities, African women have traditionally enjoyed a high degree of social mobility.

Childbearing is not traditionally viewed as mutually exclusive with economic activity. In Ghana, Cameroon and Tanzania, in fact, participation in subsistence or income-generating activities does not drop during the childbearing years, but continues to rise up to age 45-54 (Ware, 1977). In this vein, even professional women, in general, do not respond to their status in the modern sector by lowering their desired family size. Ware (1977) cites a revealing quote from a local African magazine: "The first Nigerian

women on the senior bench is, among other things, a lawyer, a journalist, and a teacher, reaching the pinnacle of all these professions and also the mother of seven children" (Joseph, 1970). Ware (1977) comments: "From an African point of view, this is only reasonable, for by definition a woman who does not produce children cannot be a success." Women's aspirations, then, are both economic and domestic.

Several observers have postulated that, as a result of a de-emphasis on women's role in economic productivity, her childbearing status has become more important (Boulding, 1975; UNECA, 1974a; Riegelman, 1974; Skonsberg; Opong, 1976). Progeny, still a status symbol for both men and women, are the one area where women can reciprocate for their increasing economic dependence upon their husbands (Opong, 1976). This is not only revealed in the way men view women, but the way women have come to view themselves. It is not difficult to imagine that rural women whose access to information and hence alternatives is limited, will be less likely to know about family planning. Women who come to view their childbearing potential as the single activity from which they derive cultural reinforcement will be less likely to care about family planning (Ahmed, 1977a; Sudan Family Planning Association).

#### Stratification Variables

In pre-colonial Africa, women had usufructuary rights to

land disposition (Pala, 1976; Fortmann, 1978). These traditional practices have created a kind of "catch 22" for rural women in terms of their access to land for income-generating production. Fortmann (1978) illustrates this paradox in an example from Tanzania.

"The issue of land is complicated by the customary law regarding permanent crops. If a person obtains land to plant a maize crop, the land can be reclaimed after the maize is harvested. However, if a person plants a permanent crop such as coffee or coconuts, the trees remain the property of the person who planted them regardless of who owns the right to use the land where they are planted. In the case of a crop such as coffee, this effectively means that the owner of the land has lost all use of it until the coffee trees die or are cut down by the person who planted them. For this reason (women's) groups . . . are unable to obtain land on which to grow crops (such as coffee) which would be much more lucrative than the maize or beans for which they can get land. In this way women and women's organizations which do not traditionally have land of their own are effectively excluded from cash crop production."

In other countries, land tenure registration makes women's access to land difficult. The economic emphasis on cash cropping--done primarily by men--has left inferior land available to women (Pala, 1976).

#### THE HYPOTHESES

As a rule, the literature does not address itself to the impact that specific rural development projects have had on women's status which has led to a direct change in their fertility behavior. In this section, therefore, the development and population literature which bear either directly or by inference on this relationship will

be formulated into a series of hypotheses. Where possible, support for the hypotheses will be drawn from African literature and case studies. However, the dearth of information on this subject as a whole, may require some of the "holes" in knowledge about the African scene to be plugged with references from general hypotheses or findings from other regions.

A general hypothesis linking development and fertility in the African context which emerges from the literature is as follows: rural women have always derived status from production and marketing activities as well as childbearing and rearing. These activities are not perceived as mutually exclusive. The simultaneity of these activities is more difficult today because of the breakdown of the extended family and migration of many husbands to the urban areas. Nonetheless, social and economic incentives for both large families and female labor force participation persist. Many women must support their own children without the support of husbands (Buvinic and Youssef, 1978). Conversely, many mothers are supported primarily by their children in terms of farm and market labor and old age security (Boserup, 1970). In addition, women derive much status from progeny (Reigelman, 1974; Ware, 1977).

Rural development projects which emphasize income-generating employment for rural African women on par with national levels of development may lead to a reduction in desired family size over

time. This will occur as rising aspirations for offspring become realistically attainable, through rising standards of living (Ahmed, 1974; Dixon, 1975; Monsted, 1977). Furthermore, because women bear both productive and reproductive burdens, they may be the first to change their attitudes about family size (Monsted, 1977).

1. Women's participation in subsistence agriculture is not incompatible with high fertility

As discussed above, most of women's agricultural contribution involves subsistence farming. In this context children are an asset in terms of the labor they contribute (Monsted, 1977).

Although women are often responsible for supporting their children, the opportunity cost of an extra child is perceived as low.

Monsted (1977) has suggested that child labor may be relatively more important in subsistence than cash crop situations. Part of this depends upon the amount of time children spend away from the farm in school which is often related to income-levels.

Kenyan landless women who are susceptible to seasonable demand for labor, expressed a desire for as many children as possible, presumably to increase the familial income. Nonetheless, Monsted (1977) postulates that because women in rural areas of Kenya bear primary responsibility for family support, their attitudes towards large families may change before their husband's. Increased economic pressure, women's more tenuous position in the economy, the physiological strain of repeated childbearing, as well as a

growing prevalence of female-headed households, may cause women to perceive a large family as a mixed blessing (Monsted, 1977; Opong, 1976).

2. Women's participation in cash cropping is not incompatible with fertility

The scenario implied by this hypothesis is somewhat theoretical, as women's contribution to cash cropping in Africa is usually only insofar as she is assisting her husband. As a rule, she receives minimal or no cash remuneration (Monsted, 1977).

The lack of equitable participatory and economic status inherent in such a situation has some important implications for fertility:

1. it erodes women's traditional decision-making power in agriculture which may weaken her decisionmaking power in terms fertility (Dixon, 1975);
  2. it promotes her economic dependence upon her husband and thereby reinforces her value as childbearer (Opong, 1976; Van Allen, 1974);
  3. it relegates her to the (increasingly stagnant subsistence sector which hinders receptivity or motivation to change values (eg. family size aspirations) or adopt new practices (eg. family planning) (Ahmed, 1974a).
3. Women's employment in off-farm industry will have a negative effect on fertility

Rural industry in the modern sector may shun women for the same reason women may shun participation in industry. Employers

argue that women will leave more frequently than men because of frequent pregnancies (UNECA, 1974b). Women often find it difficult to enter the industrial labor force because of their childcare responsibilities. Employers also argue that women are more expensive overall if the factory is required to provide child care (Boserup, 1970). Studies in Nigeria and Uganda argued that employers refrained from hiring women because of laws prohibiting them from working the night shift (Boserup, 1970). Laws in many places protecting women against such discrimination and insuring them maternity leave have had little impact. Several studies in Nigeria and the Congo indicate that there is a large female labor force anxious to enter industry (Boserup, 1970). For the most part their entrance is barred for the reasons mentioned above. In addition, as discussed in previous sections, women usually lack the skills necessary to do industrial work. This is particularly true in management and administration not only in industry, but all aspects of the modern sector (UNECA, 1974a).

From this, it is possible to conjecture that women's entrance into industrial jobs might limit fertility by:

1. creating a situation of work/childcare incompatibility, especially where the kinship support system has broken down, (Terry, 1974);
2. raising rural women's income, aspirations for herself, and her children.

4. Women's participation in home-based industry is compatible with high fertility

Women have always played a major if not single-handed role in food processing (Skonsberg). Men are often involved in weaving, tailoring and sewing (UNECA, 1974). Women do other kinds of handicrafts, in conjunction with their husbands, or in cooperation with other women. As long as they remain in or near the home, these tasks will not be incompatible with childbearing and childrearing. As women take on more tasks for which they receive no remuneration, such home-based industry (and marketing activities) may be their sole source of income. Such activities could encourage higher fertility when children contribute to productive activity and do not interfere with women's work.

5. Women's employment in trading and commerce is not necessarily incompatible with high fertility

As described above, African women represent a strong economic force in traditional marketing networks. Many women prefer this occupation to agriculture (although sometimes it is less profitable) because it is less taxing physically (Boserup, 1970). Participation in marketing has never been viewed as incompatible with having many children. Mothers either bring their children with them to the marketplace where they assist with small tasks or leave infants with kin or older children (Ware, 1977). However, with changes in the kinship system and competition from the modern

sector, this important source of income for rural African women is being threatened (UNECA, 1974c). The possible fertility consequences are:

1. women will be increasingly dependent upon men for their support and hence either have less children because of their potential economic vulnerability (Opong, 1976; Monsted, 1977) or
2. women will fall back on their domestic roles and hence have little incentive to reduce their fertility (Ahmed, 1974a)

If women become more active in marketing in the viable traditional as well as the growing modern economy, their aspirations for themselves and their children will rise. The opportunity costs of adequate education, health, nutrition, etc. for fewer children may dampen desired family size. Such a scenario is only achieved when women acquire both the skills, credit and socially sanctioned access to the marketplace.

6. Women's access to resources (land, technology, training and credit) will decrease her desired family size.

The fact that in most rural African communities spouses have maintained independent budgets has been an important incentive for female participation in income-generating activities. In the past such activities have not been in conflict with childbearing or childrearing (Ware, 1977). Today, however, women's diminished access to the cash market, land, technology and credit are slowly eroding this economic independence. The psychological impact on

fertility decisionmaking has been discussed above.

There is evidence that women's access to and utilization of land, technology, training and credit represent great potentials in terms of raising familial and national standards of living. Several studies have shown that given the means, women can and do adapt to new methods and readily learn new skills (Fortmann, 1978; Boulding, 1975). The most potential lies in the areas of agriculture and marketing, where women have a legacy of expertise and hence represent an important (though generally untapped) labor force for modernization. Lacking such a situation, the fertility implications can only be inferred from the literature: Women's access to resources for production and market outlets will improve familial standards of living, raise aspirations for children, and lower desired family size (Monsted, 1977; Ahmed, 1974; Dixon, 1975, Boulding, 1975).

7. Literacy training will lead to a decline in desired family size

Literacy training, though still new, is on the increase in rural Africa. It is too early to measure the effects of female literacy on fertility. It is clear, however, that literacy will predispose women to lower their fertility by exposing them to new ideas, heightening aspirations for themselves and their children and increasing their income-generating capabilities (Boserup, 1970; Boulding, 1975; UNECA, 1975; Dixon, 1975).

8. Nonformal, vocational training will reduce desired family size if it strengthens women's income-generating capabilities,

Several authors have pointed out that vocational education in rural Africa tends to be sex-specific (Boulding, 1975; Reigelman, 1975; UNECA, 1976; Morgan, 1976). Where such services reinforce women's domestic responsibilities (i.e., with courses in nutrition, homecrafts, childcare, etc.) to the exclusion of income-generating skills, they will do little to alter women's current role. Although domestic skills are important, they serve to emphasize women's maternal roles without offering them alternative ways of improving their economic lot. Both cultural and economic pronatalism is reinforced by the sex stereotyped division of vocational education (Mbilinyi, 1971).

#### RURAL DEVELOPMENT ACTIVITIES

##### Participation of the Rural Poor

In many parts of Africa, women are important decisionmakers in terms of agricultural practices, household logistics, child rearing, as well as other income-producing activities such as food processing and marketing (Fortmann, 1978). Ironically, many of these culturally sanctioned roles have been ignored in the process of technology transfer and extension services (Reigelman, 1975; Daton and Van Haefton; 1974; USAID, 1974). Although women are often part of the implementation of participation projects, they are

rarely part of project planning (Reigelman, 1975; Bond, 1974, Fortmann, 1978). Fortmann (1978) has pointed out that even in the Ujamaa Villages of Tanzania, where women's participation in agricultural production outnumbered men 2:1, no women served on village committees and women rarely attended village meetings (Sender, 1974).

The discrepancy between male and female participation in project planning is considerably more striking in the modern sector (UNECA, 1976). Women's participation in community development projects, and in the agricultural sector as a whole has no potential effect on family size as long as women continue their productive and childbearing responsibilities as they always have (Boserup, 1970). By limiting women's access to decisionmaking at the community and national level, the economic and social dependence and powerlessness implicit in this situation will translate into household decisionmaking (Dixon, 1975).

#### Off-farm Employment

As discussed above, women, particularly in West Africa, have traditionally engaged in marketing activities. These "market women" maintain high fertility rates (Ware, 1977). As Ware (1977) has pointed out, women's role as producer, trader and even professional is not viewed as an alternative to childbearing. Rather, productive labor is regarded as mutually compatible with bearing

and bringing up children. Ware (1977) dispels the myth that women's farm work or off-farm employment is dependent on the possibility of remaining close to the home. Women take infants to market and to the fields on their backs and leave older children with relatives, second wives, or--in the case of professional women--with paid domestic help (Ware, 1977). In Moslem areas of Northern Nigeria, women involved in income generating activities share domestic responsibilities in the confines of their compounds (Simmons, 1976). Rural women involved in off-farm employment have traditionally "inherited" their skills from other family members and have participated in nonagricultural activities in collaboration with (or at least not in conflict with) male economic activities.

Several factors have altered this situation:

1. increased competition from domestic and foreign corporations producing higher quality (and often higher status), less expensive products (Robertson, 1974).
2. the breakdown of the extended family as a childcare network for women in off-farm employment (Simmons, 1976). The breakdown of the extended family can be attributed in some measure, to off-farm employment for males.
3. low literacy rates and lack of access to education whereby women might improve their vocational skills and thereby move into more viable off-farm employment (Dixon, 1975).

Social and cultural prejudice against female employment may

be rationalized by those who perceive women as competing with men in a situation of high unemployment (Ahmed, 1974a; Riegelman, 1974). This is particularly true in the industrial sector (Boserup, 1973).

The economic impact is that women who are squeezed out of nonagricultural activities (trade, commerce, handicrafts, food processing, etc.) may become more economically dependent on their husbands and seek status and recognition in their childbearing potentials.

In sum, it is very possible that women who are involved in off-farm employment will be more likely to reduce their fertility before women who are still involved in subsistence agriculture because:

1. it is less compatible with childbearing (Ahmed, 1974a);
2. women in marketing may be more entrepreneurial and easily motivated to accept new ideas (as well as being exposed to new ideas in the marketplace);
3. children are less valuable to women in terms of their participation in marketing than in subsistence agriculture (Monsted, 1977).

### Marketing Systems

Boserup (1970) has called Africa a region of female farming "par excellence". In the tribal setting women continue to carry out almost all of the tasks concerned with food production (UNECA,

1974d; Pala, 1976; Mead, 1975; Clark, 1975; Dobert, 1972; Pala, 1974). Male participation in agricultural production has traditionally been supportive. As a result, women tend to be superior managers and agriculturists (Fortmann, 1978). Ironically, in many cases, women's participation in agriculture is inversely proportionate to her opportunities for training and decisionmaking in this sector (UNECA, 1974b; Fortman, 1978; Mead, 1975; Mitchnik, 1972). In the eyes of development planners, men have been viewed as primary agriculturalists, and hence have received the benefits of new technologies, land tenure advantages, extension services and access to credit and markets.

Achola Pala (1976) traces the role of women from pre-colonial to the present day in the context of women's economic and social role in rural areas, particularly in terms of food production. In pre-colonial Africa:

1. women were primary food producers;
2. they often had usufructuary rights to land, livestock, and crops which they produced;
3. women's reproductive powers were often linked with symbolic food productive significance.

Pala (1976) concludes that the impact of the colonial (cash) economy on women served to exclude women from access to improved technology and equal participation in the cash economy. This

was accomplished by the following factors:

1. a distinction was made between land used for cash cropping and farmed with mechanized tools (by men), and land used for domestic food production and farmed in the traditional manner (by women);
2. men were drawn to industries and mining in the city while women were left at home. This perpetuated the "skills schism" and increased the male income base proportionately to women's;
3. because of male absenteeism from the countryside, women took on more of the production and marketing decisions and contributed more physical labor. Male control over wages, a shrinking land base and land tenure changes in which land was registered in men's names, caused an increasing social and economic dependence of women on men (Pala, 1976; Van Allen, 1974).

All of this has served to erode women's traditionally strong role in agriculture. Women continue their productivity in subsistence agriculture and also help their husbands in cash cropping activities in many parts of Africa. Women's participation in commercial agriculture, however, has been restricted to a supportive role (UNECA, 1974b).

The stagnation which has resulted in the rural areas as a result of the emphasis on cash cropping and urban industry (i.e. the export market) has been blamed on the exploitation of rural

women (Pala, 1974; Van Allen, 1974). The cycle of malnutrition, based on high parity, low level of nutrition, literacy and income, are integral to the process (Palmer, 1972; UNECA, 1974).

Women's participation in agriculture has never interfered with her childbearing potentials. In fact, children are commonly viewed as additional labor, particularly where women are single heads of households (UNECA, 1974a). Without changes in their economic prospects, it is unlikely that women will change their fertility behaviors. As Boulding (1975) comments:

" . . .overworked women . . . bear children as additional field hands. It is too often assumed that women are too stupid to know when to stop bearing children, and they will go on bearing children when health and nutrition improves and infant mortality declines . . . Yet on the rare occasions when researchers set out to study the behavior of farm women, it becomes clear that they can be very skilled managers of scarce resources. . . Any program that bears on their work as producers is bound to affect their fertility. . . In other words whenever women have an opportunity to increase their skill level in ways that are relevant to the productive opportunities of their environment, they will respond in ways that increase the quality of life for their families."

Boulding's conclusions were drawn from an extensive study of 33 African countries. She looked at the agricultural responsibilities of women, the educational and vocational opportunities available to them, family structure and fertility patterns in rural areas. The programmatic implications of this study are

clear: women's access to education, skills and employment opportunities will raise aspirations and reduce desired family size. The role which women currently play in marketing systems does not fit these criterion. Women have become the invisible producers in subsistence agriculture which feeds the people but brings in minimal revenues. Essentially, women agriculturalists support national economies from which they receive little remuneration in terms of income or services (Deere, 1975). Until women become recognized beneficiaries of and participants in marketing systems projects, where their potential is greatest, it is unlikely that they will respond to family planning programs or other incentives to reduce fertility.

#### Extension of Social Services

African women likely have lost the most but have the most to gain from health, education and agricultural extension services. The impact of such services on fertility are the most well documented.

##### 1. Health Services

The relationship between high rates of infant mortality and high fertility in Africa has been suggested in the literature. Lack of health services and information in many parts of rural Africa, coupled by high parity, low nutritional levels and hard physical labor result in high incidences of maternal depletion

and infant mortality. Despite this, the economic and cultural incentives for rural women to have many children persists, even at the cost of repeated pregnancies (UNECA, 1975c).

The extension of health services has an obvious positive effect on the health and productivity of women. Extension of family planning services and information may be a force of change in and of itself (Mbilinyi, 1971; UNECA, 1975).

## 2. Education (Literacy and Vocational Training)

While vocational training in agriculture has targeted men, extension programs for women have emphasized domestic skills (Mbilinyi, 1971; UNECA, 1969; Morgan, 1976). The UNECA (1969), projecting and evaluating education and training program for women and girls in twenty African countries, outlines long-range programs in three phases:

- a. education for women for home and family;
- b. training women in community responsibility;
- c. assistance in income-generating activities in agriculture and cottage industries.

This strategy clearly reflects certain telling development priorities in education and extension programs aimed at rural African women (UNECA, 1969; Mbilinyi, 1971; Morgan, 1976).

Women have traditionally participated in all three kinds of activities, and their potential contribution to national and community

development is likewise strong in all three. Nonetheless, "domestic" training is frequently emphasized for women. Income-generating skills in areas which are traditionally women's domain (such as agriculture and marketing) are extended to men. One report comments: "The agricultural extension service is almost totally directed to export crops and thus to men. Rural activity programs for women are oriented more towards their functions as mothers and wives than as agricultural producers. In these conditions it is perfectly obvious why there are growing frustrations on the part of women about their status and participation" (UNECA, 1974a). This trend has obvious pronatalist effects in that it:

- a. reinforces women's reproductive rather productive status;
- b. does not provide women with income-generating skills which might bring them into employment thereby raising their standards of living and giving them alternatives to childbearing (UNECA, 1974a; Dixon, 1975; Ahmed, 1974a).

Without access to education and training, women's potentials as superior agriculturists are being wasted. Their limited participation in development oriented fields like science and engineering coupled by the emphasis on homecraft courses, pushes women into a position where her greatest status is derived from childbearing (Mbilinyi, 1971).

The emphasis on home-centered training, in theory, will have a positive effect on child health and nutrition. In reality it may reduce child health and nutrition by limiting the mother's access to income and thereby limiting her ability to provide for her children (UNECA, 1974a).

In the study of 33 African countries described above, Boulding (1975) points out that in countries\* where women are largely illiterate, and receive a minimum of vocational education (most of which is directed at the domestic arts) women tend to marry earlier and have more children (based on national averages). In these countries, female headed households are more common. On the other hand countries\*\* where more secondary and agricultural vocational education is available to women, women have fewer children and less burdensome workloads. These countries also have higher GNP's overall and lower national population growth rates.

Although education alone is not enough to precipitate a drop in fertility rates, several studies of African families conclude that there is a direct relationship between women's education and family size (Ahmed, 1974b; UNECA, 1975; Caldwell, 1975). A U. N. report of 20 African countries stipulates that female education ,

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\*Botswana, Central African Republic, Congo, Zambia, Ghana, Ivory Coast, Sierra Leone, Uganda, Dahomey, Malagasy Republic, Tanzania.

\*\*Cameroon, Egypt, Gabon, Guinea, Liberia, Swaziland, Zaire, Zambia.

will lead to lower fertility only if there are policies leading to an equality of resource distribution (UNECA, 1975). Education, then must fit meaningfully into an overall long-range strategy for integrating women into income-generating activities which are economically and socially compatible with small family size.

#### Agriculture Extension Service

Although African women are primary agricultural producers, they are generally ignored by agricultural services (Fortmann, 1978; Mitchnik, 1972; Mbilinyi, 1971; Bond, 1974; Lele, 1974). Mitchnik (1972), who examined rural development projects in Zaire, attributed the failure of several projects to the fact that woman's primary role as producer was ignored. Agricultural extension services failed to reach their objectives because they targeted only men.

In a study of Tanzanian female agriculturalists, Fortmann (1978) found that although 97.8% of women are involved in agriculture, their access to information about improved practices is limited. Where all of the extension workers are men, women's access to information may be constrained by cultural obstacles.

Clearly extension services in rural Africa have failed to create most of the pre-conditions for a change in status of women which might reduce fertility. Formal education for women lags behind that for men. Likewise, vocational education and agricultural training has frequently ignored women's expertise and

existing status in such economic activities. As the above comments indicate, it is unlikely that women will alter their fertility behavior without the appropriate incentives to do so. As long as women remain illiterate, unskilled and relegated to subsistence agriculture without the benefits of new technologies or training, the reasons for having large families (labor, old age support, and possible income) will remain. Furthermore, it is unlikely that women who are ignored by extension services will be receptive to the extension family planning services under these circumstances.

#### Rural Financial Markets

Women's marketing cooperatives and local extension of credit within cooperative groups is not a new phenomenon in Africa. In places where rural women are extensively involved in marketing, strong cooperatives have sprung up which insure price regulation and discourage extreme competition (UNECA, 1974). In Ghana, the market women's economic power is legendary (Ocloo, 1974). In Southern Nigeria, the 80,000-member women's union operates a weaving corporation, subsidizes a maternity and welfare clinic, and conducts literacy classes (UNECA, 1974a). Nonetheless, women are finding it increasingly difficult to compete with the modern marketing sector without literacy, skills and credit (Robertson, 1974). In addition, women may hesitate or be barred

from entering cooperatives which, in effect, bars them from receiving of credit (UNECA, 1974a). In several countries\* studied by the International Cooperative Alliance (1974), entrance into marketing societies is limited to land owners. This effectively excludes women. Female participation in marketing societies requires husband's consent (International Cooperative Alliance, 1974). Female participation in marketing societies requires husband's consent (International Cooperative Alliance, 1974).

Rural women's status with respect to cooperatives is summed up in the following statement:

". . . Women's participation with men (in cooperatives), and in their own organizations, does not on the whole carry the strength of that of men. An important reason for this is the lack of self-assurance . . . which is partly due to women's lag behind men, in formal and nonformal education, training and other access to the tools of modernization. For example, women sometimes hesitate to join cooperatives together with men, for fear of being cheated, because of their ignorance of the workings of the organizations (at times, also, women are not allowed to join). Another reason is that women, particularly in the traditional sectors, are so heavily taxed physically and psychologically that they have little time for energy to put to changing their situation" (UNECA, 1974a, pg. 36).

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\*Kenya, Uganda, Tanzania

This commentary fits into the large scenario. Rural women are losing ground, economically and psychologically, as a result of development. Lacking access to credit, women's foothold in the traditional marketing sector may deteriorate when pitted against the modern economy. Without education, and facing social obstacles, women have found it difficult to enter the modern trade economy. The infrastructure of women's cooperatives remains in many places a strong economic institution. Where such cooperatives do not exist, they represent a potential avenue for organizing women to strengthen their economic base in rural marketing systems.

#### Area Development

As in other types of projects, area development schemes often assume women into their domestic roles. The economy of Africa is strongly linked to agricultural production, both to feed the people and to generate revenue from export crops. Women continue to produce, process and market food for local consumption. Production in this sector has declined based on population growth, women's increased workload, and the negligible resources (land, technology, and income) women have to work with.

This is not to say that men grow wealthy while women sink into abject poverty. Men who participate in income-generating activities earn very little. A Kenyan study estimated that

husbands who live in the cities but have families in the rural areas contribute only about 10% of their incomes to the family budget after transportation costs to and from the site of work, (Monsted, 1977).

From a broader vantage point, then, the following general hypothesis is applicable to the African case:

"The articulation between modes of production and the corresponding division of labor--with women agriculturalists in subsistence production units and male semi-proletarians--results in wage rate insufficient for familial maintenance and reproduction. The family structure and attendant division of labor by sex is thus key to the extraction of surplus labor from the noncapitalist mode, for the subsistence production of food stuffs allows the wage to be less than the cost of production and reproduction of labor power. . ." (Deere, 1975).

The author goes on to discuss the fertility implications of such a situation in the following way:

"If the individually rational response to rural poverty is to have as large a family as possible (for more children provide more agricultural help, increase the families' ability to engage in alternative income-generating activities, and assure social security to the parents in old age) then a primary consideration in the familial allocation of tasks is that women's economic activity be compatible with the requirements of biological reproduction. Rather than tremendous differences in physical requirements between work performed on or outside the subsistence unit, I suggest that it is the qualitative nature of proletarianization--loss of control over the production process, rigid schedules, hierarchial

organization--which most distinguishes the employment alternatives. The nature of agricultural activities on the subsistence production unit--which shows the producer to be in control of the production process, working at one's own pace while attending to other tasks--is more compatible with women's biological reproduction requirements, especially if having as many children as possible is viewed as economic benefit" (Deere, 1975).

This hypothesis may in fact go to the heart of how development planning has successfully created a situation wherein women's productive power is exploited in favor of national development which has, to date, stressed export production. In addition, this situation has perpetuated the compatibility of work and child care roles which have been the status quo for women for centuries (Ware, 1977). Ironically, a tenacity to traditional fertility patterns has not remained in spite of, but because of development.

#### Summary

The literature on rural African women points unequivocally to the fact that development has significantly altered women's role and status in society. A more precise way of looking at it is that development has changed the context dramatically. Women's work and family activities have altered very little.

This discrepancy is central to the relationship between rural development, the status of women and fertility patterns. The picture one gets is that development has altered life in the

rural areas significantly (whether directly or by association with urban areas). The status of women, on the other hand, has declined. African women who held both economic, social, productive and decisionmaking power and rights in precolonial times, have experienced a slow, insidious erosion of their power and rights in the context of development. Although women reap comparatively little of the benefits of development, primarily by omission, they continue to feed a large percentage of the African population on the food they grow, and provide primary support for most of Africa's children. This fact has been largely unrecognized by development planners. Women's potential contribution to agricultural development goes relatively untapped.

As mentioned above, women want children for the additional labor, security and status they provide. From this perspective, it is reasonable that women have not reduced their desired nor actual family size. Most women are engaged in highly labor-intensive agricultural production which relies as much on their labor as the support of their children to make ends meet. This is still true, but less so, of women in marketing and commerce where women may look to their children who can read or write. Likewise, both parents will look to their children as a source of old and middle-age security. This is especially true in female headed households where children may be a woman's only economically

viable form of kinship support. Finally, women derive considerable status from having children.

Although some authors maintain that work and childbearing are not incompatible in the African setting, there is considerable evidence to the contrary as well. Whereas women could leave children with relatives in the past, this is no longer always an option. Whereas women were once primary producers in an economy grounded in subsistence agriculture, this is no longer the case. Whereas once children were an important asset in such an economy, they are increasingly more expensive to bring up. The entire scenario is shifting, and it is likely that the African woman will experience the similar role incompatibilities and high aspirations for fewer children as she moves into the cash economy.

The development-population-development cycle is in a vicious circle in Africa. We have seen how rural development has failed to establish the conditions for a drop in fertility. It is well known that population growth in itself may be an obstacle to development.

What can be done at a programmatic level to alter this trend? Clearly women's participation in income-generating activities is important for a drop in fertility. This participation requires the prerequisite training, credit, technologies and access to markets.

As we have seen, programs that improve women's involvement in the modern cash economies may achieve the congruent objectives of creating a better quality of life in rural Africa and reducing fertility rates.

## Chapter 3

### Rural Development, Women's Roles and Fertility in Asia

#### INTRODUCTION

The contributions of the rural women in Asia to the subsistence economy--as food producers and processors, home-industry workers, or traders--are considerable. In parts of South Asia, these economic roles of women are viewed as extensions of the housework role and are therefore invisible and unrecognized. Women in Southeast Asia on the other hand, traditionally have occupied decisionmaking and highly visible economic roles in the rural economy.

Regardless of the visibility or magnitude of the economic participation of women in Asia, the processes of change in the rural economy brought about by planned intervention are producing changes in these roles. These changes are, in turn, expected to impact on their reproductive behavior.

As the conceptual framework presented in Chapter 1 indicates, the key variables that have been identified as influencing the development-role-fertility linkages will be examined. Then in the next section we shall examine the empirical evidence supporting or negating the hypotheses relating nature of female economic participation and literacy/nonformal education and fertility. Finally, we shall examine the impacts of the key variables on women's roles and fertility of the six rural development strategies outlined in Chapter 1.

Efforts will be made to cite examples of specific intervention activities under each of the six types of development programs.

## THE KEY VARIABLES

### The Economic Variables

The economic variables that are hypothesized to influence the relationships between rural development, women's roles and fertility include traditional extra-familial roles of women and the nature of these roles, and the conditions of labor supply and demand.

#### 1. Traditional Extra-Familial Roles of Women

There are significant variations in Asian women's freedom to engage in activities outside the home. Women in Southeast Asia, with the exception of Malaysia, enjoy relative freedom to engage in activities outside the home. In South Asia, on the other hand, female non-familial activities are restricted by cultural constraints of female mobility and of female seclusion (Kallgren, 1977). There are similar differences in nature of employment. Thus, female participation in trade and commerce is generally high in Southeast Asia and generally low in South Asia (Boserup, 1970; Stoler, 1974), although the pattern in Central and South India is similar to that of the former (Boserup, 1970). In Thailand and the Philippines, for example, more than half of the total labor force in trade and commerce are women. In South Korea and Indonesia, the proportions of females in trade and commerce are 33 and 33 per cent, respectively. On the other hand, the rates of participation in trade are 11 and 6 per cent, respectively, in India and Sri Lanka (Boserup, (1970).

Generally, however, women's participation is greater in agriculture than in the non-agricultural sector in most Asian countries (Durand, 1975), with the exception of the Philippines (Chen, 1976, Table 16; United Nations, 1975, Table 5). Thus, the proportions of the female working population engaged in agriculture and related activities range from over 50 per cent in Korea and Sri Lanka to over 80 per cent in India, Pakistan, Thailand, Malaysia, and Nepal. Even in agriculture, however, there are differences in participation that somewhat parallel the non-agriculture patterns. In South-east Asia women have traditionally participated in rice cultivation (Tinker, 1976), and there are relatively more female own-account farmers in the subregion, with the exception of the Philippines, than in South Asia (Boserup, 1970).

The variations in patterns of paid agricultural employment among women cut across subregional lines. According to Boserup (1970, Table 9), the proportion of women among agricultural wage laborers in India, Sri Lanka, Malaysia, and Thailand are fairly high (44, 40, 39 and 35 per cent, respectively). As she further points out, India, Sri Lanka and Malaysia, are the only countries in the developed or developing regions where a fairly large proportion (12 per cent of all adult women in each of the three countries) are engaged in agricultural wage labor. Moreover, Dixon (1978) reports on 1971 statistics showing that the proportion of agricultural wage laborers in India has increased to 50 per cent of the

total agricultural hired labor while the number of female cultivators or own-account farmers has declined.

Female labor force participation rates in both the agricultural and non-agricultural sectors have declined for India (Dixon, 1978; Durnad, 1975, and Kallgren, 1977), Pakistan (Durand, 1975), and Malaysia (Fong, 1975). More women, however, are entering the labor force in most of the Southeast Asia region, although mostly in "traditional stereotyped jobs" (Binti, 1976).

## 2. Conditions of Labor Supply and Demand

The supply of female agricultural workers in Asia is traditionally higher than is the demand for them. The imbalance between demand and supply has become greater with the increasing modernization of agriculture. Dixon (1978) cites India as "a classic example of displacement of women from agriculture without a concomitant absorption into the modern sector of the economy." The condition of excess female labor supply is greater in Central and South India where a relatively large number of lower-caste and tribal women are employed as hired agricultural workers than in North India where female farming traditions are relatively low (Boserup, 1970). A similar situation exists in Java where an already overabundant supply of female agricultural labor was exacerbated by the introduction of farm mechanization and the reorganization of marketing of cash crops (Milone, 1978).

### The Demographic Variables

Age at marriage, patterns of marital dissolution and remarriage,

type of marital union, migration patterns, and type of family system are major variables that are expected to influence the relationships between rural development, women's roles and fertility.

### 1. Age at Marriage

Age at marriage is high and rising in Southeast Asia. In Korea, for example, the age at marriage rose from 17.8 years in 1940 to 21.3 in 1960 and to 23.3 in 1970. In Thailand and the Philippines, the age at marriage in 1960 was 21.9 and 22.1 years, respectively. In South Asia, universal and early marriage is the norm, e.g., 16.8 in India and Pakistan in 1961 (Timur, 1977). At least 18 per cent of Bangladeshi girls between the ages of 10 and 15 years were married in 1965; 16 and 14 per cent, respectively, of girls of the same age group in Nepal and India were married in 1971 (Dixon, 1978). And the normative expectations for early marriage remain considerable, particularly among the Muslims, (Anwar and Bilques, 1976; Khan, 1976). Studies suggest that Muslim rural mothers in Pakistan and India felt that girls should be married between the ages 12 and 17 years. As Dixon (1978) notes, early and universal marriage in South Asia is an important indicator of the low status of most Hindu and Muslim women.

An exception to the South Asia pattern of early marriage is Sri Lanka where the age at marriage in 1971 was 23.5 years (up from 20.7 in 1946 and 22.1 in 1963). Indonesia, on the other

hand, follows the South Asian pattern of early marriage (Tan, n.d.) despite the fact that Indonesia is characterized by high female economic participation and absence of traditional constraints on female mobility and non-familial activities outside the home (Kallgren, 1977).

## 2. Divorce

Cultural and social constraints against divorce are generally strong in Asia. In the predominantly Catholic Philippines, for instance, divorce is not legally permissible although allowed for its Muslim population. In Muslim countries, divorce laws are more permissive (Tinker, 1976). In Indonesia divorce and remarriage rates are high (Tan, n.d.) but not in Bangladesh or Pakistan.

## 3. De Facto Marriages

Data are largely unavailable on the prevalence of consensual and casual unions in Asia. A study by Riley (1976) of a Thai village suggests that casual unions may be more common in parts of Asia than is generally assumed to be the case. He reports, for instance, that 13 per cent of women 20 years and older had cohabited with two or more men. In the Philippines, the "querida system" whereby a married man simultaneously cohabits with his wife and another woman on a short- or long-term basis is tolerated, if not widely practiced (Javillonar, 1978).

## 3. Migration

In general, Asian men exhibit higher mobility than women. This sex differential in migration patterns is considerably greater in

South Asia where traditional constraints on female mobility are strong, than in Southeast Asia where women generally have freedom of movement.

In an analysis of migration patterns in Southeast Asia, Pryor (1977) reports that female migrants are predominant in the age groups under 25 and 45 and older, with the exception of the Kuala Lumpur Chinese and Indians. On the other hand, male migrants are in the majority for age group 25-34 years, with the exception of the Philippines where relatively equal educational opportunities for women have resulted in part in consistently low sex ratios in most migration streams and female predominance in some.

Pryor in the same study notes that data on marital status of the Southeast rural urban migrants show that about half were single and about half married on arrival to the city. Of those married, the male arrived first in 45 per cent of the households studied in Manila, 57 per cent in Kuala Lumpur and 65 per cent in Bandung. There is some evidence, moreover, that single female short-term migrants return to their rural villages if they neither marry nor find longer-term jobs in the city. The lack of work or land is the major reason for rural-urban migration in Southeast Asia.

#### 4. Family Structure

The extended family is a frequent although not the dominant family pattern in parts of Asia. In India, it takes the form of a joint family where all brothers and their married sons share a

common household. In Thailand and South Korea, the typical extended household is the stem family (29 and 19 per cent, respectively), where only one married son stays in his father's household and inherits the property while all the other married sons form their own nuclear families. The great majority of families in Thailand (64 per cent in rural and provincial urban areas) and South Korea (72 per cent), however, are nuclear.

In most of Asia, the nuclear family is the typical family structure. Sri Lanka, for example, is 90 per cent nuclear (Timur, 1977). There are, however, variations in the kinship organization. In Indonesia, three types of kinship systems are found (Suryochondro, 1976): the patrilineal among the Bataks in Sumatra; the matrilineal system in Minangkabau, Sumatra, and the bilateral system which is the majority pattern. The bilateral system, which is the characteristic pattern in most of Southeast Asia, is related to the favorable position of women in the family and in society (Suryochondro, 1976).

Research data on the relationship between family structure and fertility are inconsistent. There is evidence, for instance, that the extended family not only facilitates but also forces excessive childbearing. The extended family's positive effect on fertility is best illustrated in the following quotation from Newland (1977):

A South Korean family planning official, when asked who makes the decisions about childbearing and family planning

in a typical Korean family, suggested the following hierarchy: husband's mother, husband's father, husband, wife's mother, wife's father, wife. In other words, the individual who would most directly bear the burden of having an additional child would be the last to be consulted about the decision.

A Korean woman or couple who wants to practice contraception, Newland notes, has to hide the fact from their parents.

In a review of the literature on the relationships between family structure and fertility, Simon (1974) finds that childbearing in extended family settings is not higher and probably is lower than in the nuclear family, at least in parts of Asia. One of the reasons for this is the lower frequency of coitus because of lack of privacy in the extended family (Nag in Simon, 1974).

##### 5. Polygamy

Polygamy, another aspect of family structure that has been hypothesized as influencing the interrelationships between rural development, women's roles, and fertility in Chapter 1, does not appear to be prevalent in Asia. In Indonesia, a Muslim country, polygamous marriages constitute less than 5 per cent of all marriages (Suryochondro, 1976). In other areas where polygamy is a respected tradition, e.g., Thailand (Riley, 1976), Muslim South Asia, and the Muslim-dominant regions of the Philippines, the proportions of polygamous marriages are very small.

## The Cultural Variables

Values and attitudes related to motherhood, women's mobility and seclusion, son preference and male dominance have been identified as key cultural variables that may mediate the impact of rural development on women's roles and fertility.

### 1. Motherhood

Motherhood is viewed as the primary role of women in Asia. A large number of children are viewed as a sign of good fortune and a social stigma is attached to barren women. In some countries, e.g., Sri Lanka, a woman's inability to have children is regarded as evidence of great sin in a former existence (Kodikara, 1974).

### 2. Female Seclusion

Values supporting female seclusion or purdah are particularly strong in South Asia. As Papanek (1971) notes:

Purdah is related to status, the division of labor, interpersonal dependency, social distance, and the maintenance of moral standards.

Thus, the practice of purdah effectively restricts women's participation in employment outside the home, her access to education, training, credit and new technology.

In most of Southeast Asia, restrictions on female mobility are minimal and women generally enjoy freedom to engage in activities outside the home (Kallgren, 1977).

### 3. Son Preference

Son preference is strong in many parts of South Asia (Dixon, 1978). It is related to the marriage practices of dowry payment and village exogamy. The dowry exerts a financial burden for parents of daughters and a financial gain for those with sons. Village exogamy means that parents lose their daughters after marriage. In addition to the dowry and village exogamy, the severe limitations on an unmarried daughter's economic utility due to the practice of seclusion make female children less desirable than sons. Thus, as Salahuddin (1976) notes:

Girls are made fully conscious that, unlike their brothers who are assets to the family, they are only liabilities.

Even in parts of Southeast Asia, there is some evidence of slight son preference. In the rural areas of the Philippines, for example, 58.3 per cent of a sample of currently married women report preferring more sons than daughters (Stinner and Mader, 1975). Son preference is, however, stronger in Korea and Taiwan, where sons have special cultural significance that derives partly from religious beliefs and rituals (Fawcett, 1976 in Simmons, 1977).

Data on the the implications of son preference on fertility are mixed. Repetto (1972) reports on relationship between son preference and fertility for North India, Bangladesh and Morocco. On the other hand, one of the main reasons given for non-acceptance

of contraception in a Muslim village in the Punjab was preference for sons (Khan, 1976). Moreover, in an experimental study of ideal family size in India, Mohanty (in Bhende, 1975) finds that when the probability of having a male child is hypothetically manipulated, respondents "who desired only 3 children were willing to extend their family size to even 9 children in order to ensure a male child."

### Male Dominance

Values supporting male dominance are particularly strong in South Asia. Male dominance may be expressed through the mechanism of ensuring women's total dependence on the male. In Bangladesh, for instance, the social structure ensures that a woman is under the support and protection and, therefore, control of an adult male all her life--first her father, then her husband, and later her son (Ellickson, 1976). Katona-Apte (1975) attributes the undernourishment of low-income Indian rural women to feeding patterns whereby the wife feeds the husband first, then the male child, then the female child, then herself. Male dominance may also be expressed in the husband's "tendency to regard his wife as sexual property, who is meant to produce as many children as possible" (Kodikara, 1974). According to Kodikara, this male dominance is the most important element in understanding the high fertility in Sri Lanka.

Some degree of male dominance is also apparent in Southeast

Asia, although in general, conjugal power relations are relatively egalitarian. In Thailand, for example, the wife must have her husband's permission to take a job or to sell property (Chutikul, n.d.).

#### Social Psychological Variables

Studies suggest that it is not female employment per se but rather work attitudes and motivations that influence reproductive behavior. In a Philippine study, for example, Jayme (in Gonzales and Hollnsteiner, 1976) reports that female workers who are motivated by need for self-fulfillment "tried to a greater extent than economically-motivated workers to abstain from childbearing." He further reports that career orientation is significantly associated with fertility attitudes among younger women. Among older women, however, career orientation is only weakly related to family planning practice and not to family size or childspacing.

Perceptions of the economic costs and benefits of children have also been identified as influencing reproductive behavior. Mueller (1972) finds a relationship between perceived costs and benefits of children and ideal family size and contraceptive usage. The impact of perceptions of the positive or negative value of children on fertility behavior is not consistent, however (Javillonar, 1978; Simmons, 1977).

#### Political Variables

Suffrage is universal in Asia. However, it is only in the

Philippines, Indonesia, and India that women exhibit relative political awareness (Kallgren, 1977). In most of Asia, however, politically powerful women's groups have helped improve women's status by advocating changes in discriminatory laws, by pushing for social services including family planning for women, and by serving as role models (Chipp, 1971, for Pakistan, in Buvinic, 1976; Jansen, 1974, for Sri Lanka, in Buvinic, 1976).

### 1. Family Division of Labor

There are marked sub-regional differences in household decisionmaking positions of women. In Southeast Asia, the traditional family division of labor is generally non-restricting for women while the case is not true for South Asia (Kallgren, 1977). Thus, conjugal power relationships are relatively egalitarian in most of Southeast Asia and relatively male-dominated in South Asia. In the former, moreover, women generally control the purse as financial managers of the family, which position gives them considerable power as well as responsibility for the welfare of the family (Chutikul, n.d., for Thailand; Javillonar, 1978, for the Philippines; Piet, 1976 and Suryochondro, 1976, for Indonesia).

It has been suggested that women's role in family decision-making has important anti-natalist implications (International Planned Parenthood Federation, 1972). There is some research evidence that a woman's perceived status and decisionmaking role at home, for example, are related to her decisionmaking role in family planning (Council for Social Research, New Delhi, for India, in

United Nations, 1975).

As has been noted, however, the childbirth rates are high in Indonesia, Thailand, and the Philippines, countries where the economic participation rates and status of women in the family and in society are high.

#### Family Planning Variables

As noted in Chapter 1, demographic-oriented family planning policies and programs are found in most of Asia (United Nations, 1975). Bangladesh, Pakistan and Nepal, however, are relatively weak in both program effort and demand for family planning services, while India and Indonesia are moderate in program effort but low in demand. It is only Korea, among the eight Asian countries of interest in this paper, which is high in both program and demand status (Mauldin and Berelson, 1977).

In order to facilitate access to family planning information, services and devices, the Philippine Labor Code requires places of work with 200 employees or more to provide such services to the workers and their spouses (Palma, 1976). Data from India show that the utilization rate for uneducated working women with access to such services at their place of work is higher than for those without such access (Minkler, 1970).

The easy availability of family planning information, services, and devices is important for the woman's right to determine the size and timing of her children or even to decide not to have any at all (Dixon, 1978; Rahman, 1976; Shahani, 1973).

## THE HYPOTHESES

1. Women's participation in subsistence agriculture is compatible with high fertility.

The evidence generally supports the hypothesis that female participation in subsistence agriculture is compatible with high fertility in Asia (Dixon, 1978; United Nations, 1975). The usual reasons given in the literature for this compatibility are:

- a. A woman may keep her children with her while at work in the farm and so she does not need to choose between motherhood and farmwork.
- b. The value of children as farm workers is high, thus women are motivated to have as many children as possible and are not likely to practice birth control.

There are some indications, however, that the direction of the relationship between subsistence work and childbearing is in the opposite direction in some cases. Thus, it is the need to support a large family that forces rural women to seek agricultural employment (Boserup, 1970; Milone, 1978). In Asia, particularly in Southeast Asia, as has been noted, wives share with the husband the responsibility for meeting the needs of the family. As financial managers of the household, it is their responsibility to supplement the husband's meager subsistence income. In South and Southeast Asia, the women's subsistence agricultural activities are considered as extensions of her housework.

There are indications, moreover, that the compatibility theory may be an overly simplistic explanation of the high fertility in the rural areas. The birth rates in Sri Lanka, for example, where about half of the female working population are in agriculture, are relatively low while the Philippines, where less than a third of the economically active women are in agriculture, has relatively high birth rates (Newland, 1977). Moreover, a study of rural women in Bangladesh in 1974 showed that "women working in agriculture had lower fertility than expected." (Germaine in Newland, 1977), and data from the 1961 Indian census suggest that agricultural employment has a negative effect on fertility while "housework as house wife does not" (Chaudhury, 1976)

The apparent incompatibility between female subsistence activity and fertility may be due in part to lesser accessibility of family planning services and higher infant mortality in the rural areas. The marked drop in the birth rate in Sri Lanka, for example, is usually attributed to the high level of social services, including family planning, and easy accessibility of medical care which has reduced the infant mortality rate by 70 per cent over the last 25 years (Newland, 1977).

## 2. Women's participation in cash cropping is compatible with high fertility

The proportions of females among all own-account farmers in

Asia are very low, particularly in south Asia (e.g., 3 per cent in Sri Lanka and 4 per cent in Pakistan (before the civil war). The figures are higher for Southeast Asia, except the Philippines (4 per cent), e.g., Malaysia, 19 per cent; Thailand, 14 per cent; and South Korea, 13 per cent. Thus, most of women's participation in cash cropping is either as helpmates to their husbands or as hired agricultural workers. There is no research evidence indicating that the fertility of women in cash cropping is any different from that of women in subsistence agriculture. There are, however, indications that farm modernization is increasingly reducing the participation of women in cash cropping without concomitant increases in alternative employment opportunities (Boserup, 1970; Dixon, 1978). In Indonesia, for example, the introduction of technology, e.g. rice hullers, and the reorganization of marketing procedures in some types of cash cropping have displaced women from their productive paid or unpaid agricultural work.

The displacement of women by agricultural mechanization in the absence of alternative employment may be expected to have negative consequences for their status in the family and in society. This, in turn, may be expected to have pro-natalist consequences since their childbearing role may be the only viable role open to them.

### 3. Women's employment in off-farm industry would have

a negative impact on fertility.

As noted earlier, a generally consistent finding in studies relating female employment and fertility in Asia is that in the rural areas, agricultural and non-agricultural employment has a positive or no effect on fertility (Fong, 1975; Goldstein, 1972; Ihromi, 1973; Harman, 1970; Javillonar, 1978; Minkler, 1970). As Newland (1977) further observes, in the Philippines, Thailand, and Malaysia the birth rates are high (but declining slowly) although "the work rate for women is on par with the industrial countries." Moreover, Javillonar (1978) in a study of a sub-sample of working women from a national survey of ever-married Filipino women, reports that employed women in the highest status occupations are the least likely to practice contraception, have the highest desired family size and the highest number of additional children wanted, although their total living children is not significantly different from those of the other occupational groups.

4. Women's participation in home-based industry is compatible with high fertility.

Existing evidence generally supports the hypothesis. Dixon (1978), for example, in an analysis of the impact on reproductive behavior of female participation in five rural development programs creating new, mostly home-based employment opportunities for women in India, Nepal, Pakistan and Bangladesh, reports that such participation does not affect marital fertility directly

nor indirectly through delaying age at marriage. Thus, there was no change in the traditionally low age at marriage except for daughters in poor families. In the latter case, the primary motivation for employment appeared to be to earn enough money for a dowry.

On the other hand, creating employment opportunities in home-based industry may have anti-natalist effects through its impact on traditionally strong preference for sons in South India. Thus, in a Pakistan village, some change in the usual unfavorable reception to female births was observed following the employment of girls and women in an embroidery industry (Dixon, 1976).

5. Women's employment in trade and commerce is not necessarily incompatible with high fertility.

Some macro-level data provide partial support to the hypothesis. As has been pointed out, in Southeast Asia, the women are fairly dominant in trade and commerce -- with the Philippines and Thailand making up more than half of the work force in this occupation, and Indonesia and South Korea about a third (Boserup, 1970). With the exception of South Korea, however, these Southeast Asian countries also are characterized by high child birth rates (Newland, 1977).

Micro-level data relating female participation in trade and commerce to their fertility are very meager. Some data for the

Philippines show that the family size of working proprietors and traders is not significantly different from that of the other occupational groups (Javillonar, 1977).

6. Women's access to resources (land, technology, training, and credit) will decrease her family size.

There is no empirical evidence relating women's access to resources with her desired family size. The hypothesis is based on the assumption that access to resources would broaden a woman's range of role options and that given such options, she would not choose to define her role primarily as a childbearer.

7. Literacy training will lead to decline in desired family size.

The empirical evidence on the impact of literacy per se on fertility behavior is not consistent. Thus, in Sri Lanka and South Korea, there were no significant differences in family size between illiterate women and those with primary or elementary schooling. Moreover, the Philippines, which has over 80 per cent female literacy rate, has consistently high fertility (Timur, 1977).

On the other hand, there are indications of a negative impact of literacy on fertility. In Thailand, for example, illiterate women had higher fertility than literate women (Golstein in Timur, 1977). This phenomenon may be due to involuntary factors, e.g., subfecundity, pregnancy wastage and infant mortality, among illiterate poor women.

8. Nonformal training will reduce desired family size if it strengthens women's income-generating activities.

Nonformal educational programs currently being implemented in some Asian countries, e.g., the Philippines (Crone, 1977; World Education, 1975), Thailand (Meesoo, 1975; World Education, 1973) and Bangladesh (Hoque, 1976) are based largely on the "self-actualizing method" developed by World Education. The aim of this method is "to design and implement learning experiences that maximize women's participation in the education process by using content related to their expressed needs and current activities (World Education, 1975). Although the curriculum is basically open-ended, studies of these programs suggest that a major, if not the major, concern of women is the acquisition of skills and knowledge that are related to income-generation. There is, however, no empirical study relating nonformal training to desired family size. It may be argued, though, that economically active women would want to limit their family size when childbearing and childbearing compete with their income-generating activities or with an acquired taste for material things.

## RURAL DEVELOPMENT STRATEGIES

In the next several pages, we shall examine the impacts of six types of development activities on the roles of rural women directly and on their fertility indirectly.

### Participation of the Rural Poor

In most of Southeast Asia, women play fairly equal roles in the economy as well as in the family (Stoler, 1977; Tinker, 1976). As Piet (1976) notes for Indonesia, the problems of development "do not divide along sex lines but rather along the line between haves and have-nots." Castillo (n.d.), Montiel and Hollnsteiner (1976), among other, make the same observation for the Philippines. The high status of women in Southeast Asia is generally attributed to their contribution to the household and the subsistence economy (Licuanan and Gonzales, 1976; Stoler, 1977) and to the bilateral family system (Suryochondro, 1976).

Despite the highly visible level of participation of women in Southeast Asia as workers and decisionmakers, most externally introduced development programs are based on the male-provider model which ignore women's important economic role. The introduction of agricultural mechanization in Java resulting in decreased employment opportunities for women is a good example of development programs which have negatively affected women's participation (Milone, 1978).

In South Asia where women's participation in the subsistence economy is relatively less and largely invisible, women have not benefitted from male-directed development schemes (Kabir et al., 1976), and the obstacles for initiating development programs for rural women are considerable. Abdullah and Zeidenstein (1976b in Rihanai, 1978) note that the following factors are inhibiting women's participation in development programs in Bangladesh:

- a. lack of appreciation for the contributions women already make,
- b. the fact that modernizing efforts involving traditional female activities are aimed at men, resulting in the loss of the women's expert knowledge as well as of an economically and socially important activity,
- c. pervasive attitude that women are helpless and ignorant.

#### Off-farm Employment

Rural development programs geared toward increasing off-farm employment opportunities for women would generally have the immediate positive effect of absorbing some of the excess female agricultural labor supply, which is relatively large and still increasing as agriculture is modernized. In areas where female hired workers are in large numbers, e.g., in Central and South India, Sri Lanka, Malaysia and Thailand, providing alternatives to agricultural employment would also help raise the exploitive wages of these female agricultural workers.

Job-creating rural development programs may be classified into three types: 1) those based on traditional, routine subsistence activities, 2), those based on traditional village cottage industries, and 3) small industries producing non-traditional products requiring non-traditional skills.

An example of the first type is the Integrated Rural Development Program (IRDP) in Bangladesh, a cooperative primarily concerned with developing women's economic self-reliance by upgrading her daily agricultural activities to commercially profitable levels (Ahmed, 1974; Dixon, 1978). An important component of the program is the provision of marketing channels which enable a woman to sell her produce directly rather than relying on her husband who usually keeps the cash. The program, moreover, provides a variety of other support services, including literacy training and family planning.

Another example of the first type of employment-related development activity is the pappad-making initiated by the Lijjat Pappad Centre in Gujarat, India. Pappad is a type of Indian bread. The Pappad Centre distributes the dough to the 480 participating women who roll it into the appropriate size and shape in their homes. Through this program, the women are able to earn income from working 5 to 6 hours a day on a task that they have traditionally learned while being able to manage their household (source of project description not available).

The Jute Works of Bangladesh, which is a women's handicrafts marketing cooperative, is an example of the type of development program based on promoting traditional village cottage industries. The cooperative was established in 1973 to provide employment for victims of the Pakistan civil war.

An example of the third type of development program that would create off-farm employment for women is the small-scale industries project in Kerala. A good percentage of 10,000 labor-intensive small factories including "foundry, electroplating, galvanizing and anodizing unit, surgical cotton and bandages factory, bamboo unit, and fruit and preservation unit" are designed for women only (Menon, 1976). The creation of women-only cottage and light industries to provide off-farm employment for women that would not directly challenge cultural values supporting sex segregation and female seclusion in most of Asia has been suggested by Dixon (1978), Youssef (1974 in Buvinic, 1976) and others.

There is empirical evidence suggesting that women's status in the family and in society is related to her economic role. As noted earlier, women generally fare better and have higher status in Southeast Asia where they have traditionally played important economic roles. Several authors, e.g., Leonard (1978), Singh and de Souza (1976), moreover, report that in South India

where female economic activity rates are high, women have higher status than in North India where traditionally women are economically inactive.-

The relationship between women's status and fertility is, however, problematic. Thailand, Indonesia, and the Philippines where women's economic participation and status are high also have high birth rates. Empirical studies of fertility among employed women in Asian countries point overwhelmingly to a positive or no relationship between female economic participation and their fertility (Fong in Malaysia, 1975; Goldstein in Thailand, 1972; Ihromi in Indonesia, 1973; Harman and Javillonar in the Philippines, 1970 and 1978, respectively; Council for Social Development, New Delhi, in United Nations, 1975 and Minkler in India, 1970.

Papanek (1975) suggests that the positive or non-relationship between female employment and fertility in Asia is due to the following factors:

- a. availability of cheap domestic help,
- b. extended-family residential patterns,
- c. more flexible hours of employment,
- d. greater compatibility between child care and work patterns

Dixon (1978) analyzed the population implications of five rural development programs that represent the three types of employment-generating strategies discussed above. She reports

that:

...none of the programs appears to have altered fundamentally the marriage or birth patterns of its workers. Reproductive behavior remains highly resistant to change.

She finds no change in cultural pressures toward early marriage for girls. A later age at marriage results from parental inability to provide a dowry and saving for a dowry appears to be a major motivation among young girls to seek employment in these programs. Dixon further suggests that unless these cultural values favoring early marriage are changed, increasing employment opportunities for young women may result in earlier marriages.

Neither has marital employment resulted in incentive to limit or space births. Dixon suggests that this may be due to the fact that women generally work at home or take their children to work, and also the fact that the programs did not provide specific incentives for the female workers to delay marriage or practice family planning.

#### Marketing Systems

Rural development programs that facilitate women's access to distribution channels for their agricultural produce or handicrafts are particularly essential in South Asia where traditional constraints on female mobility and the purdah have made women totally dependent on their husbands or male relatives for the sale of their products or the purchase of

materials needed for their income-generating activities. The purdah prevents women from entering the marketplace, not even to sell products from their traditional activities as producers and processors of food and as animal caretakers -- vegetables, eggs, milk and milk products, poultry (Lindenbaum, 1974). Even where women work for others for a share of the crop, they still usually do not receive the income for their labor. Female cotton harvesters in Pakistan, for example, receive 1/16 of the cotton they pick through the season, but do not receive the cash from their husbands or fathers who take the cotton to the market (Dixon, 1978).

Cooperative programs, such as the Integrated Rural Development Program in Bangladesh, and the milk cooperatives in Gujarat, India, provide women with direct marketing channels for the products of their farm and household activities (Dixon, 1978). Such programs which enable women to control the income generated by their traditional subsistence roles make their contributions to the household and to the rural economy more visible and valuable. This, in turn, would change their bargaining position vis-a-vis their husbands which, in turn, is expected to have anti-natalist effects.

The marketing problems in cottage industries are more complex. In addition to the problem of restrictions of access to the market imposed by purdah, women in cottage industries are handicapped by

their lack of knowledge concerning local or export demand for their products. Thus, as some authors (Lindenbaum, 1974; Singh and de Souza, 1976; Wilkes, 1977) note, some of the cottage industries continue to train women and produce handicrafts which are becoming outdated, unprofitable and unmarketable because of a low local demand or an already glutted export market. Systematic market surveys need to be undertaken before a cottage industry training program is set up to assess demand for potential skills and products (Singh and de Souza, 1976) if cottage industries were to provide gainful employment to rural women. An example of this type of program is the skill development and marketing program for women's crafts initiated by the Nepal Women's Organizations. This project aims to increase in incomes of rural cottage industry workers by promoting a market for their traditional handicrafts as well as providing training to improve the quality of crafts and to help women acquire business skills. The program also incorporates literacy training and family planning service.

Rural development programs that facilitate access to the town and city markets, e.g., road pavement and the introduction of motorized conveyances, would help female traders in Southeast Asia who have to confine their operations to the local market because of poor transportation facilities.

#### Rural Financial Markets

- Due to traditional and/or legal restrictions on women's

ownership or control of land and property in most of Asia, their access to legitimate sources of credit which usually requires collateral is severely limited. Rural development programs that facilitate this access would help women start a new income-generating activity or help those who are already economically active to maintain and strengthen their participation, hence their economic independence. An example of a development program that facilitates women's access to credit is the Self-Employed Women's Association (SEWA) project Ahmedabad, India. Through the sponsorship of SEWA, various groups of illiterate, extremely poor, self-employed women, e.g., vegetable vendors, junksmiths, ready-made and used garment sellers, hand-cart pullers, etc." were able to obtain easy-term credit from nationalized banks rather than having to turn to highly exploitive private money-lenders (Indian Council of Social Science Service, 1975-76; Singh and de Souza, 1976).

The Rural Finance Experimental Project in Bangladesh under the sponsorship of USAID, on the other hand, aims to help male and female marginal farmers, sharecroppers and other landless workers to obtain loans, through informal village groups and cooperatives, "to finance activities which increase production and supplement income." These would include farm improvement, paddy processing, animal raising, net making and fisheries (USAID, Office of Women in Development, 1978: 70). Although

the project is for both men and women, the latter are expected to benefit substantially from it since the great majority of economically active Bangladeshi women are in agriculture.

These rural financial development projects, by contributing to women's economic independence and economic utility to their family of origin or of procreation, may be expected to help raise the status of women in the family and in society. This, in turn, over time, may increase the age at marriage and lower marital fertility as extra-familial roles are accepted as partial options to motherhood.

#### Extension of Social Services

Three types of social services, namely, 1) health and nutrition training and services, 2) literacy training and non-formal education, and 3) agricultural extension services, will be discussed below.

1. Health and nutrition training and services - Until fairly recently, the emphasis of extension services for women had been on childcare, health, nutrition, home-maker skills and family planning. The mothercraft centers, which aim to promote the nutritional and health status of children by teaching mothers appropriate childcare skills as well as family planning, are examples of this type of extension program. Some mothercraft programs, like the Mother's Clubs in Korea, also promote the active participation of women in family decisionmaking and in

community development (Park et al, 1974; Rogers et al., 1975).

These programs have been criticized for focusing primarily on the woman's familial roles and ignoring her traditional role in the subsistence economy (Aleta et al., 1977; Castillo, n.d.; Kabir, 1976). However, in areas where women's options are severely limited by traditional constraints of seclusion and caste, as in India, this type of program may have latent consequences on women's roles far beyond that expected. A case in point is the Jamkhed Comprehensive Rural Health Project in India where illiterate, often lowcaste women were trained to be village health workers. The outcomes of the project, apart from improved health among village women and children were (Wilkes, 1978):

- (1) the consciousness-raising of women due to the creation of a new and important role for rural women
- (2) the breakdown of caste barriers since higher-caste women had worked and interacted closely with or received help from lower-caste health workers.

The anti-natalist implications of health and nutrition programs are best exemplified in the case of Sri Lanka, where widely available health, medical and other social services have resulted in marked drop in birth rates (Newland, 1977) as noted earlier. In this case, the dramatic reduction in infant mortality has led apparently to decreased compensatory reproductive behavior.

2. Literacy training and nonformal education - Except for Sri Lanka, the female literacy rates in South Asia are very

low -- 12.2% in Bangladesh, 18.4% in India, 3.7% in Nepal, and 5.7% in Pakistan (USAID, Office of Women in Development, 1978). Illiteracy severely restricts a woman's participation in the rural development process as well as her utilization of available social services, including family planning. Literacy training, therefore, may be expected to raise women's status and increase the range of roles she could assume. And, as has been noted in the previous section of this paper, literacy has the effect in some cases of lowering fertility, probably due to greater contraceptive usage among literate women.

3. Agricultural extension services - A consistent observation and criticism of agricultural extension programs is that these programs are directed primarily at men and ignore women's traditional roles in subsistence agriculture. Castillo (n.d.), for instance, notes that there is a sex division in Philippine training programs -- family planning for women and skills training for men although -- Filipino women have traditionally played important roles as farmers and raisers of livestock. In Bangladesh, to cite another example, extension services are generally aimed at men, even in subsistence activities which traditionally fall under the woman's domain, e.g., tending the vegetable garden, care of poultry and cattle, rice processing (Kabir, 1976; Wilber, n.d.). Dixon (1978) makes similar obser-

vations on the gender-based biases of extension workers in India.

The relative impact of farm mechanization and technology on women's participation in agriculture depends on their ownership of land and the conditions of agricultural labor supply and demand in a given area. Own-account female farmers and wives of cultivators in labor-shortage areas have benefitted from the introduction of farm tractors (Milone, 1978). The predominant impact of mechanization and technology, however, has been the decline of agricultural participation by women (Abdullah and Zeidenstein, 1975, in Bangladesh; Billings and Singh, 1970 and Dixon, 1978, in India; Milone, 1978, in Indonesia). In Java where there was an over-supply of female agricultural workers and sharecroppers, for instance, the introduction of rice hullers (for which women were not trained) and steel scythes (which were somewhat too heavy for women) had led landowners to displace female workers with men (milone, 1978).

On the other hand, the introduction of running water and simple tools that would reduce the arduousness of women's house and routine subsistence activities may result in gains in physical health as well as income in cash or kind from these activities.

#### Area Development

Examples of area development programs that integrate women in the development process are the Bula-Minalabac Integrated Area

Development II and the Rural Electrification Projects, both sponsored by USAID in the Philippines. In the first, women's familial (e.g., improving family nutrition and health standards) and economic roles (e.g., marketing produce, tending backyard gardens, and raising livestock) are taken into account. Part of the project objectives is "to enhance the women's role in family decisionmaking and the household economy, as well as in decisionmaking through community-based organizations." (USAID, Office of Women in Development, 1978: 76).

The widespread accessibility of electricity provided through the Rural Electrification Project has served to minimize the importance of physical strength in non-agricultural work and has led to a dramatic increase in female employment in the modern sector (USAID, Office of Women in Development, 1978).

## SUMMARY

The region of Asia is characterized by tremendous diversity in a number of factors which may influence the magnitude and direction of the effects of rural development on women's roles directly and on fertility indirectly.

Variations in patterns of traditional female economic participation -

1. Compared with South Asia, generally, the female employment rates are higher in Southeast Asia where cultural and social constraints on female mobility and participation in activities outside the home are absent or minimal and where female literacy rates and schooling are higher (with the exception of Sri Lanka on the latter characteristic).
2. Women's participation in both South and Southeast Asia (with the exception of the Philippines) is greater in agriculture than in the non-agricultural sector. There are, however, inter- and intra-country variations in the nature of agricultural and non-agricultural participation patterns that influence the nature and direction of change in women's roles brought about by rural development strategies.
3. The variations in the nature of female participation in agriculture have been associated with differential impacts of farm modernization and mechanization on women's economic roles.

In areas where there is a high percentage of women who work for wage or a share of the crop, such as in Java, Central and South India, Sri Lanka, Malaysia and Thailand, the introduction of technology and mechanization has negative effects on the participation of women when off-farm employment in cottage industries is not created to provide alternative employment to the displaced female labor force. The displacement by men of female agricultural workers in Java when rice hullers and the steel scythe were adopted by landowners is a classic example of the negative impact of farm modernization on women.

4. The impacts of rural development strategies promoting farm modernization are related to the ownership of or access to land. Thus, the introduction of technology would benefit the female own-account farmers (constituting from 13 to 19 per cent of all own-account farmers in Southeast Asia, with the exception of the Philippines where only 4 per cent of own-account farmers are female) and wives/daughters of land-owning cultivators by reducing the physical strain and time in performing their routine agricultural tasks and by increasing gains in crop yield.

5. In Southeast Asia, where females constitute from about a third to more than half of the work force in trade and commerce, area development programs that include building roads linking the rural areas to towns would help female traders expand their

operations. On the other hand, easy access to the town market by farmers and cottage industry workers would reduce, if not totally eliminate dependence on these middlemen to market their produce or supply them with non-locally produced goods. Similarly, rural development programs that specifically aim to improve marketing facilities for the food producers, livestock raisers and cottage industry workers, such as the formation of marketing cooperatives, may be hypothesized to have a negative impact on the rural traders who may lose their major suppliers of merchandise to sell.

Variations in Demographic Patterns - Among the demographic variables examined, age at marriage and type of kinship system appear to have the most significant influence on women's roles.

1. There is an apparent relationship between early age at marriage and illiteracy. Thus, in South Asia where early marriage is the norm, female illiteracy rates are high. The exception is Sri Lanka where age at marriage and literacy rates are both high. The latter pattern is generally characteristic of Southeast Asia. Extension programs emphasizing literacy training in addition to income-generating skills, thus, may be hypothesized to delay marriage and to facilitate women's participation in the development process in South Asia.

2. The bilateral kinship system in most of Southeast Asia

is related to women's freedom in that sub-region to engage in non-familial activities outside the home, their high economic participation, and egalitarian conjugal relationships. The high fertility rates in the Philippines, Indonesia, Thailand, and Malaysia where the bilateral system is generally dominant, suggest that this type of kinship system simultaneously facilitates high participation in economic and other activities and high fertility.

Variations in cultural traditions - Among the cultural variables, values and attitudes related to female seclusion and male dominance have significant implications on the degree and nature of women's participation in the rural development process. These cultural traditions are more characteristic of South than Southeast Asia.

1. Women's seclusion in most of South Asia makes their contributions to the household and the rural economy largely invisible and severely restricts their access to marketing channels and credit. Thus, although the South Asian woman may work long and hard hours at income-generating activities, they do not necessarily control the cash income from these activities. Rural development programs that facilitate women's direct access to distributional channels and to rural financial markets would enable women who are currently or potentially active in the rural economy

to reduce their almost total dependence on the husband or male relatives for marketing their produce, livestock or crafts and for acquiring credit or supplies.

2. Male dominance may be expressed (in addition to female seclusion) in the treatment of women as sexual property whose primary task is to produce as many children as possible, as well as in feeding patterns that are detrimental to the women's nutritional and health status. These values could effectively circumscribe, if not totally negate, the effects of rural development programs that attempt to enlarge the range of role options for women.

The mediating influence of social/psychological variables -  
Although the research evidence is rather weak, work motivations and attitudes and perceived costs and benefits of children may partly provide the dynamics for understanding the relationship between female employment and fertility.

1. Career orientation and working for self-fulfillment, are sometimes but not always, related to lowered fertility and fertility intentions. Subsistence routine activities requiring hard physical labor and exploitively low wages may hardly be expected to be viewed by the rural women as self-fulfilling. It is not surprising that leaving the agricultural labor force and becoming a full-time housewife are ideal goals for the economically active

rural women in Asia (noted in the literature but not cited in this paper). The introduction of small tools and construction of water wells at convenient places to reduce the long hours and physical exertion involved in agriculture-related activities may help reduce the relative attractiveness of the housewife/mother role compared to subsistence work and may help produce a work orientation conducive to the lowering of fertility.

2. Perceptions of children as old age insurance and as sources of unpaid labor combined with the relatively low cost of childrearing in the rural area, influence the relationship between female employment and marital fertility. The evidence is, however, not conclusive. It has been suggested in the literature that increasing female employment opportunities, particularly for young women, that are incompatible with motherhood, e.g., in "centrally located" settings as Dixon (1978) suggest, would increase the opportunity cost of children and lower marital fertility. There is evidence, however, that mothers work to help support a large family rather than the non-work status contributing to high fertility. This observation would have implications for off-farm employment programs that aim to make the work and mother roles highly incompatible. Such a program may lead to working women dropping out of the labor force to assume full-time childbearing and preclude women assuming

their traditional responsibility for the family welfare and of contributing to the household income. Programs that allow women to contribute to the household income through home-based cottage industries while simultaneously performing their familial role, may eventually, if not immediately, lead to lowered fertility by reducing infant mortality through better nutrition and child care.

Family planning variables - There are variations in family planning effort and demand in Asia, as Mauldin and Berelson (1977) show. In South Korea and Taiwan both program effort and demand are strong while in Pakistan, Bangladesh and Nepal both are weak. In India and Indonesia a low demand exists despite moderate family planning efforts. Such differences would influence women's exercise of their right to determine the size and timing of their children and would circumscribe the effects of rural development programs that attempt to promote women's participation in non-familial activities. There is evidence that when off-farm employment programs incorporate access to family planning services, contraceptive usage is greater than when such services are not available.

Rural Development and Women's Roles - Aside from the mediating influence of the above key variables, the impacts of rural development strategies on women's roles may be influenced

by the nature of the assumptions underlying externally introduced development programs. The application of the Western model of gender-based division of labor, which limits women's participation in development projects to family planning, childcare, and homemaking training, and directs the income-generating skills and technology transfer to men, has been documented to result in the loss of women's traditional subsistence role in parts of Asia, particularly those areas characterized by high proportions of landless female agricultural wage workers. Land-owning female farmers and wives of cultivators, particularly in labor-shortage areas, have benefitted from farm modernization.

The creation of alternative employment opportunities, such as off-farm employment or cottage industries, would help absorb these displaced female workers.

Access to marketing channels is a major problem of economically active women in subsistence agriculture and cottage industries, particularly in South Asia where female seclusion denies women entry to the marketplace and, therefore, their control of the cash income from their activities. Rural development programs facilitating such access would promote women's economic independence and status in the family and in society.

Similarly, women's access to credit is limited by their lack of property ownership. The promotion of rural credit

cooperatives and guaranteed loans from banks would minimize the exploitation of women by private money lenders.

Rural extension programs aimed at improving women's health, literacy and vocational training as well as access to family planning services would enhance women's status by enlarging the number of roles that they can assume.

#### Women's Roles and Fertility

As discussed in the hypothesis-testing section, the evidence is substantial although not always consistent, that female employment in agriculture or non-agriculture is compatible with high fertility. This may be due to the fact that female economic participation in the subsistence basically does not change the contingencies of existence in the rural areas, characterized by extreme poverty, illiteracy, high infant mortality, long hours of hard physical work, and malnutrition.

## Chapter 4

### Rural Development, Women's Roles and Fertility in Latin America

#### INTRODUCTION

##### Fertility in Latin America

In their analysis of the conditions of fertility decline in developing countries from 1965-75, Mauldin and Berelson (1978) note that the Americas experienced "quite a bit" of decline. The crude birth rate declines during that period and the 1975 crude birth rates are shown in Table 1.

##### 1. Urban/Rural differences

In a comprehensive analysis of factors influencing urban/rural fertility, Findlay and Orr (1978) calculated total and age specific urban and rural rates based on the U.N. Demographic Yearbook and census data. The Latin American Pattern shows sharp differences in urban and rural rates (Table 2). Age-specific fertility rates also clearly indicate a pattern of delay-rapid child-bearing for urban women; most have their first birth at a later age than rural women. For example, in Lima, women ages 15-19 have less than half the fertility rate for rural women. In addition, many urban women have completed their families by ages 30-34, whereas rural women continue child-bearing up to age 49. The authors suggest

TABLE 1:  
1975 CRUDE BIRTH RATES, AND  
1965-75 CRUDE BIRTH RATE DECLINES,  
FOR LATIN AMERICAN COUNTRIES

COUNTRY	CRUDE BIRTH RATE 1975	1965-75 CRUDE BIRTH RATE DECLINE (IN PERCENTS)
Barbados	19	31
Bolivia	44	1
Brazil	38	10
Chile	23	29
Colombia	33	25
Costa Rica	29	29
Cuba	21	40
Dominican Rep.	38	21
Ecuador	45	0
El Salvador	40	13
Guatemala	43	4
Haiti	45	0
Honduras	48	7
Jamica	30	21
Mexico	40	9
Nicaragua	46	7
Panama	31	22
Paraguay	39	6
Peru	42	2
Trinidad and Tobago	23	29
Venezuela	37	11

SOURCE: MAULDIN & BERELSON, 1978: Table 3.

TABLE 2:  
 URBAN-RURAL FERTILITY DIFFERENTIALS  
 FOR LATIN AMERICAN COUNTRIES, CIRCA  
 1970

<u>LATIN AMERICA</u>	<u>URBAN FERTILITY RATE</u>	<u>RURAL FERTILITY RATE</u>	<u>URBAN/RURAL</u>
BRAZIL	3.47	5.82	.60
CHILE	3.70	6.32	.59
COLOMBIA	3.35	5.22	.64
COSTA RICA	5.12	8.14	.63
DOMINICAN REP.	5.55	6.70	.83
EL SALVADOR	5.27	7.30	.72
GUATEMALA	5.54	7.17	.77
HONDURAS	5.28	8.69	.61
MEXICO	5.87	7.10	.83
PANAMA	3.90	6.67	.58
PERU	4.23	6.31	.67
VENEZUELA	4.87	5.75	.85
MEAN	4.95	6.35	.76
STANDARD DEVIATION	1.13	1.62	.20

SOURCE: FINDLAY AND ORR, 1978: TABLE 1.

that this may be due to contraceptive use by urban women. Many factors are involved in the urban/rural differences: in rural Chile, high rates of infant and child mortality shorten the birth interval by 4½ months which results in higher completed fertility (Oberg, 1971; cited in Findlay and Orr, 1978). Findlay and Orr (1978) suggest that urban areas offer an "environment of diversity" where education and work opportunities are more varied and provide alternative patterns to early marriage-childbearing for women. The economic value of children can only be higher in rural areas, where a larger proportion of children are likely to be working (Tienda, 1974).

#### The Roles of Women in Latin America

The socio-cultural position of women in Latin America is cross-cut by national boundaries, as well as class and ethnocultural differences. Yet it has been argued that the similarities and differences in the position of women may reflect similar local characteristics that cut across boundaries. For example, the peasant Brazilian woman in the dry northeast may have more in common with peasant women in a similar local situation (e.g. the "cholas" of the altiplanos of Bolivia) than with peasant women in other parts of Brazil (U.N. Secretariat, 1976). Furthermore, class cuts across cultural boundaries in influencing the attitudes and roles of Latin American women (Pescatello, 1973). This is particularly evident in urban areas,

but clear class differences have been found among peasant women as well (Garrett, 1976, Deere, 1977, 1978). Ethnic differences also come to play, in that the position of women varies both within and between subcultures that are predominantly of Spanish, Indian, or Black heritage. Elmendorf (1976a) argues that the Indian women of Mexico (particularly Chan Kom) have more equality with men than do women in more "modern" areas of Mexico.

However, the cultural contexts, though different, may have similar consequences for fertility but for different reasons. The impact of these differences for policies aimed at the role of women and fertility means that the planner needs to be cognizant of the idiosyncracies of the particular class or cultural background of the group that he or she is dealing with, as responses to intervention may differ. Yet, as Pescatello (1973, 1976) has done, it is possible to generalize to some extent by building on the increasing number of studies of women in Latin America. The following is an attempt to present a brief description of the factors which have been identified as relevant to fertility, as they are found in Latin American context.

#### THE KEY VARIABLES

##### Traditional Economic Activities of Rural Women

Much of the agricultural activity of women is not included

in figures on economic activity. Thus according to many population censuses, women comprise less than 5 or 10 percent of the population actively engaged in agriculture—one noteworthy exception is Bolivia (e.g. Garrett, 1976; Elmendorf, 1977; U.N. Secretariat 1976). Census data, however, do indicate that women are often concentrated in the category "unremunerated family labor" (e.g. U.N. Secretariat, 1976). As Garrett illustrated (1976), almost all growth in the female agricultural labor force in Chili was in this occupational category; by 1965, 85 percent of the women in agriculture fell into this category.

Case studies have shown the extent to which rural women are involved in productive activities. And as Orrego de Figueroa (1976) notes, the rural women farmers of Bolivia, Peru, Ecuador, and Mexico are involved not only in trading their agricultural products, but often bring back manufactured goods to the village, yet are not included in the official statistics. In their evaluation of the agricultural and related activities of women in Bolivia, Peru, and Paraguay, Mickelwait, et. al., (1976) characterized male/female participation decision-making as shown in Table 1. The observations made by Deere (1977, 1978) in the Peruvian Sierra provide a good description of rural women's activities which complements the above table. Women provide about one quarter of the total labor days spent by the family

in agricultural production; their agricultural tasks include everything but plowing. In most households, the women are usually responsible for the animal-raising activities (with the help of children)\* and trading/commerce, which together meet about one-third of the family income. Deere (1977) reports that women, especially if they spend time working in the fields, also participate in agricultural decisions, for example, seed selection and preparation. Yet men often continue to make decisions regarding purchases, fertilizer, and times to plant. According to Mickelwait, et. al., (1976), the Indian Campesinas in the Andean regions of Peru and Bolivia are involved in tasks such as planting, fertilizing, weeding, rotating crops, gathering produce, and thrashing (in general, tasks which do not require great physical strength). This is especially the case in Peru, where young wives may do all the agricultural tasks when their husbands migrate for work. Even in Paraguay, there is a wide range of participation to non-participation of rural women in agriculture (Aguar, 1976; Huntingdon, 1975; Ruddle and Chesterfield, 1974; Carpio, 1974). In fact among the Quechua peasants of Peru, women are involved in the sale of cash crops, which is quite unusual (Nunez del Prado Bejar, 1975).

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\*It is noteworthy that many women depend upon a child to pasture sheep and goats, which requires one family member full time.

TABLE 3: MALE/FEMALE DECISION-MAKING AND PARTICIPATION IN AGRICULTURE

	CARRY OUT AGRICULTURAL PRODUCTION		USE MODERN INPUTS		JOIN COOPERATIVES		OBTAIN CREDIT		PETTY TRADING		SELF CASH CROPS		PUT ASIDE SAVINGS	
	D	P	D	P	D	P	D	P	D	P	D	P	D	P
BOLIVIA	HW	HW	HW	HW	Hw	H	Hw	H	W	W	Hw	H	hW	HW
PARAGUAY	Hw	HW	H	H	H	H	H	H	HW	W	H	Hw	Hw	H
PERU	HW	HW	HW	HW	Hw	H	HW	Hw	W	W	Hw	H	hW	HW

KEY

- H= Husband decides or participates in activity
- Hw= Husband decides or participates in activity with inputs from wife
- HW= Both husband and wife decide or participate in activity
- hW= Wife decides or participates in activity with inputs from husband
- W= Wife decides or participates in activity
- D= Decides how, when and what to do
- P= Participates actively once decision is made

SOURCE: MICKELWAIT, ET. AL., 1976: Table 13.

Some studies indicate a great deal of sex-typing in agricultural tasks (Women and Development, 19); yet evidence from the Peruvian-Andes indicates that men participate in spinning and weaving and that husbands and wives have joint responsibility for cultivation of fields and care of livestock (Bourque and Warren, 1976). Deere (1977, 1978) argues that there are class differences among peasants with greater role diversity among poorer campesinas. Poor women participate in most tasks, whereas, rich peasant women perform traditional female activities such as placing seeds in the furrows or sweeping up thrashed grain. Poorer peasant women are also more likely to work in the fields, in contrast to landed peasants who hire agricultural laborers. In the latter case, wives spend a good part of their day preparing meals for the laborers. Deere concludes that poverty and landlessness are responsible for the increased participation of women in agriculture, with women contributing 21 percent of the familial labor days among the middle and rich peasantry in comparison to 35 percent among the landless strata. (See also the work of Young, 1977).

The role of women in agriculture has been influenced by development, often with the result of reducing their paid participation. From 1941 to 1970, the proportion of Venezuelan women employed in agriculture dropped from 14.7 percent to 4.4

percent (Maccan and Bamberger, 1974). In Chile, since 1935, women have been disproportionately displaced from permanent, resident employment on large estates (Garrett, 1976). Other reforms, as in Peru, while improving employment opportunities of women have not increased their status in co-operatives, landownership, and the like. As Deere (1977b) argues these changes may have the effects of releasing men to spend more time earning wage income, but may increase the burden of women on the minifundio. The Peruvian law provides that women can manage land only when they are recognized as head of the family. Only one-third of the women in agriculture are in this category, whereas over half are the wives of farmers (Sara-Lafosse, 1968). In Chile, male temporary resident workers gain rights to land upon marriage; Garrett argues that this reinforces the economic basis of patriarchy in the family and:

The alienation of women from agricultural production has the consequences of restricting them to the spheres of domestic production and social reproduction. (1976:2)

#### Demographic patterns

Two of the most outstanding characteristics of female marriage patterns in Latin America are marital-delay and non-marriage. Youssef (1973, 1974) reports that only 57 percent of the total female adult population have experienced marriage; 33 percent are single and 10 percent in non-legalized unions. Late marriage is relatively commonplace; for example, 27

percent of women between the ages of 25 to 29 were single (c. 1960). About 17 percent of all adult women aged 30-64 are single which indicates the extent of non-marriage (Youssef, 1974). Mauldin (n.d.) also reports that between 1965-75 there were significant increases in the percentage of women never married. In the South American\* countries examined by Youssef (1974), consensual unions ranged from a high of 20.1 percent in Venezuela to 3.3 percent in Chile. Such unions are more commonplace among the lower class (Pescatello, 1976), although evidence would suggest that legal unions are the rule among rural Indian populations.

#### 1. Age at Marriage

Delayed age at marriage has been found to be an important factor in fertility decline (e.g. Mauldin and Berelson, 1978; Freedman, 1963; Miro and Mertens, 1968). For example, Williams, et. al., (1975) report that the time spent by rural Haitian women out of active conjugal union, combined with later age at first union, appear to lower fertility. Higher rural fertility in part results from earlier age at marriage in rural areas (Hinshaw, et. al., 1972). In urban areas, later age at marriage is associated with higher education and white-collar employment (Weller, 1968). Balakrishnan (1976) examined the determinants of female age at first sexual union (defined as age at marriage)

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\*Chile, Columbia, Costa Rica, Ecuador, Mexico, and Peru.

in rural and semi-urban areas of Mexico, Costa Rica, Colombia, and Peru. The findings illustrate that later age at marriage had a substantial effect on fertility, and that education was the most important factor related to later age at marriage (even after controlling for place of early socialization and present place of residence); yet only a small part of the variance in age at marriage was explained by these three factors.

## 2. De Facto Marriages

Illegitimacy is high in Latin America, with children born in all non-legal unions defined as illegitimate. The rates average around 30 to 40 percent (Youssef, 1974; Cutright, et. al., 1976), with country variations: Venezuela, 53%; Peru, 49%; Paraguay, 43%; Ecuador, 32% (Buvinić and Youssef, 1978). Unstable unions and illegitimacy are particularly high in Caribbean nations (e.g. Chen, et. al., 1976; Buvinić and Youssef, 1978). Latin America also has a high incidence of abortions, with Chile and Argentina having the highest rates and Lima, Peru, the lowest (Pescatello, 1976).

## 3. Migration Patterns

Latin America has an unusual pattern of female migration to urban areas, in that it exceeds the migration rates of men. One consequence is that the sex ratio in rural areas (104:100) favors men whereas in urban Chile (in the 1960's), for ages 35-55 there were 250 potentially marriageable females for each

100 potential male partners (Buvinic and Youssef, 1978). It is primarily young women who migrate to the cities to find work as domestic servants, traders, prostitutes, and occasionally unskilled laborers (eg. see Jelin, 1977). Buvinic and Youssef (1978) also point out that widowed women of all ages migrate to the cities in order to find employment. And it would appear that these migrant women do not return to their village to serve as role models for other women. Rather, as Chaney (1977) reported, only half of the domestic servants (interviewed in Lima) had returned to their village even once. The fertility consequences of these patterns of rural to urban migration are the subject of another SOAP, and therefore will not be discussed here. Yet one of the impacts of male migration which clearly affects the role of rural women is the alteration in family structure, namely, women-headed households. There is limited evidence that male migration may result in women having somewhat more control over the land and even involvement in political responsibilities (Bourque and Warren, 1976; Deere, 1977b), but one clear impact is to lessen the economic position of the female-headed families left behind.

#### 4. Family Structure and Stability

Assessing the extent of female-headed households is difficult to do, but has been addressed by Buvinic and Youssef (1978). Their review of previous studies indicated that in rural areas, women may well be de facto heads of household; for example, Lopez de Piza (1977, cited in Buvinic and Youssef, 1978) report-

ed that 62 percent of the rural poor women studied (N=82) had been abandoned by their men. Merrick (1977, cited in Buvinic and Youssef, 1978) found that 19 percent of the sample households in Belo Horizonte, Brazil, were headed by women. Using a measure of potential female-heads-of-household, Buvinic and Youssef (1978) calculated the proportion of such households, with a range of 40 percent in Panama to 11 percent in Paraguay. It has been suggested that "unstable unions can have a positive or negative effect on fertility by either reducing exposure to intercourse or encouraging the birth of a child with each new union" (Blake, 1955; cited in Chen et. al., 1974). The evidence from Guaguaquil, Ecuador presented by Chen, et. al, (1974) suggests that there is some support for the latter view among men but not among women. Several other studies (e.g. Williams, et. al., 1975) clearly indicate that unstable unions have a depressant effect on the fertility of women. "Single mothers" also appear to have lower overall fertility, and comprise a large part of the single population. For example, about 43% of all single Chilean women ages 15 and over are mothers; in the Commonwealth Caribbean, the percent is 50 (Buvinic and Youssef, 1978). In Chile, Colombia, Guatemala, and Peru, the child/mother ratio of all mothers is almost twice that of single mothers. Data from Guatemala (1973) indicate that fertility differences are found in each age cohort between single mothers and widowed/divorced (Buvinic and Youssef, 1978).

In sum, Latin American countries evidence several unique demographic patterns, that are not found to the same extent in other developing countries: delayed age at marriage, non-marriage, female migration to the city, high rates of consensual unions and unstable unions. All of these factors theoretically should be related to lower fertility; yet as was noted, Latin America has very high fertility rates, particularly in rural areas. It is therefore necessary to examine the cultural, social-psychological factors, and structural factors which impact on the role of women and thereby fertility.

#### Cultural Factors

Many aspects of Latin American culture would suggest an extremely low status for women in Latin America. As Youssef (1973:330) argues, there are: "Cultural pressures operating from all sides to confine women to their traditional roles of marriage and childbearing." These values, particularly regarding family honor, might suggest a fairly tight control over women, with the result of low rates of illegitimacy, education, and labor force participation of women. Yet as evidenced above, the actual patterns are quite different; women have good educational opportunities, participate in the labor force to some extent, and have high rates of illegitimacy. Youssef (1973) argues that certain situational circumstances created a wider

range of alternatives for Latin American women (especially relative to women in the Middle East); namely, the nature of the Spanish conquest and the role of the Roman Catholic Church in undermining the authority of male family members. Yet the remnants of the cultural influence manifest certain constraints on the role of women, particularly in rural areas.

### 1. Machismo

One of the oft-cited features of Latin American culture is the machismo/marianismo attitudes that focus on exaggerated masculine and feminine stereotypes. Such macho attitudes are often used to explain the high birth rates in Latin America, e.g. the male has to prove his masculinity by fathering many children. The reverse side of the coin--marianismo--is the belief in the spiritual superiority of women which teaches that they are semi-divine, morally superior to and spiritually stronger than men. These beliefs are strongest among the urban and provincial middle-class (Stevens, 1973). She also suggests that many Latin American women perceive the status accorded them by marianismo as advantageous, or that women have "freely chosen to have their marianismo cake and eat it too." The machismo imagery has been seen to affect fertility in another way; namely, that sexual distrust of one's partner (as a result of machismo) makes contraception unacceptable (Stycos, 1955;

Brody, et. al., 1976).

## 2. Taboos Regarding Sex

Cultural taboos regarding sex are also factors which inhibit the use of contraception. For example, Elmendorf (1976) found the women of Chian Kom, Mexico, reluctant to discuss sex and forms of birth control; yet they asked her advice on how not to have any more children. These attitudes are particularly prevalent among rural Indian cultures (e.g. see Annis, 1978), especially in Mexico and Peru (Simmons, 1977). Simmons et. al., (1975) found that while contraceptive awareness is widespread in rural areas of Costa Rica, Colombia, Peru, and Mexico, its use is not and seems little related to the desire for no more children. The authors argue that part of the explanation may be found in negative attitudes and taboos regarding discussions of sex, particularly with young women.

## 3. Roman Catholic Church

The role of the church--with its emphasis on procreation and prohibitions on certain forms of contraception--is often cited as a factor contributing to the high fertility rates in Latin America. The findings of Cutright et. al., (1976) somewhat support this view. Using data from 16 Latin American countries in 1960, they found that Catholic institutional strength is an important factor in fertility differentials: "Modernization alone explains 38 percent of the variance in marital fertility and 68 percent in illegitimacy rates. In-

cluding Catholic institutional strength increases explained a variance to 76 and 84 percent, respectively," (Cutright, et. al., 1976:521). Yet they suggest that with modernization, the church's effects will probably be lessened (as happened in developed countries).

ernization, the church's effects will probably be lessened (as happened in developed countries.)

On the other hand, Kinzer (1973) argues that Latin America's fast growing birth rate is related to such factors as low female employment and illiteracy, rather than to machismo attitudes and the opposition of the Roman Catholic church to birth control. The current schism within the church concerning socio-economic reforms and the fact that about four out of five Latin Americans adhere to "popular" religious beliefs, suggests that the formal doctrine of the Church concerning birth control may have less of an impact than commonly assumed (see the Wiarda, 1977). Buvinic (1977) also concludes that Catholicism has little influence on the actual behavior of women with regard to marriage, motherhood and birth control; however, the church does seem to influence the attitudes of educated women.

#### 4. Role of Motherhood

The overwhelming evidence for Latin America is that motherhood is the "master status" for women. Even among professional women with more equal marriage relationships, Cohen (1973) in Columbia found that they continued to value the

traditional societal expectations regarding womanhood. Stevens (1973) reports that few employers would think of not giving a women sick leave to care for her sick children; it is viewed as a matter of the employer's duty to respect the sacredness of motherhood.

The traditional female role is evident in the literature of Latin America (Jacquette, 1973), and in magazine fiction (Flora, 1973). In the latter study, the ideal heroine was the passive female, even when controlling for class. It was particularly interesting that these stories usually linked sex and romance to procreation, and any illicit sex relations "invariably resulted in pregnancy."

The tenacity of traditional sex role ideologies is illustrated in the study by Harkess (1973) of urban migrant women. She found that working class women who had lived in Bogota for some time had as traditional attitudes as recent migrants with regard to: political participation and political equality between the sexes; educational equality; labor force participation; husband-wife relationships; ideas concerning wife-mother roles; and ideal qualities of the sexes. Harkess argues that both types of women were seeking status within their own worlds, namely the traditional neighborhood, and thus manifested similar goals and attitudes. With regard to fertility, she found that only three percent of both long-term resident lower middle class

and very poor recent arrivals said they made the decision to have a child always or more frequently than their husbands.

#### 5. Norms Regarding Family Size

The cultural norms regarding the role of women carry over into norms regarding family size. Large family size norms are seen as the outcome of machismo (e.g. proving masculinity through many children) and of the status of women regarding motherhood (e.g. a woman's status is improved by having many children). Yet Reining, et. al, (1977) suggest that there is no simple progression of increased status with each child; rather the ability to have children is the crucial factor.

At least two studies have found substantial ambivalence concerning family size. Simmons (1974), studying rural women in Costa Rica, Colombia, Peru, and Mexico, found that a great majority of women saw advantages in families with ten or more children; yet they also cited certain disadvantages, primarily financial. Attitudes with regard to large families were ambivalent, with 67 percent expressing mixed views, 17 percent seeing only disadvantages, and 16 percent citing only advantages. Small families were seen to have some advantages and few if any disadvantages.

In a similar study, Micklin and Marnane (1975) found both ambivalence and support for small families in a rural village in Colombia. A full 75 percent of the women interviewed felt

that "small" families (3.2 children) are generally a good idea. Yet almost half of the respondents also saw "large" families (10.4 children) as desirable. Women with modern attitudes were more likely to view large families negatively and small families in a positive light.

#### 6. Attitudes Related to the Work Role for Women

Since motherhood is defined as the primary role for women, one would expect to find negative attitudes regarding work outside the home. Arizpe (1977) reports that in Mexico City, it is only among university graduates that the working wife is more acceptable. Yet in rural areas, working in agriculture, marketing, and handicrafts, is often viewed as part of or an extension of the domestic role. The attitudes of husbands with regard to work outside the home have been found to have an impact on women's labor force participation, as was found by De Jong (1973, cited in United Nations Secretariat, 1976) in Colombia, Peru and Mexico.

Rosenburg (1976) examined the labor force participation of women in five regions in Colombia which had distinctive sex-role ideologies (as measured by family type, traditionalism, etc.). Although she found that education had an effect on labor force participation, local economic factors such as urbanization, median income, and unemployment rate were not found to be related

to female labor force participation. She argues that the different participation rates may in part be due to the differing ideologies concerning the role of women. Rosenberg suggests that social expectations with regard to the family may be more important in the decision to work than "rational criteria."

#### Social Psychological Factors

In their comparison of two villages in Mexico, Reining, et. al., (1977) illustrate how historical and economic factors combined with culture to form two very different social characters: the women of Tierra Alta, though economically less well-off than families in Santa Maria, evidenced greater self-confidence and hope and less dependence on their husbands. Historically, Santa Maria--as a relatively fertile area--experienced the Spanish conquest and hacienda system; but because Tierra Alta has been a marginal farming area, the hacienda system was never established and its men and women have had to find additional sources of income. The consequences of these different economic situations relative to the role of women, are summarized next:

#### TIERRA ALTA

own and inherit land  
 work their own lands  
 and raise animals  
 migrate to find work  
 engage in handicraft  
 production, most recently  
 using knitting machines  
 in their homes (which  
 has increased family  
 incomes)

#### SANTA MARIA

can inherit land but usually pass  
 it on to their sons  
 excluded from cash cropping done  
 with mules  
 do not work outside the home  
 have no craft or cottage industries  
 only roles available to them are  
 keeping house and rearing children

The concomitant social-psychological differences are particularly important to fertility. The women of Tierra Alta are more independent and self-reliant, and may engage in struggles with their husbands as a result of their new economic possibilities. On the other hand, the women of Santa Maria feel more helpless, less capable and self confident, are passive, unresponsive without hope, and dependent upon men for their material needs.

Dependency is one of the clear differences between these village women in Mexico. A similar argument has been used to examine fertility in Peru (Findley and Orr, 1978). Dependency is symbolized in the patron-client relationship begun in the hacienda system, which results in economic dependence and powerlessness, particularly for women. The authors argue that land reform and communal farming have done little to change this situation for rural women; the interaction of dependency and the subservience of women thus brings about high fertility.

#### Education

Although most Latin American countries have policies designed to encourage female education, actual literacy and educational levels show women to lag behind men (e.g. Pescatello, 1973; Orrego de Figueroa, 1976; Yousef, 1973). Among children ages 7-14, the male/female rates are similar, but as age increases, educational levels are higher for men (United Nations

Secretariat, 1976; Youssef, 1974). And these differences are particularly pronounced in rural areas; men consistently have higher rates of literacy (Elmendorf, 1977, U.N. Secretariat, 1976).

#### Women and Power in Latin America

Researchers who have examined the political power of women in Latin America agree that women have been excluded from top leadership and policy-making positions (Chaney, 1973; Pescatello, 1976; Orrego de Figueroa, 1976). But this does not mean that they have lacked involvement in political movements. Indeed, as Orrego de Figueroa (1976:49) pointed out, there are three facts which illustrated the contradictions in women's political involvement:

- a) women have won acclaim during periods of transition and then consolidation of the various political regimes;
- b) they subsequently have not participated in the structures which they themselves helped establish; and
- c) scant attention has been paid to women's affairs by government agencies.

In rural areas it is almost inevitably the male (whether husband or older son) who participates in the credit co-operative or comunero (which is dependent on land ownership) and in public meetings and responsibilities. Although male migration results in more women as members of comuneros, they cannot hold public office. Furthermore, even in communities where women have control over land ownership and wealth, the men have adapted to

mestizo norms and language and are therefore better equipped to interact in modern society (Bourque and Warren, 1976).

The lack of public power carries over into household decisions; for example, women in certain parts of Paraguay do not even control their own market earnings (Schoux, 1975). Several studies have examined decision-making within the family, particularly as related to other aspects of women's status. Deere (1977, 1978) found that greater participation in agricultural field work was correlated with greater participation in agricultural decision-making. Yet in Montserrat, Moses (1977) found that most skilled women felt that working contributed little to their decision-making, with men continuing to make decisions regarding the purchase of large items.

## HYPOTHESES

Female Employment and Fertility

The evidence from Latin American studies of fertility suggests that female labor force participation is related to lower fertility, but with several important qualifications. One of the problems with this relationship is the direction of causality: women may limit their number of children so that they can work (particularly if there is no available relative to care for children); women with fewer children (i.e. who are subfecund) may "choose" to work or mothers with many children may have to work to improve the family income. Very few studies have addressed the problem of causation, yet it is central to policy planning. Only the cumulative wealth of longitudinal studies will provide clearer answers; at this point, we can only suggest that working in certain types of jobs has some negative impact upon fertility.

In their extensive review of the literature on the socio-economic correlates of fertility, Mason, et. al., (1971) reported that consistent and strong correlations between female labor force participation and fertility were found in Puerto Rico (Carleton, 1965; Weller, 1968; Nerlove and Schultz, 1970) and elsewhere in Latin America (Miro, 1966; Requena B., 1965; Miro and Mertens, 1968; Stycos, 1968; Gendell, et. al., 1970).

However, in a comprehensive review of the literature on the

relationship between female labor force participation and fertility in Latin America, Davidson (1977) concludes that there is no consistent inverse relationship to be found. While the relationship is often present in large cities, it is not found in small towns (see also Miro and Mertens, 1968) Rather she suggests that the more important question is the type of employment, particularly as it pertains to role incompatibility. And Stycos and Weller (1967) have argued that when correlations between female labor force participation and fertility are not found, this may be due to two factors:

- 1) women have no contraceptive techniques available to them, or
- 2) labor force participation and rearing children are compatible.

Much of the evidence from Latin America suggests that employment per se is not necessarily associated with lower fertility, even in urban-types of employment. As Dixon (1975) has pointed out, such factors as the sector of the economy, the occupation, work commitment, income of women, the length of employment, part-time or full-time status, and availability of child care intervene in the relationship between female employment and fertility.

#### 1. Place of Employment

Jaffe and Azumi (1960) found that the place and type of employment were important factors related to fertility. Women

(in Puerto Rico and Japan) working in cottage industries in their homes had fertility levels similar to non-employed women. However, those women who were employed in the modern sector outside the home had lower fertility. Similarly, Hass (1971) found that in several urban areas of Latin America, fertility was inversely related to employment outside the home but not related to employment in the home. Thus working class women who work in their homes in such activities as baking, embroidery, or leather work are less likely to have incentives to have fewer children (also see below re: role incompatibility).

## 2. Sector of the Economy

The findings of Da Silva (1976) in metropolitan Brazil (Belo Horizonte) support the contention that the sector of the economy intervenes in the relationship between family size and work status. The participation of women in the labor force was not found to have a negative relationship to family size, except among women in the formal labor market, women who are employees in the private and/or public sectors, or who are employers. Similarly, larger families do not deter labor force participation and could even push women into role compatible occupations, or encourage women with older children to engage in incompatible work.

Peek (1975) in his study of 4000 families in central Chile, also found that when women are employed in the traditional sector

of the economy, there is no relationship between the number of children in the home and the labor force participation of the mother. However, in the modern sector, large families and labor force participation are inversely related. Of more importance, if the household contained other adults who could care for the children, then there was a positive relationship between family size and labor force participation for both modern and traditional sectors. Clearly, the availability of other adults and perhaps older children reduces the likelihood that the mother will find roles of mother and worker incompatible.

### 3. Child-care Arrangements

As several of the above studies have shown working and child-care are considerably more compatible when there is a relative or older child to care for younger children (Mason, et. al., 1971). In fact, this is one of the indices which Weller (1968) used in his operational definition of role incompatibility.

Micklin and Marnane (1975) found that couples in rural Colombia who are not well-integrated into their kin networks prefer to have smaller families. Both factors are, of course, related to modern attitudes, but it would be interesting to investigate whether the smaller family size is seen as desirable in part because there would be few relatives available to help with a large family.

#### 4. Role Incompatibility

The concept of role incompatibility between that of worker and mother as it applies to fertility has been well-researched in urban Latin America. Basically the argument (Dixon, 1975:12) is that: "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 nonemployed women." The characteristics of work that are most likely to lead to incompatibility are work outside the home, cultural beliefs that emphasize that the woman needs to make a choice between work and children, and a job that supplies enough rewards so that childbearing is seen as a less attractive alternative--such rewards as monetary, social or intrinsic/psychological (Dixon, 1975). As she (1975:13) states: "The work must be attractive to women and take them out of their homes if it is to have an effect on reproductive decisions."

Weller (1969) posits that role conflict between worker and mother involves: 1) allocation of time; 2) normative role conflict (i.e. occupying a role set that is culturally not approved); and 3) alteration in the balance of the marital relationship (eg. tension created by additional children and working). He (1968) operationally defined role incompatibility as follows: 1) whether children are cared for by relatives or not; 2) white-

collar employment; 3) being in the labor force even though a woman does not feel it is right for a woman to work outside the home if she is married and has children; and 4) the degree of role incompatibility as measured by the number of the above characteristics. His results in San Juan showed two patterns, either 1) the fertility of women not in the labor force and that of women in compatible situations is similar, or 2) the fertility of workers in compatible situations is between the levels of fertility of non-working women and women in role incompatible situations. One of the problems with the research is that women who are high on role incompatibility are also high on income and status as well as education; thus it may be these variables that are related to fertility.

Using a similar framework, Hass (1971, 1972) examined fertility in seven Latin American cities (CELADE data) as related to: employment outside the home; number of hours employed outside the home; and white-collar employment. She found that employment outside the home and white-collar employment were related to lower fertility in most cities. The exceptions occurred in cities where fertility was already low (Buenos Aires) or where cultural norms require women to have large families (Mexico City). Thus she suggests that using the intervening variable of role incompatibility may be most appropriate to areas undergoing fertility decline. When fertility begins to decline, women may see the

possibility of other roles because they have smaller families, more conveniences, etc., and then intentionally control their fertility in order to continue employment.

It is also important to note that when she introduced control variables of education and approval of nondomestic activities, the findings suggested that the attitudes of wives regarding nondomestic activities and employment, as well as education, are as effective in explaining fertility differences as is role incompatibility. She suggests that whether or not women approve of alternative roles to motherhood may be a vital factor in bringing about fertility decline: "... (if) women are enabled, encouraged, fertility in developing nations would fall." (1972:126)

The results of Hass' study suggest that the effect of role incompatibility is limited, in that it is most applicable to women in higher urban areas who are of socio-economic status, and where fertility has already begun to decline. Furthermore, Stycos and Weller (1967) have constructed the following paradigm concerning the relationship between female roles and fertility, which is specified by the availability of birth control:

Birth Control technology

Mother-worker roles

Available

Unavailable

	Compatible	In-compatible
Available	No relation	Mutual Causation
Unavailable	No relation	Fertility influences employment

Thus it is in the situation of mutual causations where role incompatibility is most relevant to fertility decline. It should be re-emphasized that these findings are for urban areas, and their generalizability to rural areas has not been empirically tested.

Furthermore, Piepmeier and Adkins (1973), argue that where women have always worked and contributed to the family's income, role incompatibility is less likely to be perceived to have an impact. However, it can be argued that if working outside of the home or off-the-farm is not considered part of the domestic role, then such activities may well lead to role incompatibility. Yet, as they suggest, the introduction or creation of role incompatibility may not be a tenable solution. It is quite possible that increasing role incompatibility, in a situation where the role of motherhood is important, would result in decreased labor force participation and perhaps increased fertility. Rather than focusing on incompatibility, Piepmeier and Adkins suggest making work roles a viable alternative for women (This will be discussed in greater detail below).

##### 5. Occupation

The accumulation of evidence from Latin America would suggest that the occupation of a woman intervenes in the relationship to fertility. Two studies have found opposite trends for

domestic workers in urban areas: Stycos (1965) found in Lima that the fertility of service workers was similar to non-employed mothers. However, Gendell, et. al., (1970) found that fertility of service workers was lower than that of non-working women, especially if they lived in their employer's household. The findings of Collver and Langlois (1962) tend to support Stycos, in that they found a negative correlation ( $r=0.60$ ) between women's labor force participation and fertility in occupations other than domestic. Stycos (1965) also found that the fertility of office workers was considerably lower than other mothers, including professionals (office workers having 43% fewer children and professionals having 14% fewer children than the mean).

However, the occupations of most rural women fall at the lower end of the occupational structure, and therefore one would not expect a negative relationship to fertility. Dixon (1975) argues that in rural areas of developing countries, employment tends to be in occupations related to agriculture, marketing, or cottage industries. Indeed, Rosen and Simmons (1971) found that the proportion of women who had worked was similar in the five industrial and non-industrial communities they studied in Brazil; however, women in the small rural community have worked almost solely in low status agricultural jobs, usually as seasonal workers. In these types of employment, women can readily keep

their children with them while working or leave them with other family members. Indeed, Arizpe (1977) reported that migrant Indian women prefer street selling because it allows them to keep their children with them. Thus the present type of employment available to rural women contains no built-in incentives to reduce family size.

The type of occupation is closely related to the income received; this income in turn is related to fertility. As Anderson (1978) found in her study of rural and semi-urban Guatemalans, female wages had a negative impact on desired family size (whereas the wages of males and children had a positive impact). Kennedy, et. al., (1974) found smaller families among women in relatively higher paying occupations in Venezuela (using 1971 census data). Yet even among women in less well-paying jobs, education was found to be correlated with lower fertility.

#### Hypotheses Pertaining to Employment

The above review of the empirical findings in Latin America regarding the employment of women and fertility provides some support for hypotheses discussed in Chapter 1.

1) Women's employment in agriculture, particularly as unpaid subsistence workers, is not incompatible with high fertility.

2) Women's employment in the informal sector of the labor

force, such as marketing or the production of handicrafts in the home, is not compatible with high fertility. However, if economic development undermines the economic position of market women, eg., modern industry which competes with cottage type handicrafts, women's status will depend even more on the role of motherhood.

3) Women's employment in off-farm industry may contribute to decreased fertility by:

- a) increasing her status
- b) delaying marriage
- c) providing an alternative role to the domestic one, particularly if the work is incompatible with motherhood.

#### Education of Women and Fertility

The relationship between education and fertility is the subject of another state-of-the-art paper; therefore, the subsequent discussion will be brief and focus on those aspects that are most relevant to the role of women. There appears to be a clear inverse relationship between education and fertility. In fact, Kinzer (1973) argues that the high rates of illiteracy (and low rates of employment) are the key factors in understanding the high fertility rates in Latin America:

...birth rates are low where there is high literacy (Argentina, Uruguay, and coastal Chile); or massive literacy campaigns but no governmental family planning programs (Brazil); or slight effort at improving literacy and energetic family

planning (Chile, Colombia, and Ecuador); and lowered drastically where literacy campaigns are combined with governmental birth control efforts (Cuba). (Kinzer, 1973:306)

The explanations usually given are that educated women have a greater hopefulness, have higher aspirations for their children, and want to do something to achieve these aspirations (Findlay and Orr, 1978). Attitudes toward and use of contraception have also been found to be related to education. For example, Brody, et. al. (1976), found in Kingston that education was related to: positive attitudes toward contraception; early, consistent, effective, reliable and purposeful contraception; and lower reproductive performance.

While many studies have shown that highly educated women have lower fertility (Miro, 1966; Kinzer, 1972a), the relationship is not as clear in rural areas. For example, Kennedy, et. al., (1974) found the impact of education on fertility to be much less in rural areas of Venezuela. In rural and semi-urban villages of Guatemala, Anderson (1978) found female education to have a positive impact on desired number of children. In contrast, Miro and Mertens (1968) found an inverse relationship between education and fertility in rural areas of Chile, Colombia, and Mexico. And in his examination of the effect of land availability in rural Brazil on fertility, Merrick (1978) found that one of the mediating factors was that of literacy (eg. for women aged 30-34, 34 percent

of the effect of land scarcity on fertility was mediated by literacy).

These contradictory findings may be due to the general low level of education in rural areas (i.e. the small range of differences in education has no effect) or to the greater valuation of large families in rural areas. For example, Findlay and Orr (1978) report that for women with primary education, only 20 percent of those in rural areas favor small families, in contrast to 45 percent of those women in cities larger than 200,000. However, women with secondary education preferred smaller families.

Much of the evidence would indicate that literacy is not enough to reduce fertility. For example, Carleton (1965) found that important fertility differences do not appear until after eight years of schooling among women in San Juan. Similar results were found by Da Silva (1976) in Belo Horizonte, Brazil: The negative impact of education on fertility is evident only among women with completed elementary school. These findings suggest that there may be a threshold level of education which must be met before direct effects on fertility are noticed. It has also been suggested that there may be a U-shaped relationship between education and fertility. Carleton (1965) found that college women (both economically active and inactive) had slightly higher fertility than did high school women, with the economically active women having lower fertility. These findings may reflect the higher status of women with

college, and their ability to hire domestic servants for child care.

Furthermore, the interrelationships between education, occupation, and aspirations make it difficult to ferret out the important variables which have an impact on fertility. For example, higher education is associated with both higher labor force participation and lower fertility. It is not clear from the literature whether education, in combination with off-farm employment, might have an interactive effect on the fertility of rural women. This is a research question which should be addressed. It is probable that both higher education and occupation have an interactive depressant effect on fertility. Program planners thus have to be aware that raising levels of literacy/education or providing off-farm employment in isolation may not be enough to decrease fertility.

In general, the following hypotheses have found some support in the literature concerning the educational correlates of fertility-related behavior in Latin America:

- 4) Literacy training has the potential to reduce desired family size by: a) exposing women to modern ideas; b) giving them a better understanding of contraception and c) encouraging higher aspirations for their children which will encourage smaller families.
- 5) However, literacy training may not be enough to depress fertility; rather a completed pri-

mary education appears to be the threshold level of education needed for fertility differentials.

### Fertility and Social Psychological Factors

Several studies (Reining, et. al., 1977; Hinshaw, et. al., 1972) have examined the cultural settings of rural areas in an attempt to explain how cultural, structural (e.g. historical and economic), and social psychological factors are interwoven with rural fertility. Reining, et. al., (1977) observed that there are three types of fertility responses: 1) continuation of traditionally large families by choice (e.g. among those who are economically better off); 2) the beginning of family size limitation which is characteristic of those less well-off economically but who are hopeful and confident; and 3) acquiescence to large family size. The type of fertility response is related not only to economic status but to the social psychological characteristics of different rural women.

#### 1. Self Confidence and Independence

It will be recalled that women of Tierra Alta and Santa Maria differed considerably in terms of the roles available to them and their economic and historical circumstances. The women of Tierra Alta, though economically less well-off than families in Santa Maria, evidenced greater self-confidence and hope and less dependence on their husbands. These were reflected in the differing

values attached to children in the two villages. Families in Tierra Alta seemed to place more value on schooling as a means for children's development; whereas, the emphasis in Santa Maria was on the needed supply of children (especially sons) for economic help, and the need for children to start working at a young age to contribute to the family's income.

Based on these differences, the authors predicted that the women in Tierra Alta would accept contraceptives more readily than those in Santa Maria. Although the villagers in general do not think very much about how many children to have, there is some evidence to support the differential fertility hypothesis. In these villages: "The increasing participation in the cash economy, and the resulting need for cash by the families, is always mentioned by the women when they speak of the desire to have fewer children." (Reining, et. al., 1977:181). In a closer examination of motivations for limiting family size, they found primarily two reasons given: 1) a self-centered motivation, eg. to have more fun; and 2) in order to benefit the children they do have, especially with regard to education. The evidence from fertility and age-distribution statistics (though not confirmed as significant) suggests that the fertility rates in the two villages have been quite different.

## 2. Fatalism and Fertility

It is generally hypothesized that persons who are more fatalistic are less likely to be predisposed to control family size. This would appear to be the case in the hopefulness of the women of Tierra Alta and the hopelessness of the women of Santa Maria. In addition, Crader and Belcher (1975) found that fatalistic orientation to life is associated with high fertility, particularly among nonsubsistence economic groupings in rural Puerto Rico. But they also found that high fertility, in turn, can lead to greater feelings of fatalism.

## 3. Decision-making Power

Decision-making power in the family can be seen to directly affect fertility through the wife's feelings of independence and autonomy (see Reining, et. al., 1977). For example, Weller (1968) found in San Juan that while knowledge of contraception was not related to family decision-making, effective use was greatest among couples where husbands were less dominant. Brody, et. al., (1976) found that reported agreement regarding contraceptive use (in Kingston) was more powerfully correlated with fertility behavior than was simply discussion of contraception. They also found that women's feelings of "autonomy-independence" (eg. personal competence, self-awareness, and willingness to manage one's own life) were related to higher contraceptive use and lower repro-

ductive performance. Finally, in their review of studies regarding fertility behavior, Piepmeier and Adkins (1973) concluded that decision-making and communication patterns within the family were better predictors of reproductive behavior than either employment or education (both of which have an impact on decision-making).

#### 4. Role Models and Alternatives

The concept of role models and alternatives to the domestic/childbearing role would seem to be central to the issue of rural fertility. Role theory, as based in social learning theory, would suggest that women in rural areas have primarily the domestic/childbearer role model available in their interactions with kin and friends. It is noteworthy that the high rates of outward female migration and their non-return (Chaney, 1977) all contribute to the dearth of "modern" role models.\* Yet there are only a few studies that have dealt, even peripherally, with role theory in the development context. Most of these concern the acceptability of the work role for married women.

Findlay and Orr (1978) suggest that women working in modern occupations may more often have "modern" fertility attitudes. They suggest that the approval of women's participation in activities outside the home and their work commitment may be more

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\*See SOAP by James Gundlach for an elaboration of this idea.

important factors affecting fertility decisions than work per se (see also Safilios-Rothschild, 1977). The conclusions reached by Hass (1972) in her study of seven Latin American cities would support this: if women perceive and approve of non-domestic, non-child related roles for women, whether they work or not, they will have lower fertility.

### 5. A Synthesis

Rosen and Simmons (1971) investigated a full range of factors involved in industrialization, decision-making, and fertility, and concluded that social-psychological factors are important elements in the equation. In their study of five communities in Brazil (one of which was a rural village) they found that the major differences in family decision-making power is between women who have worked at some time and those who have never worked. Although this relationship held across status groups and type of community, they found that women in traditional communities have less family decision-making power than women from every social stratum in industrial cities.

In an attempt to ferret out the factors that influence wife's decision-making power, controls were applied. Their conclusion (1971:61) was that: "wife's participation in decision-making can be attributed to the higher levels of schooling, work-status and modern role-attitudes among women in industrial cities." This decision-making power, in turn, was related to lower fertility.

Furthermore, the influence of wife's participation in decision-making was significant even when controlling for the effects of social status and level of industrialization in the community; in other words, this applied to the rural village studied as well.

Based on comparisons of the causal models including all variables for industrial and non-industrial areas, they found two important differences. First, work had no influence on the role attitudes of women in non-industrial communities, presumably because they were working in traditional or agricultural tasks and not exposed to new social influences and values. Secondly, in non-industrial communities, modern role-attitudes were related to more egalitarian family structure, but not to having smaller family size ideals. Furthermore, the association between ideal and actual family size was weaker in non-industrial areas.

Their conclusions regarding the importance of social psychological factors stated:

We take these findings [dependence analysis] to provide support for the inclusion of wife's role-attitudes, participation in decisions, and preferred family size as intervening variables between education, labor force participation and husband's occupation on the one hand, and actual family size on the other....

Industrialization operates through education, increased work opportunities, and the nature of the work to change the females' attitudes toward themselves as women and as wives; that this in turn influences family structure

as indexed by participation in family decisions; and that these variables are linked together in a way which operates to reduce family size preferences and fertility. (Rosen and Simmons, 1971:66,51).

Based on the research findings of the studies reviewed above, the following hypotheses have some empirical support:

6) If women are able to control earnings from income generating activities, this should result in less dependence upon husbands and increase their decision-making power within the family unit. One possible consequence would be greater power over fertility/contraceptive decisions.

7) One important consequence of women's greater access to land, credit, marketable skills, employment, and the like, is to give women a sense of control and independence which can lead to lower fertility.

8) The social psychological factors discussed in the above hypotheses contribute to feelings of hope for the future. These feelings, particularly if combined with education, can lead to higher aspirations for one's children and thereby reduce family size.

9) Non-formal education and related activities which focus only on women's domestic activities do not provide alternatives to the role of childbearing.

The foregoing review of previous studies has included data

from both rural and urban areas. Many of the findings concerning employment in modern sector occupations, role incompatibility, and education as they are related to fertility, are less germane to women in rural areas. Yet these findings allow one to focus on those factors which may be central to the reduction of rural fertility. The findings of Deere (1977a, 1978) and Young (1977) concerning less sex role segmentation among the poorest peasants suggest greater role diversity for these women. If, as has been suggested, their fertility is lower in spite of their poverty, role diversity (or conflict) may well be a factor. The subsequent discussion of rural development strategies will attempt to apply the findings from rural areas and project the data from urban studies in an assessment of such policies and programs.

#### RURAL DEVELOPMENT STRATEGIES

Nerlove and Schulz (1970) suggest that there are several variables which affect fertility that are open to policy-manipulation: provision of educational facilities, general level of economic activity and the degree of unemployment, the location of industry, the extent and nature of employment opportunities for women, and the provision of public health services (particularly birth control information). Each of these is related to the role and status of women in a society, but the most direct impact on fertility concerns female employment. As they conclude:

One influential economic variable in the model is our index of demand for female labor services. The existence of good employment opportunities for women outside of the home appears to have a direct positive effect on female participation in the labor force and negative effect on marriage that should tend to lower fertility slightly. (1970:68, emphasis added)

Whereas off-farm employment for women may well be the principal factor in fertility reduction, other rural development strategies may have an indirect impact on fertility through other structural and social psychological factors discussed earlier.

#### Participation of the Rural Poor

Participation of the rural poor includes a wide variety of activities, ranging from health care programs, political participation and leadership, to whether or not peasants (particularly women) own land and actively participate in decisions concerning its use. Thus this broad rural development strategy appears to be a part of several of the hypotheses discussed above, but will be considered in terms of: 1) encouraging women's leadership in rural areas; 2) participation in the decisions and implementation of family planning programs; and 3) peer support groups.

##### 1. Leadership

Bolivia has developed an innovative system of training programs for rural women leaders (through the Rural Women's Development Division of the National Community Development Service-

NCDS). Women are organized around a specific economic or community need; the projects are used as a basis for training and giving women experience in leadership (New TransCentury, 1978). The approach is based on women as individual change agents; women are trained to take over the operation of women's community associations in order to continue the work begun by promoters (see Eddy De Arellan, 1976, for description). The evaluations of fellow villagers indicate that these women have been successful in getting community support for self-help projects; furthermore, the women leaders are consistently cited as being the most helpful and appreciated. Although the programs resulted in improvement in family care subjects and leadership opportunities for women, there is little evidence that the training which these women experienced has had an impact on the role of women in the production process (Mickelwait, et al., 1976).

Another project in Peru illustrates how the initial participatory efforts of women can be undermined by arbitrary decisions of developers. ORDEZA (Rural Development Division in Peru) was involved in a subproject designed to establish a community-owned restaurant for tourists, which would provide a sales outlet for the handicrafts of local artisans. In the initial planning stages, one-half of the artisans were women. Not only were they involved in the suggestion and decision to build a restaurant,

but organized work crews when building was begun on the project. This was necessary because many of the men did not initially participate; the construction activities of the women shamed the men into participation. However, arbitrary decisions by ORDEZA administrators excluded persons who did not have a high school education from working in the restaurant; this had the result of excluding most of the artisans and original co-operative members, and fell more heavily on women. A further decision that no artisan sales would be made in the restaurant effectively excluded women from any participation (Mickelwait, et al., 1976).

The increased participation of women in decisions outside of the home has been hypothesized as having a negative impact upon fertility; this can be seen to operate by giving women more decision-making power within the family, particularly with regard to number of children and contraception, and by providing alternative roles for these women.

## 2. Family Planning

The importance of the participation of women is underscored when one considers family planning programs. Although most rural development activities in the areas of health and family-planning have women as the target population, few programs seek to incorporate women into the planning, distribution, and other positions of leadership (Chaney, 1973a). Field data from Guatemala indicate

the importance of involving women beyond merely family-planning acceptors. Because Indian cultures strongly oppose men and women talking privately, it is highly unlikely that Indian women will seek family planning advice or contraceptives from males. Yet in the Quiche region, almost all of the family planning distributors are men in their 20's (Annis, 1978). Annis found that one of the most successful distributors (in terms of number of acceptors) was the mother of a 16-year -old high school student (who was officially the distributor). In some cases, the male distributors had passed the responsibility onto their wives. This clearly suggests the need to involve women as active participants in family planning rather than simply passive acceptors (see also Simmons, 1977; Wiards, 1977).

### 3. Peer Support Groups

The experiences of rural women's groups in Colombia also illustrate the potential of women's participation, especially with regard to fertility. These groups exist among the relatively prosperous coffee growers and are involved in both health and family-planning related activities and income generating activities. Misch, et al., (1975) report on two significant findings regarding these groups: 1) they have succeeded in improving rural incomes and family planning, and 2) income-producing activities are an essential element to holding the groups together. It is the latter that encourages continuing membership and provides the basis on which other programs such as

family planning can be built. By increasing the family's cash income (through production of handicrafts, "factories in the field"), there is an increase in the value of the mother's time. In the new home economics model of fertility, this should reduce fertility. Of special importance is that these women's groups provided peer support which could be a critical factor in behavior change.\* Misch, et al., (1975) reported that the women used the group for decision-making and support in taking action. The evidence concerning contraceptive behavior is impressive: continuation of family planning behavior was found among 85 percent of the women after 12 months, and 78 percent after 18 months. Furthermore, the incidence of new acceptors increased. At the same time, the economic yield from the cottage industries was high (Misch, et al., 1975).

One important conclusion which emerges from the above discussions is that participation is likely to be continuous, and thereby more effective, if an economic activity is a central component. Whether teaching rural women leadership skills or family planning, interest was maintained when it was in the economic interests of the women to participate. This suggests that it might

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\*See also Piepmeier and Adkins, 1973, regarding peer support of family planning among lower class women.

be possible to better implement family planning through such agents as work groups (see Piepmeier and Adkins, 1973); for example, marketing groups and cooperatives could be used.

## 2. Extension of Social Services

### 1. Rural Education

The provision of education or literacy training to rural women has one of the greatest potential impacts upon fertility. As described above, education can expose one to new (modern) ideas and attitudes, aid in the understanding of reproduction and contraception, and result in higher aspirations for one's children--all of which may encourage smaller family size. Yet there is some question as to whether literacy is enough: there may be a threshold level of education necessary (e.g. completion of elementary school) before fertility is depressed. Even if only literacy training can be accomplished, it is important that the women continue to practice their skills or they will revert to illiteracy. As Turner (1974) suggested, it is necessary to:

shift 'graduates' to post literacy involvement such as production of rural newspapers to retain and improve their skills, higher education, or additional training for community development projects.

In addition, some of these suggestions would provide off-farm employment opportunities for these literate women. The feasibility of providing rural women with an elementary school education is

questionable, but it is possible that the interaction of literacy training and off-farm employment would reduce fertility. In addition, educational programs aimed at rural girls clearly should have an impact on their subsequent fertility. Turner (1974) provides several suggestions on how to provide non-formal education for rural poor girls and women that is complementary to their tasks, chores, and interests. She also suggests that textbooks, audio-visual materials and the like be selected to avoid stereotyped male and female roles. Perhaps additional attention can be paid to avoiding material that reinforces the role of women as mother and childbearer.

Rural education can be seen to be related to fertility in another way--by providing employment opportunities for rural women in the profession of teaching. The project paper of USAID Rural Education II in Bolivia (1977) suggests just that; one of its purposes is to provide incentives to encourage teachers to remain in rural areas. A suggested approach is to provide loans at grade 10 with the stipulation that they be repaid with rural service. It is estimated that one-half of the beneficiaries would be female students, primarily from peasant backgrounds. While this proposal may result in the recruitment of rural women, it clearly will not have an impact upon the rural poor women who would never achieve a 10th grade education. However, one latent consequence of such projects is that these female teachers, who are from rural backgrounds,

could provide alternative role models as well as sources of "modern" information.

### Off-farm Employment

The relationship between female employment and fertility--with the intervening variables of type of employment, occupation, role incompatibility, etc.--strongly suggests that off-farm employment, perhaps in combination with education, is the rural development strategy which has the greatest potential to reduce fertility. There are several cautions, however. Employment alone, even in urban areas, is not necessarily related to lower fertility. Rather, as Abbott (1974) has suggested, the central factor in the fertility/employment equation is the degree to which the separation of domestic and work-related activities are made attractive by real economic gain. The negative relationship is that between fertility and well-paid work outside of traditional family roles. The review of the evidence presented above documents the relationship, and will not be repeated here.

Rural Latin American women comprise a small part of the hired workers, with the exception of textile industries (Garrett, 1976; Boserup, 1970). In Peru, while wage work is essential to the economic position of peasants, women constitute only 15 percent of the labor force participants (Deere, 1978). Again, the official statistics undoubtedly underestimate women's involvement in goods-

production, as they often produce handicrafts at home which are sold in markets.

The extent to which rural women will become involved in off-farm employment such as factories is suggested by the few existing studies. Women became actively involved in the co-operative enterprises which evolved from the INCORA project in Colombia (Cebotarev, 1976; see below under rural financial markets). Even when the cultural norms oppose women working in factories, such employment can succeed. For example, the Mayan Indians in the Guatemala highlands did not consider factory work to be women's work; yet when a textile factory was established there, the rural woman sought employment in order to increase family earnings. When a U.S. owned corporation established a factory in Puerto Rico, it was able to attract female workers by ensuring high moral standards (Boserup, 1970).

Of the several rural development projects examined, most are designed to generate off-farm employment for both men and women, and will reach women primarily because the type of factories usually hire women workers, namely, textiles and food processing. For example, the Agro-Industrial Export Development project in Honduras (Report on Women in Development, 1978) is expected to create jobs for about 400 women in the processed and fresh vegetable industry. It is also designed to provide technical assistance and marketing strategies to small growers, most of whom may well be men.

The Rural Enterprises Development in Guatemala (Project Paper, 1978) is designed to establish factories to employ the rural poor and is expected to generate 7155 woman-years of employment. The report suggests that many women will become "entrepreneurs" as a result of loans, etc., since women are more often found in textiles (especially weaving).

In Colombia, the Small and Medium Industry Development (Project Paper, 1974) would provide credit and technological assistance to these industries, which tend to be labor intensive. Since small and medium industries tend to use women more, one result would be increased job opportunities particularly in the textile and clothing industry. The project paper (1974:31) argues that this would provide an attractive alternative to domestic service and:

...represent a major improvement in the woman's status in that she receives much higher pay, has fixed and shorter working hours, the freedom to choose where she will live, and is integrated into the productive aspect of the economy.

Yet much of the previous evidence concerning blue-collar women indicates that fertility differentials are negligible in comparison to non-employed women. The report also suggests that women can play an important role as professionals in agencies providing these loans (citing one woman executive in a bank). While this type of employment is conducive to lower fertility, it clearly has no effect

on the fertility of rural poor women.

Projects such as the above, which would create primarily unskilled employment for rural women, may not reduce fertility. There are of course several contingencies, for example: the availability of relatives or older children to care for younger children (see Piho, 1975); the level of wages, particularly since textiles are generally low-wage industries; and the extent to which women are able to move into better paying, more skilled jobs in these concerns. One possible outcome, if young unmarried women are employed, is to increase the age of marriage or consensual union--a factor which has been shown to reduce fertility (see Dixon, 1976).

#### Marketing Systems

As described above, women in Latin America historically have been involved in the marketing systems. Deere (1978) found that petty commodity trading was still an important source of income for rural women; in fact, 10 percent of the households she sampled has some sort of store, although this was primarily among the rich and middle peasants. In most Latin American countries (Paraguay is one notable exception), the women predominate in decision-making and participation in petty-trading, while husbands usually make decisions regarding the marketing of cash crops and livestock (Mickelwait, et al., 1976)

Yet as a group, market women have been relatively disorganized

and powerless, usually selling as individuals and depending upon relatives and older children for help with the marketing (e. g. Bunster B., 1978). It is this disorganization that places market women in a precarious position relative to development strategies. Chinas (1974) suggests that the lack of internal organization among the Isthmus Zapotec Indians that she studied might discourage their continued participation in the food-processing-vending activities as development strategies are undertaken. The competitive practices of "intrusive entrepreneurs", virtually drive the individual vendor out of the marketplace.

One solution to this is the formation of women's marketing cooperatives. The women of Chan Kom in Mexico recognized that co-operatives could increase their production and give them increased profits without leaving the village, but they lacked the financial knowledge and expertise to sell their products without a "middleman". The women also showed great flexibility in their willingness to make items more marketable by changing patterns, etc. (Elemendorf, 1976a). In Nicaragua, some vendors have been more successful in co-operative action. The Rural Market Credit Unions in Nicaragua (Report on Women in Development, 1978) are aimed at establishing credit and savings co-operatives to marginal borrowers in order to give them independence from local moneylenders. The project has been expanded to include small tradespeople, artisans and those

involved in home industries in rural towns; 36 co-operatives are currently in existence. In the Dominican Republic, the Training Rural Managers Project (Report of Women in Development, 1978) would provide training in small business management skills.

Several of the rural development programs, which have a woman's component reach women primarily as wives of peasants (e. g. Bolivia Small Farmer Organization, Small Farmer Training Loan in Colombia). While these may improve rural agricultural marketing systems, they are not designed to elevate the status of women.

There is not much evidence that encouraging market activities of rural women will have a negative impact of fertility. In fact, women often prefer this type of occupation because of its flexibility, whereby they can minimize conflict between the dual roles of worker and mother (Bunster B., 1978; Elmendorf, 1976a). Thus, unless marketing activities provide a better income than most market women currently eke out, or become less compatible with childbearing (for example, less flexible scheduling, having to leave children at home), the status of women will not be improved nor will their fertility likely decrease.

#### Rural Financial Markets/Credit and Co-operatives

Credit is primarily male-dominated, from those controlling to those receiving credit (Mickelwait, et al., 1976; Cebotarev, 1976). Even among urban market women (in Lima), the co-operative markets

provide no credit assistance to their members (Bunster B., 1978). In the three Latin American countries examined by Mickelwait, et al. (1976), the formation of co-operatives is virtually a male domain; this appears to result from the patterns of land-holding (see also Boyrque and Warren, 1976). However, in Bolivia and Peru, women may indirectly affect the decision of whether or not to join a cooperative by subtle pressures on their husbands (Mickelwait, et al., 1976). The presence of informal decision-making corresponds to observations made by Elmendorf (1974) and Diaz (1970) in Mexico. In Paraguay, women have no influence over such financial decisions (Schoux, 1975; Mickelwait, et al., 1976).

An innovative program in Colombia (INCORA), designed to provide credit to rural women in voluntary associations for individual or group projects, illustrates the positive effects which credit can have on the role of women (Cebotarev, 1976). The rationale for the mandate given to INCORA--to organize women in the most rural areas--was that a better utilization of their skills and energy in economic activities could result in an increased standard of living for the poor. By the built-in rotation of officers, different women could gain experience in organizing, planning, finances, etc. This was particularly important in the group projects, where women learned how to legally establish corporations and to plan for investments, production, etc. By the end of 1968, almost 300 women

had been granted credit.

The program was not designed to bring about changes in the role of women; in fact, several cash-crop projects (such as grain) had to be dropped--not because they were unsuccessful--but because they were seen to be encroaching on male activities within the domestic unit. Cebotarev reports that there were other attempts to thwart women's activities: refusal of loans, or using a woman's credit to repay her husband's loans. There were several notable failures as well as successes; one of the biggest failures was a food processing plant, primarily because of technological and equipment-related problems. Yet the women involved in the original project requested another loan and established a commercial garden and orchard. In another subproject, the women ran a neighborhood store but had to reduce the involvement to two women (from 8) because of competition. Another effort at a commercial vegetable garden was successful until the women could no longer get the land. The most successful projects often involved 3 to 8 women, particularly dairy projects and craft associations. In the opinion of several observers, the greatest accomplishment was the increased self-confidence in non-domestic roles of the women involved in these projects. As Cebotarev (1976:25,28) stated:

. . . In all, however, group projects gave women the opportunity to organize group action and to induce change on various

fronts. In the home they improved the quality of life and defended their newly acquired roles to their husbands and fathers. In the non-familial, public world, they confronted local authorities, bank managers, technical experts, even the INCORA supervisors and the RFC coordinators to defend their positions, interest, decisions, and rights...

It appears that not ignorance and poverty, but the institutional power and authority structures of Latin America are the greatest barriers that rural women must overcome.

Colombia continues to have small industry loans which are also available to women; however, in 1978, it was estimated that women constituted only about 10 percent of the total available credits (Report of Women in Development, 1978). Some of the rural development programs in other countries are aimed primarily at providing credit to rural women: the Social Services and Small Loans to Low-Income Women (primarily Barbados); Rural Market Credit Unions and Women's co-ops in Nicaragua; and the Pespire Valley Integrated Rural Development in Honduras. The latter project resulted in a noteworthy women's co-op involved in canning. In 1977, the members were able to support their families even though the corn crop had failed; in addition, they purchased land on which to raise other fruits (Report on Women in Development, 1978).

The relationship between the availability of credit and fertility is not clear-cut; in part, it may well depend upon what the credit is used for by women. Investment in agricultural improve-

ments or marketing co-ops should translate into higher incomes, and therefore higher status. But working in these traditional occupations has not previously shown a depressant effect of fertility. Yet as Cebotarev (1976) illustrated, an increase in self-confidence and decision-making abilities occurs among women who have been successfully involved in co-operative organizations; feelings of control over one's life, nonfatalistic attitudes and increased decision-making have been shown to be related to fertility.

#### Area Development

Area development has had latent consequences on rural women, often undermining their traditional income-generating tasks and lowering their status--neither of which is amenable to lower fertility. In an analysis of Brazilian census data, Vasques de Miranda (1977) found that industrial development tended to push women out of handicrafts. Chinchilla (1977) also argues that industrialization almost universally destroys or weakens artisan industry, which is most often done by women (see also Garrett, 1976, concerning agriculture).

But other types of development, such as the building of roads, can make it easier for market women to sell their goods (provided they have better forms of transportation to make use of the roads). Elmendorf (1976) reports on the impact of a road to Chan Kon in Mexico: the village women felt that it increased marketing opportunities by making it easier to sell their handicrafts in tourist

areas (which had been a three-hour walk). Yet initially, they had hoped that the road would bring tourists and their trade to the village on their way to nearby archeological sites. Instead, the village was only a stop-off on the way to the city that the road provided the link to. Similarly, a road to the village of Tepoztlan eventually undermined the local marketplace, which was run primarily by women. The link to the city of Cuernavaca increased trade with the city so that only minor purchases were made in Tepoztlan (Elmendorf, 1976a).

The type of opportunities available as a result of the linkage by roads may affect the status of women.\* For example, the road to Chan Kom provided access to jobs at a nearby resort where girls from the village found employment in the kitchens--for about half of what village boys/men were paid. These kinds of jobs provided immediate monetary rewards, but were generally dead-end jobs. Elmendorf (1976a) suggests that young women migrating to cities may have a better chance to learn skills to become nurses, seamstresses, pastry cooks, and accountants. However, most young female migrants find themselves in domestic service, marketing, unskilled factory work, or prostitution.

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\*Although the topic of migration is another SOAP, it will be dealt with here briefly.

Programs such as the Integrated Regional Rural Development Project in Jamaica seek to improve roads, electrical services, and water supply. Similarly, the Integrated Agricultural Development Project in Haiti seeks to organize water-user groups and establish community nurseries. Without changes in these basic domestic tasks, it is doubtful that women would be able to be involved in, for example, off-farm employment--at least without seriously overloading themselves.

#### SUMMARY AND CONCLUSIONS

From the above review of theoretical and empirical studies on rural development, the role of women, and fertility, as well as reports on rural development projects in Latin America, several conclusions are evident. It is the task of this section to summarize briefly these findings and attempt to assess the possible impact of rural development strategies on fertility in Latin America.

Certain demographic patterns exist in Latin America which have been shown to be associated with lower fertility. These include delayed marriage, non-marriage, prevalence of consensual unions, and migration of young women to urban areas. In spite of these characteristics, Latin America continues to have high rates of fertility, perhaps because of the socio-cultural setting which places high valuation on the role of motherhood. Yet the very existence of these demographic patterns suggests that fertility

decline may be accomplished with more ease in Latin America than in other developing areas. Yet clearly, the socio-cultural setting has been shown to be quite supportive of high fertility.

Many of the cultural elements in Latin America can be seen as contributing to high fertility. The influence of machismo attitudes, the doctrines of the Roman Catholic church, and cultural taboos regarding the discussion of sex have been noted. But the results of several fertility studies suggest that cultural factors concerning the role of women may be more important in explaining high fertility. Norms which emphasize motherhood as the only viable role for women and therefore reject work roles, foster a cultural milieu in which one would expect low rates of female labor force participation and high fertility. It has also been shown how cultural and structural factors combine to influence social psychological characteristics such as dependency, passivity, and feelings of powerlessness and helplessness--all shown to be related to higher fertility.

Structural factors such as education and employment mitigate against high fertility. Educational opportunities for females are legally the same as for men in Latin America; but in practice, women have lower levels of education and higher rates of illiteracy. The low rates of labor force participation of women, particularly in rural areas, are also concomitant with the high fertility in

## Latin America.

From the consideration of the role of women and fertility in the Latin American context, several hypotheses have found support:

- 1) Women's employment in agriculture, particularly as unpaid subsistence workers, is not incompatible with high fertility.
- 2) Women's employment in the informal sector of the labor force, such as marketing or the production of handicrafts in the home, is not incompatible with high fertility. However, if economic development undermines the economic position of market women, e.g. modern industry which competes with cottage-type handicrafts, women's status will depend even more on the role of motherhood.
- 3) Women's employment in off-farm industry may contribute to decreased fertility by:
  - a) increasing her status
  - b) delaying marriage
  - c) providing an alternative role to the domestic one, particularly if the work is incompatible with motherhood.
- 4) Literacy training has the potential to reduce desired family size by:
  - a) exposing women to modern ideas
  - b) giving them a better understanding of contraception
  - c) encouraging higher aspirations for their children which will encourage smaller families
- 5) However, literacy training may not be enough to depress fertility; rather a completed primary education appears to be a threshold level of education needed for fertility differentials.
- 6) If women are able to control earnings from income-generating activities, this should result in less dependence upon husbands and increase their decision-making power over fertility/contraceptive decisions.
- 7) One important consequence of women's greater access to land, credit, marketable skills, employment, and the

like, is to give women a sense of control and independence which can lead to lower fertility.

8) The social psychological factors discussed in the above hypotheses contribute to feelings of hope for the future. These feelings, particularly if combined with education, can lead to higher aspirations for one's children and thereby reduce family size.

9) Non-formal education and related activities which focus only on women's domestic activities do not provide alternatives to the role of childbearing.

The juxtaposition of these hypotheses with the six rural development strategies has focused on certain approaches which are more likely to impact on fertility, but certain combinations may well work together to have an interactive effect, for example, education and off-farm employment. Based on the evidence presented above, it is hypothesized that rural development strategies (in decreasing order of importance) will have the greatest impact on women's roles and fertility under the following conditions.

1. Off-farm employment

- 1) employment outside the home
- 2) employment in modern sector industries
- 3) substantial monetary or other rewards from work which make it more attractive than staying at home
- 4) employment in conjunction with training in marketable skills

2. Extension of social services: education/literacy training

- 1) education above literacy levels
- 2) education which is reinforced by using these educational skills in the community
- 3) teachers with rural backgrounds who can serve as modern role models and sources of modern attitudes

3. Participation of rural women in community projects and decision-making
  - 1) projects which encourage women's leadership in non-familial areas
  - 2) participation in the planning and implementation of family planning programs
  - 3) peer support groups which may provide family planning, but must also focus on income-generating activities
4. Rural financial markets
  - 1) credit provided directly to women for individual or group income-generating enterprises, rather than to male-controlled industries that hire women
  - 2) co-operatives which can function as peer support groups and disseminate family planning information (see above)
5. Extension of social services: non-formal training
  - 1) training in skills which are marketable in industrializing society
  - 2) information on family planning distributed at the factory and through marketing and handicraft co-operatives
6. Area development
  - 1) projects which do not undermine the income-generating activities of women or reduce their labor force participation and thereby reduce status
  - 2) projects to lighten domestic tasks of women are necessary if they are to participate in alternative roles
7. Rural marketing systems
  - 1) encouraging women's participation in agriculture or marketing activities will probably have little impact upon their fertility
  - 2) projects which reduce the marginality of marketing occupations (e. g. through buyer's co-operatives, etc.) should increase the status of these women, but it is not clear that fertility reduction would be an additional outcome

In conclusion, in order to depress fertility, rural development strategies need to include alternative roles for women--especially in terms of normative support for such roles and the presence of

role models other than domestic/familial. In addition, projects which give women more decision-making power and greater confidence can be expected to have a negative impact on fertility. It is of course crucial to complement the rural development strategies with family planning efforts. The key is that women begin to perceive that having fewer children is in their self-interest, gain power and access to such family planning decisions, and see that there are viable alternatives to extended child-bearing.

## Chapter 5

### Rural Development, Women's Roles and Fertility in the Middle East and North Africa

#### INTRODUCTION

In this section we examine the situation in the Middle East and North Africa. We describe, first, the main features of traditional women's roles in this area. These are discussed in terms of the economic, demographic, cultural and other intervening variables that provide the conceptual framework for the analysis. We discuss both the distinctive features of the role of Middle Eastern women, and the factors common to rural women in developing areas generally. In this section, we also examine some of the major changes underway in this region and their implications for women's roles and fertility in rural areas. Second, we focus on particular rural development strategies and projects in the Middle East. We describe existing and proposed rural development interventions and discuss their actual or potential effects on women's roles and fertility. The discussion is theoretically and empirically grounded in the discussion of the first section on Middle Eastern women's roles, and this provides the basic structure for the hypotheses.

#### The Demographic Situation in the Middle East

Demographically, the countries of the Middle East and North Africa tend to be intermediate among developing countries, with lower mortality and fertility than most of Africa and parts of Asia, but higher than Southeast Asia and most of Latin America. (Crude birth rates average

around 40 with crude death rates averaging around 14 and life expectancy at birth approximately 55 years, Kane, 1978.) In terms of urbanization, these countries are also intermediate, with roughly 45-50% of the population classified as urban (Kane, 1978). Mauldin and Berelson's recent analysis (1978) finds most of the countries of the Middle East classified as above average in terms of overall modernization or social setting factors that would be expected to contribute to fertility decline, but generally weak on family planning program effort. In terms of percentage decline in crude birth rate over the period 1965-75, most show little or no change (0-5%), while two show a substantial decline: Tunisia (24%); and Turkey (16%). These are estimated to have had birth rates on the order of 35 in the mid-1970's, substantially below the average for the rest of the region (Mauldin and Berelson, 1978, Table 3, Table 12). Egypt's crude birth rate declined over this period, then rose again to 38 (Kane, 1979).

#### The Position of Women

A major feature of the position of women in the traditional Muslim Middle East is the pattern of female seclusion ("purdah"). This is associated with a whole array of factors affecting fertility, including early age at marriage, low levels of education, exclusion from paid employment, and the lack of alternative female roles.

The pattern of female seclusion and the restrictions it has placed on the participation of Middle Eastern women in nonfamilial roles have been discussed by a number of authors (Youssef, 1971, 1974; Smock and Youssef, 1977; Mernissi, 1976; Dixon, 1976). Some of the

major points can be summarized briefly. The honor of the family (and particularly of its male members) in the Middle East is dependent upon conformity by wives, daughters and other female members of the kin group to a code of behavior that, to a large extent, is concerned with sexual purity. A central element is the avoidance of contact with non-kin males by women and girls past the age of puberty. This avoidance is provided for through a variety of structural mechanisms, as well as through socialization of both men and women. Among these mechanisms are: marriage of women at young ages, with the choice of partner controlled by the family; the restriction of women to the familial sphere, with little or no participation in the labor force or in the community at large; and the return of widowed or divorced women to the partilineal family group, either until another marriage can be arranged (for younger, typically divorced women) or permanently (for older, widowed women). Traditionally women have been able to achieve status only through marital and maternal roles, and only these roles are highly valued for women within the society. The combination of female seclusion and a number of factors associated with it (such as low education and young age at marriage) puts the woman in a position of dependency within the family unit and limits her ability to function outside the family; at the same time, her security as well as her esteem lies within the family, so that any attempt to seek status outside the family risks her future and also involves her in roles for which she has little training and which have little value for women within the society. This combination of motivational and structural factors is further

reinforced through the stratification system. Seclusion of women is an indicator of high social status for the family within the society, and so serves as a means of seeking or confirming a family's position of status and esteem. The poorest families, especially in rural areas, may be unable to provide for the seclusion of the women of the family; but for others, seclusion is valued both as a sign of conformity to cultural values and as an indicator of the man's ability to provide economically for the women of his family.

There has been substantial change in urban areas, and variation among countries, as will be discussed later. But traditional patterns are still strong in rural areas and constitute the background to change throughout the region.

These features of the role of Middle Eastern women have important implications for their economic participation, for attitudes and values concerning participation, and for a range of demographic and other behaviors. These are discussed in more detail in the following sections.

This discussion examines the main features of the economic, familial and other roles of rural women in the Middle East, using the conceptual framework presented in Chapter 1, and focussing on economic, demographic, cultural, social psychological, political, and family planning variables.

## THE KEY VARIABLES

### Economic Variables

Women's economic roles and economic position provide an important focus for analyzing the relationship between women's roles and fertility and the implications for fertility of economic and social development. Three economic factors are examined here: (a) women's traditional roles in economic production; (b) conditions of labor supply and demand; and (c) ownership and access to land.

In discussing the economic activities of Middle Eastern women, the value of female seclusion is central. Middle Eastern women, like women through the rest of the world, have traditionally played an important role in production. The traditional household functions as both a consumption and production unit, and household members of all ages, from young children to older men and women, have important and well-defined roles to play. In the rural Middle East, as in most other rural areas of developing countries, the household continues to have a central function in economic production and consumption, with members participating in both the subsistence and monetarized sectors of the economy.

#### 1. Traditional Economic Roles

Rural women have a major economic roles, in agriculture and in domestic production. Women perform a wide range of tasks in agriculture, including sowing, weeding, and animal husbandry. (Stirling, 1968; Maher, 1974, 1978; Smock and Youssef, 1977; Ahdab-Yehia, 1977; Chatty, 1978; Simmons, 1974; Cosar, 1978). Although the specific agricultural tasks carried out by women vary somewhat within the region, depending

on crops grown and local traditions, Cosar's statement about Turkey appears to be true generally for rural Middle Eastern and North African women: "... for peasant women farm work is compulsory through tradition, completely integrated within home and family life, and inevitable" (Cosar, 1978: 129).

There are important differences among countries and classes in women's economic roles. These are particularly evident in differences in women's occupations and participation in the modern, primarily urban sector of the economy (Boserup, 1970; Youssef, 1971; Cosar, 1978; Allman, 1978; Smock and Youssef, 1977), but are also evident in traditional rural economic roles as well. Furthermore, new differences are emerging and old ones are being increased as a result of such other changes as differential male out-migration from rural areas and increasing numbers of female-headed households (Birks and Sinclair, 1970; Buvinić, Youssef and Von Elm, 1978). These are discussed below.

Both the inevitability of rural women's agricultural work and its integration are reflected in the depreciation of their contribution to production. Thus, in one study, men stated that "women just cook" and that women's work is "those tasks that can be performed sitting down," despite the fact that four-fifths of women in the sample did field work (Pascon and Bentahar, 1971; cited in Maher, 1978). The low level of female economic participation reported in censuses and surveys in the Middle East also reflects the lack of acknowledgement of women's economic contribution.

Although most of women's agricultural labor is unpaid (and often unacknowledged, as noted above), there are some traditional income-

producing activities of women. Thus, among the Bedouin of the Beqaa Valley in Lebanon, proceeds from the sale of butter were controlled by women, who used the income to buy things for themselves or their families (Chatty, 1978:405); in Turkey, rural women could trade eggs and chickens, as well as handicrafts (Stirling, 1965:118), and in Morocco women take care of livestock and chickens and prepare food for sale in the market (Dwyer, 1977:43).

The restriction of women to the private sphere of the household and village, however, affects women's opportunities for income production through these means as well as through economic activity outside the household. In the village and in domestic agricultural work, rural women have traditionally been relatively free to move about. Veiling, restriction to the household and other elements of female seclusion are far more marked in the larger and more heterogeneous settings of the towns and cities. Although in some rural settings women go to market to buy or sell little things, in other areas they are restricted from going, since this would involve contact with non-kin males. Men or children (including young girls, who are less restricted until the age of puberty) go instead. Consequently, women may be unable to market the commodities they produce for income. Simmons (1974:14) notes the roles of the merchant (male) who visits the women in a Tunisian village several times a week to collect eggs and spun thread to be taken to market for the women and girls and, in return, brings them goods ordered from the market.

Although women are traditionally less restricted in the village setting, rural women enter employment outside the household only out of necessity and at the cost of respect to both them and their families. In rural areas of the Middle East, the seclusion of women and their exclusion from agricultural and other activities outside the household is a mark of status, and thus women's public economic role is class-linked. Men who can afford to do so will often hire agricultural laborers so their wives will not have to work in the fields (Maher, 1978; Mernissi, 1977). For rural women, seclusion is both a source of prestige and a relief from a heavy and continuous burden of agricultural labor (Mernissi, 1977).

Paid employment of women has traditionally been the lot of only the poorest families. Only women who had no source of family support worked, and even for these women, work opportunities were severely restricted. For those who worked out of necessity, jobs were typically an extension of traditional female roles: domestic service and agricultural labor (Stirling, 1965; Simmons, 1974; Davis, 1978). In some areas (e.g., Morocco and the rest of North Africa), poor women work as domestic servants. However, especially if they are live-in servants, this places them in a precarious position, exposed to the risk of interaction with non-kin males. In much of the rest of the Middle East, women are largely excluded from servant roles for this reason. Poor girls in domestic service may be incorporated into a domestic unit, in a role like that of a "poor relative," doing unwanted tasks for family members and being given support and protection in return (Simmons, 1974).

Although there are a few traditional roles for rural women that provide some income, these are limited in number and scope. Typically, they are roles within the female or domestic sphere, in which women provide services needed by and restricted to other women or performed in female-dominated settings; midwife, seamstress; bath mistress; laundress (Davis, 1978); or, in some cases, representative-intermediary-liaison with the public world (e.g., the arifa in the Moroccan legal system; see Dwyer, 1977). A few of these roles have neutral or relatively high status, but these are generally available to few women, since they require special talent (e.g., holy woman, midwife), or are filled by widowed or older women, who traditionally have more freedom. Other occupations, such as hired field laborer are regarded as stigmatizing in many areas and are only undertaken out of necessity, as they are low-status tasks and require the woman to work in public view (Davis, 1978). At the same time, field labor is a relatively "good" job for women, in that it pays well, and, in a prosperous agricultural area with many seasonal crops may provide relatively steady income; and, because they are paid less, women may be preferred over men as field workers (Davis, 1978).

The cultural and economic dilemma, then, is that most employment for rural women is either unpaid labor in family agricultural production (which is exhausting and little-valued), irregularly paid work of moderate to high status available to few women, and often to older married women or widows, or, if it is paid and regular, undertaken primarily out of economic necessity.

Little of this work competes with marriage or motherhood as acceptable and valued female roles. Younger unmarried girls and women are more likely to be economically active, but their level of participation is still typically low (in Egypt in 1960 girls aged 10-14 had higher labor force participation than any other age group, but even in this group only 10% were in the labor force, including both agricultural and non-agricultural occupations (Smock and Youssef, 1977)). In areas where labor force participation rates are higher, women tend to withdraw from paid employment upon marriage. Ahdab-Yehia (1977) reports that in Lebanese villages the proportion of women 15-19 employed outside the home is as high as 58%. She notes that girls may be preferred as workers to boys, since their wages are low, the damage to family reputation is less if daughters rather than sons are engaged in paid labor, and boys are more likely to be sent to school as a long-term investment in the family's security. However, even here, women typically withdraw from employment outside the household upon marriage.

The woman's participation in the public sphere is severely restricted by the practice of avoidance of contact with men outside the kin group. In many places, women are largely excluded from the kinds of occupations available to women of other cultures, including factory work, trade, and even domestic service, all of which involve unsupervised contact with men (Youssef, 1971). Although some countries (e.g., Iran, Morocco) have some proportion of women in manufacturing, these have typically been in cottage industry in the home, a kind of activity that is congruent both with seclusion and with high fertility (Youssef, 1971; Jaffe and Azumi, 1960; Dixon, 1976).

And the traditional economic roles of rural women, in agriculture and cottage industry, are consistent with and even favorable to high fertility; thus Findley (1978) reports that in rural areas of Egypt there is a positive association between women's education and occupational status and their completed family size, possibly because women from higher status families experience less child mortality and/or because women's participation increases family income and thus makes it possible for the family to support a larger number of children (Findley, 1978:172-173).

## 2. Labor Supply and Demand

Traditionally, Middle Eastern women, except those of the poorest families, have not experienced the economic necessity to work, as their male kin had the responsibility to support them until marriage or after divorce or widowhood, and their husbands supported them in marriage. In recent years, however, this security has been eroded by a variety of major social and economic changes. High rates of inflation are a source of economic pressure for women to seek paid employment; this is true in both urban and rural areas, and for both wives and women heads of households. Male rural-to-urban migration shifts more of the burden of support of the family to women left behind in rural areas; for those with land, increased responsibility for agricultural production is one possible response; for others, paid employment may be needed. Some countries (e.g., Oman, Yemen) have also experienced massive migration of rural males to the capital-rich Arab countries, especially since 1973 (Birks and Sinclair, 1979), leaving an increasing number of rural women to take major or sole responsibility for agricultural production. The effects

of these and other factors on numbers of female-headed households and women without family support are discussed in a later section. Here we examine some of the little information available on the relationship between women's family status and labor supply, and on some of the potential consequences of changes in women's participation in employment. The Census of Morocco, which gives data on employment of women by marital status gives some indication of the responsiveness of female labor supply to other social and economic changes. In Morocco, the female labor force (which includes both those employed and those seeking employment) increased 75% from 1960 to 1971 (in urban areas, for which data are available, the female labor force almost doubled in size, while the number of female-headed households increased by one-third); during this same period, female unemployment rose from 2% to 21% of total unemployment, and among the divorced and widowed, the dominance of unemployment among women is even greater (63% of job seekers among the divorced are women, and 78% among the widowed) (Youssef and Buvinić, 1979). Comparable data for other countries and time periods are not available, but if similar patterns are found in other countries, these figures give some indication of the magnitude of the impact on female labor supply of change in the numbers and proportions of households headed by women.

Thus it appears that the supply of female labor is responsive to change, and that paid employment for women is already increasing in importance and will continue to increase in the future if present economic and demographic trends continue. Furthermore, the increase may occur in non-traditional activities, in both the urban and rural areas (e.g., increasing participation of women in off-farm employment as well as in

agricultural work), and thus may compete more directly with fertility than traditional female work has done.

At the same time, increasing female participation in employment is a potential source of strain at both the familial and societal levels. Increase in women's employment may threaten family relationships (with husbands or with other male kin), as well as threatening the loss of status and respect for the family unit. Additionally, the economically marginal status of many men, especially those with little or no land, in rural areas characterized by underemployment, means that increased employment of women is a threat to the status of men, and programs to improve women's opportunities may result in male hostility (Maher, 1978; Tessler, 1978).

### 3. Women and Property

The relationship of women to property in the Middle East reflects the whole complex of economic, cultural and social factors associated with women's roles in kinship, marriage, and the economy.

Three key factors can be summarized briefly. First, Islam guarantees to women rights of ownership and inheritance of property; second, because women traditionally could not be economically independent and self-sufficient, even if they have land it must be managed by a husband or male kinsman; and, third, property tends to maintain the link of married women to their own kin group, at the expense of weakening the marital bond (Pastner, 1978; Maher, 1974, 1978). These points and their implications for fertility are discussed below.

As Pastner notes, "... the Muslim woman has always had very specific legal rights to property. But access to property need not imply actual control over property" (1978:434). "The paradox is that while they are legally recognized as "economic persons" capable of receiving property, it is difficult for Muslim women to exercise full economic rights because of other aspects of their status that define them as "protected persons" (1978:437). In some sectors of the Middle East, women may receive property as a marriage gift from the spouse, and this is supposed to provide financial protection if the man instigates divorce for unwarranted reasons (Pastner, 1978:441). Although this may serve as a deterrent to divorce if the amount of property is large, as it is for some large landowning families, it has little effect for the landless and other poor (Pastner, 1978:442). And, whereas a woman can also inherit land (especially if she has no brothers) the restrictions on her public activities mean that she must work largely through male kin spokesmen in managing or disposing of her land (Pastner, 1978:445).

..... For many landowning families, the preference is to keep the land intact and to avoid even women's limited inheritance (which transfers control of the property to her husband). Thus, women often forego their inheritance, in exchange for the continuation of support from her kin in cases of need (Maher, 1974, 1978). One consequence is that both men and women have relatively low initial investment in the marriage, and strong continuing ties to their kin group. This can be seen as both an accommodation to and an encouragement to divorce, especially in the early years of marriage before the couple has many children (Maher, 1978).

Thus one way that land and land-based kin ties can affect fertility in the Middle East is through the effect on marital stability. This relationship is examined in more detail in the next section, on demographic factors and fertility.

### Demographic Variables

Several social and demographic variables directly affect the fertility of rural women in the Middle East. These include: (a) nuptiality variables, such as age at marriage and patterns of marital dissolution and remarriage; (b) migration patterns and (c) the form of family system in rural areas.

#### 1. Age at Marriage

Age at marriage for women affects fertility through two mechanisms. It has a direct effect on fertility, operating through the length of exposure to the risk of conception. For populations with early age at marriage and low levels of contraceptive utilization, like much of the rural Middle East, the effect of age on marriage on aggregate fertility can be substantial. The other, indirect effect operates through the opportunities delay of marriage provides for young women to be exposed to and experience roles other than strictly familial roles. To the extent that young women, by marrying later, participate in work roles, education, or other activities outside the household, they have the opportunity to learn skills, attitudes and experience that allow them to combine other roles with motherhood and marriage, or to support themselves and their children if necessary (e.g., after divorce or widowhood).

Even in Middle Eastern areas with relatively high ages at marriage, however, a large proportion of young women are withdrawn from education at around age 15; in these areas, increasing girls' education to later ages will have relatively little impact on age at marriage, although in others (Turkey, Tunisia) increased schooling for girls was associated with a rise in age at marriage during the 1960's (Youssef, 1976-77).

Available data show the age at marriage to be generally young throughout the Middle East and North Africa, although the range of variation in the area is substantial. The percent of women age 15-19 who are married (as of about 1960) ranged from as high as three-quarters (74%) in Libya, down to one-third or less in Turkey, and more than one-half in Morocco, Jordan, Tunisia and Iraq (Youssef, 1978). More recent data show general stability in these figures, with declines in the proportion married in several countries, including Morocco and Iran (United Nations, 1977: Table 25). On the average, rural women marry at a younger age than do urban ones (Firdley, 1978), although in some regions the differences are small, with both town and village women marrying at young ages (Maher, 1974).

Men marry at considerably older ages. Recent figures show fewer than 5% married among men 15-19 in most countries of the region, and no country shows more than 10% in this age group married (United Nations, 1977: Table 25). In the area of Morocco studied by Maher, the average discrepancy in age at marriage was greater in the rural area than in the town (Maher, 1974). Life histories of Middle Eastern women often mention marriages to men far older than themselves (Fernes, 1977), although this has been changing in recent years.

In addition, women have traditionally had less education than men, with a large proportion illiterate, especially in rural areas (in the 1968 Egyptian Census, 91% of rural women age 12 and older were illiterate, compared with 44% of urban women [Smock and Youssef, 1977]). Among younger women the level of literacy has increased substantially in recent years and is as high as 64% in Kuwait and 51% in Turkey, ranging downward to 15% in Libya (Youssef, 1976-77). Within countries, figures on school enrollment show lower levels among rural than urban girls, however, so these national figures are generally higher than comparable rates for only the rural population.

All of these factors--young age at marriage, large age gap between husband and wife, and low educational level of women--tend to be associated with dependence of the wife on the husband for transactions outside the household, limited communication between spouses, restricted power of women in decisionmaking, and with other factors that tend to militate against effective fertility control or desires to limit family size (Dixon, 1976).

The young age of women at marriage is effectively supported by a number of social and cultural mechanisms. The socialization of girls is entirely oriented toward preparing them for the role of wife and mother (Simmons, 1974; Youssef, 1978). Traditionally it is only through marriage and childbearing that women can attain a position of respect. Even where non-familial roles are available, they do not exclude the mother/wife role, either for urban or rural women. Girls leave their parental households to enter the household of their husband's family at

marriage; consequently, by adolescence, both the girl and her family are oriented to her departure. For the girl, existing in a status between that of girl and woman, marriage is seen as a way to obtain some freedom and a household of her own (Simmons, 1974).

The girl's family is also under pressure to marry her off as soon as possible. A delay in marriage risks the girl's chastity and reputation, and the family loses prestige if their daughter is not sought for marriage at a young age (Youssef, 1978; Maher, 1974). Additionally, the girl is an economic burden to her family, with little hope of future return on their investment in her since she will go to her husband's family on marriage.

The combination of pressures on both the girl and the family are powerful supports to the pattern of early marriage and major barriers to efforts to encourage greater delay of marriage. Both point to potential intervention points, seeking to change the balance of rewards and costs to both family and daughter in the marriage process.

At the same time, while delay of women's entry into marriage provides the potential for women to gain experience that may provide them some power and independence in the household, this effect will not occur automatically, in the absence of opportunities to make effective use of the time gained. Fox (1978) in a recent study of the relationship between age at marriage and women's role in Turkey, concluded that later age at marriage did not necessarily result in more modern or independent roles for village women, and concludes that a major reason is that the village environment allows few opportunities for women to develop new

skills or attitudes that can be translated into independence within the marriage. Thus, opportunities for work experience, education, or other forms of development appear to be critical to this kind of change.

This issue is discussed at more length in relation to specific types of rural development intervention. It is important to emphasize here that the effect of age at marriage on fertility is not simple or automatic. Raising the age at marriage has a direct, but usually small, effect on aggregate fertility through shortening the duration of exposure (although even this is limited because of the subfecundity of women who marry at very young ages for the first few years of marriage). The larger effect operates through a complex set of social psychological, economic, and cultural variables, including the woman's influence in couple decisionmaking on family size and contraceptive use, and the roles available to her other than or in addition to motherhood.

## 2. Divorce and Remarriage

Divorce rates are high in the Middle East (as in other Muslim countries), but divorce has carried relatively little social stigma, and most divorced women are young and remarry quickly (Smock and Youssef, 1977; Khalifa, 1973; Maher, 1974, 1978). The proportion currently divorced is correspondingly low, on the order of 2-4% (United Nations, 1977). Data are not available by country on the numbers of persons who have experienced divorce. However, the high rates of divorce reported suggest that the proportion is substantial, and scattered evidence from small-scale studies supports this. Thus, Maher found that 50% of the marriages made by inhabitants of the Moroccan village she studied had

ended in divorce (1978:110). Her data also indicate that divorce is higher in the village setting than among the employed urban class, with migrants (most of whom are rural in origin) having intermediate levels of divorce. In that village, divorce had been particularly common in the early years of marriage and when the couple have few or no children (Maher, 1974). These two factors facilitate remarriage and help explain the very small proportion reported as currently divorced in censuses and surveys.

Widows constitute a significant proportion of the population of women at older ages (in the Egyptian Census of 1966, 16% of women 40-49 and 38% of women 50-59 were reported as widows [Khalifa, 1973:30]). Widows are less likely to remarry than divorced women, for several reasons (Smock and Youssef, 1977; Buvinic, Youssef and Von Elm, 1978). On average they are older than divorced women. By virtue of age and child-bearing, many have achieved a position of respect within the family; by contrast, a divorced kinswoman is a worry to the family until she marries again. Even if they are young, widows are less likely to be sought as marriage partners than are divorced or never-married women, because they are regarded as "bad luck." Furthermore, sons and other male kin traditionally are responsible for the support of widowed women for their lifetimes (Smock and Youssef, 1977). Even though this responsibility may be beginning to erode under current economic pressures, the position of widows continues to be relatively more secure than that of divorced women. Despite their numbers, however, the demographic and economic importance of widows for change appears limited. Many of them are past

childbearing age and even the young ones are less likely to remarry and resume childbearing than are divorced and never-married women. And, because of the obligation for male kin to support them and the older age of many widows, they appear to be the group least likely to enter the labor force, either by choice or necessity.

In order to understand the dynamics of the divorce and remarriage process and their implications for fertility, it is necessary to examine several aspects of the role of Middle Eastern women and their relationship to their kin group.

Women's status as "protected person" means that, with few exceptions, women are economically dependent on their husbands or their male kin; because of their exclusion from the public sphere, even propertied women need to have a man to serve as manager and a liaison with the public world (Maher, 1974).

Traditionally, male kin have continuing responsibility for women, and the woman always has the right to return to her parental family after divorce (which is usually initiated by husbands) (Youssef, 1978). In at least some areas (e.g., the more tribally organized area of Morocco studied by Maher), rural couples may have little investment in their marriage during the early years of marriage, and conjugal bonds are weak while the ties to the kin group are strong (Maher, 1974). Other groups have different constraints. Thus, large landowning families, in which property transferred to the woman at marriage is kept by the woman and her family after divorce, have stronger incentives to support the marriage (Pastner, 1978); and salaried townsmen may in effect "buy out" a family's

interest in one of its daughters through the transfer of goods at marriage (Maher, 1974).

The status of divorced women, although lower than that of married ones, is not low, and if the woman is young, submissive, and attractive, the family generally succeeds in marrying her off again quickly. Both family and woman have strong incentives for rapid remarriage: the family is responsible both for supporting and supervising the woman; and the woman, returned to a status within the family that is similar to that of an adolescent girl, has an interest in attaining again the relatively freer status of the married woman (Smock and Youssef, 1977).

The negative impact of divorce on fertility is relatively low for both demographic and socio-cultural reasons. First, because remarriage is high and occurs after a relatively short interval, the reproductive time lost through divorce is less than it would otherwise be.

Second, several social mechanisms further reduce the fertility impact of divorce and remarriage. Under Islamic family law (White, 1978; Smock and Youssef, 1977) fathers have the right to the children of the marriage, at an age specified by the school of law applying in the particular country. Until that time, the law assigns guardianship responsibility to grandparents (either paternal or maternal, depending on the law), and thus the divorced woman has relatively little responsibility for the children's support or care (Youssef, 1978). In practice, as well, grandparents or other kin take responsibility for the children (Youssef, 1978; Maher, 1974). Traditionally, women do not take their children into a new marriage; if children are under age or are not claimed by

their father, they will remain with grandparents or other kin, and the woman is, in effect, childless upon entry into the new marriage. The consequences for fertility are complex and at least the potential impact is substantial. The lack of children upon entry into a second or higher order marriage facilitates continuing reproduction by the woman, through several mechanisms: the fact that the new husband does not have to take responsibility for her children probably speeds women's remarriages; and, once in the marriage, the absence of children of the prior marriage in the household means that there are few or no costs of those children to reduce fertility in the second marriage. And, insofar as children are an economic asset, the lack of children from the prior marriage means there is a positive incentive to further childbearing. Since, in practice, men do not have to take custody or responsibility for their children, the husband's prior marriage and childbearing also have less negative effect on fertility than they would otherwise have.

These conditions combine to reduce the potential negative effect of divorce on women's lifetime fertility and on aggregate fertility levels in areas characterized by high rates of marital dissolution.

Several changes appear now to be threatening the position of divorced women and suggest the likelihood of greater change in coming years. In the past, women in the Middle East have had a kind of "bargain" in which they were assured lifetime economic protection and freed from economic necessity to support themselves. In exchange, they lost independence and the opportunity for participation in the public domain. Whatever the negative social and psychological effects might have been,

the assurance of economic support and protection was an important factor in women's lives. Recent data suggest that this protection is breaking down, under the pressure of other economic and social changes in the rural Middle East.

Davis (1978:417) notes that one reason for Moroccan village women to work is divorce or repudiation by the husband, combined with the unwillingness or inability of her family to provide alternative support. Youssef (1978:82-83) reports that data on women workers show a higher proportion in the labor force among divorced women than among widowed or single women, suggesting that divorced women are not receiving the same kind of support as are other women. She comments, "Whatever the explanation is, it is important to note that the labor force behavior of the divorcee may be the first indication we have of the incipient disintegration of traditional family obligations," as the result of conflict between the traditional value of family economic support throughout the woman's lifetime and greater economic strains on families (Youssef, 1978:83).

Maher (1978) gives further insight into the change in the position of divorced wives. She notes that men appear to be less likely now than in the past to claim their children after divorce, instead leaving the children and the burden of support on women and their kin (1978:115). Although some of these women and children can find support from their wealthier relatives, Maher also notes the economic hardship increasingly suffered by divorced women. Thus, divorced and widowed women may be forced to take seasonal factory work in cities out of extreme economic need. This kind of work is highly stigmatizing, and the fact that women

take it both reflects and contributes to the social isolation of the women and their children (Maher, 1978).

The effects of the loss of family economic support on fertility may operate through several mechanisms. First, without family support and supervision, women are likely to remarry more slowly; and the stigmatizing effects of employment that removes women from the family's protection and brings them into unsupervised contact with men may largely destroy their chances of remarrying. Traditionally, the Middle East has had severe sanctions against non-marital childbearing and, even if these are weaker for stigmatized women, their fertility is likely to be lower than that of women in stable unions.

Second, this trend may be the start of a larger trend, in which single and widowed women are also less secure in the expectation of family support. One possible result is that, out of necessity, women will have to seek education and work experience, in order to have some ability to support themselves and their children if they are left widowed or divorced, or if they fail to marry at very young ages. Aswad (1978) notes that daughters of some land-owning families in Turkey have recently begun to work in the cotton harvest, which they had not done in the past. The apparent reason is that young men of similar status are sent off for education and end up marrying educated urban girls, so that girls of well-off families (who are not allowed to marry down socially) are in danger of not marrying or marrying at late ages, and so seek paid employment to compensate for the likely loss of bridewealth.

Although drastic change seems unlikely in the very near future, the possibility of greater economic independence for women resulting from necessity appears to be growing. These and some related issues are discussed below, relative to migration and family structure.

### 3. Migration Patterns

Migration patterns are discussed in detail in another state-of-the-art paper, and will not be examined in such detail here. In this section we focus specifically on the issue of the effect of migration of rural women's roles and fertility in the Middle East.

Many rural areas of the Middle East have experienced rapid population growth, combined with slow economic growth and the lack of employment opportunities that provide alternatives to agricultural employment. Rural to urban migration has been one important consequence. Much of this has been male migration, on either a short-term or long-term basis, and this has important consequences for the economic and other roles of women.

In addition, patterns of migration among countries of the Middle East contribute further to the loss of male manpower from the rural areas of some countries and to the burden on rural women. Especially since 1973, the capital-rich Arab countries have imported very large numbers of workers for the construction of major development projects (Birks and Sinclair, 1979). Although many of the Arab migrants for employment have been urban in origin and/or from the modern sector of the economy, the impact on rural areas has been substantial in some countries. Thus, in Jordan, it appears that labor has left the rural

areas, either to go directly to other countries or to take up the opportunities in urban Jordan that are created by the migration of urban workers for employment outside Jordan (Birks and Sinclair, 1979). In Oman and Yemen, a very large proportion of the rural male population has migrated for employment abroad: in a sample survey of rural Oman, it was found that three quarters (74%) of males aged 14-40 were away from home, and 88% of males 15 and over had spent at least half a year working away from home at some time; in Yemen, it was estimated that, in 1975, one-third of all male workers were abroad, and most men have migrated for employment at some time (Birks and Sinclair, 1979).

Much of the migration is by men unaccompanied by families, and much is relatively short term in nature. Traditional migration patterns include seasonal agricultural migration, and much of the contract migration is for a limited period (e.g., two years). Thus, the great majority of male migrants from the rural areas are likely to return after some time away (and others who become permanent migrants will be joined by their families in their new location). In the meantime, many women are left as de facto household heads, for a shorter or longer period.

The social, economic and demographic impact of these migration patterns cannot be fully assessed, both because data are unavailable, and because much of the migration is relatively recent in its development. However, one can make some hypotheses about the potential impact.

Households headed by women have been uncommon in the traditional Middle East, and their existence conflicts with traditional values and

sex role expectations. In the absence of men, women left behind are increasingly forced to take on the work of men as well as their own, including both agricultural tasks previously performed by men and such activities as going to market that are more publicly visible and, in many places, previously were forbidden (Maher, 1978:110; Buvinic, Youssef, and Von Elm, 1978). In addition to engaging women in activities in the public domain, the out-migration of men increases the already-heavy work burden of rural women, without either relieving women of other work or providing assistance in the work, other than the assistance they can get from children or kin.

Birks and Sinclair (1979) report that, in Oman, the male seasonal migrants have increasingly taken the attitude that, when they are home in rural Oman, they are on holiday, and do not participate in farm work; their data suggest that, as male temporary migrants increasingly obtain higher-status and less arduous jobs outside agriculture, they are less willing to return to agricultural labor, leaving this to women instead.

One possible impact of the increasing visibility of women's agricultural work and their greater independence and responsibility when their husbands are away, involves women's own self-image and acknowledgment of their role in economic production. In the past, the low reported levels of women's economic participation have reflected women's own failure or unwillingness to acknowledge their productive role; thus women as well as men report that they do not work, despite clear evidence of their important role in agriculture. As women become more extensively involved, particularly if this involves participation in such public

activities as purchase or sale of major agricultural products, both women and men may increasingly have to recognize and acknowledge the contribution women make to production. Similarly, women who have taken increasing amounts of independent responsibility for the household and its support while men were away may be less willing to return to the traditional, subordinated role of women, in such areas as family decision making as well as economic production.

Male outmigration from rural areas may operate on fertility through several mechanisms. First, depending on the migration pattern, fertility may be directly reduced through reduced exposure to the risk of pregnancy. Second, the increased need for women to support their family seems likely to increase both the burden represented by children and the value they provide through helping in household and farm work.

In the long run, a major effect may operate through the greater independence of women and their greater participation in activities and responsibilities outside the domestic sphere. If this kind of change comes about, its effects will be felt in a number of areas. A specific fertility effect may be realized through competition between fertility and other roles of women or through costs of children rising faster than benefits. Whether this occurs will depend on a number of other factors, including the degree to which women continue to participate and are able to support their families through such activities as cottage industry and agriculture, which do not generally compete with familial roles and thus do not exert downward pressure on fertility.

Out-migration of rural men also appears to be a factor in the worsening position of divorced women in rural areas. In the absence of working male kin, it is difficult for the family to provide support and protection to divorced kinswomen and their children. Male migration, combined with such factors as rapid inflation and rural under-employment, makes the support of divorced kinswomen increasingly burdensome for families, and has the potential for undermining the tradition of support of female kin, as described in the preceding section.

The Middle Eastern tradition of female seclusion and exclusion from paid employment that involves unsupervised contact with males means that relatively few Middle Eastern women migrate to the towns and cities, except as members of family groups. Those few women who do migrate to the cities are likely to be from marginal social groups, particularly from the poor and divorced, who move out of need, and may move after failing to contract a new marriage within a relatively short time (Buvinic, Youssef, and Von Elm, 1978). In the urban setting, their position continues to be marginal, and they may have to resort to prostitution as well as factory work or other low-valued labor (Cosar, 1978; Maher, 1978).

The economic and demographic implications of female rural to urban migration can be examined briefly. First, although few data are available, the number of women who migrate to urban areas without their kin group appears to be small, unlike the pattern in Latin America. Second, since the independent female migrants tend to be divorced and are probably less likely to succeed in remarrying in the city than they

would in the village, their fertility is likely to be relatively low. (If as Buvinic, et al. suggest, these are women who left for the city because they had failed to remarry in the village, their fertility would probably be reduced in any case, and the migration simply transfers that low fertility to the city.) Third, these women appear to be an important group for training and work programs that would help keep them from having to move to the cities, and thus need to be considered in social and economic planning activities.

Women who move to towns or cities with their husbands or who marry a townsman are unlikely to have their fertility reduced below the level they would experience if they remained rural in residence. These women typically experience increased seclusion and isolation and a reduction in productive activities (Maher, 1974; Fernea, 1977), and thus are not likely to reduce their childbearing. If improved living conditions and medical care reduce infant and child mortality, their completed family size may, if anything, be higher in the urban setting than it would have been had they remained in the village.

Thus, at both the aggregate and individual level, the relatively small and selective migration of Middle Eastern women from the countryside to cities appears unlikely to have a major demographic impact, either on the rural or urban areas. Although the volume of such migration may increase, if the number of divorced women without kin support increases and if there continue to be few opportunities in the villages, the social and economic problems involved appear likely to continue to outweigh any demographic impact.

#### 4. Family Structure

The traditional Middle Eastern ideal is the patrilineal, extended, co-resident, multi-generational family. In some cases, such as the families of large landowners, this may be achieved, since the family is an important economic and political unit with substantial resources and commitments. In the past, in stable villages and for small-to-moderate-landowners, there appears to have been some degree of co-residence, often with the sons of the family living in a family compound area (Simmons, 1974). In poor rural areas, the family and residence unit has probably always been more nuclear in structure, as has been the case for the poor and rural population of much of the world (Goode, 1963).

In these settings, particularly when the young couple live with or close to the husband's parents or brothers, the young wife needs to have a child (preferably a son) in order to establish her position within the household (Simmons, 1974; Stirling, 1965). The need to bear a first child quickly may be somewhat less for wives who do not reside with or near their mothers-in-law and other kin. However, the pressure is still great, since motherhood is necessary to assure the woman's status and provide for her future, and childlessness is a reason for divorce or for the husband's taking another wife.

Polygamy is another aspect of family structure in the Middle East, and needs to be discussed in this context. Under traditional Islamic law, men were allowed up to four wives, but only if they could ensure equal treatment of all wives. In practice, this meant that polygamy

was largely restricted to older and wealthier men, and the level is generally 10% or less (White, 1978). In most areas of the contemporary Middle East, polygamy appears to be declining (in several countries, including Tunisia and Turkey, it is legally prohibited). The net effect of polygamy on fertility appears generally to have been small, with few households being polygamous and the fertility of wives in polygamy being lower than that of wives in monogamous unions.

#### Summary and Conclusion

A number of aspects of social structure and culture in the Middle East function to support high fertility, and many of these are directly linked to female seclusion. Thus early age at marriage is motivated by the need to ensure that adolescent daughters are quickly and safely married, and rapid and nearly universal remarriage after divorce serves to return the woman to the safe married status as soon as possible. The incentives are several: family prestige, and the reduction of the economic burden of caring for marriageable daughters, on the side of the family; socialization for familial roles and the adult status they confer, for daughters. The effects of these demographic factors on fertility are both direct (increasing exposure), and indirect (through providing no valued alternatives to these roles).

Social and economic change in recent years has important implications for rural women's roles. High levels of male out-migration leave larger numbers of women with the responsibility for female-headed households, and makes the support of divorced kinswomen more difficult for families. Both are likely to increase women's participation in previously-forbidden

public roles in family agriculture, paid employment, marketing, and so on. In the long run, they may affect women's roles and fertility by increasing women's participation in activities outside the household, including ones that provide alternatives to high fertility or compete with it, although the net economic impact will depend on what other social, economic, and cultural changes occur in the rural areas and in the societies as a whole.

### Cultural Factors

Cultural factors relating to women's roles and fertility in the rural Middle East include Islamic law and tradition, and attitudes and values in a number of areas: motherhood; seclusion and female roles; son preference; and male dominance.

Islamic law has important effects on women's status, through such means as women's inequality in inheritance, the ease with which husbands can obtain divorces, polygamy, and so on (Goode, 1966; Tessler, 1978; White, 1978). In the Middle East, major reform movements have sought to address questions of women's status and roles through the law, and reform in the legal status of women has been found to be associated with higher participation of women in education and employment (White, 1978). In both Turkey (Cosar, 1978) and Tunisia (Tessler, 1978) reform governments have secularized the law pertaining to family and personal status, seeking to improve the position of women by removing inequities such as the freedom for husbands to initiate divorce or repudiation and the severe restrictions on wives' ability to initiate divorce. More recently, events in Iran represent one attempt to return to elements of an older Islamic

tradition in a society in which substantial change had been experienced in the roles and opportunities of elite urban women.

At the same time, although improvement in women's position in the society is associated with reform and codification of legal codes relating to women and family, women's actual rights are often less than those implied in the law. Thus, for instance, although the law specifies women's inheritance rights, few rural women inherit in accord with the law, and few seek to fight for their inheritance, since to do so would imperil their support from their kin group (Maher, 1974, 1978; Pastner, 1978); furthermore, even though women have rights in property, their social and economic status means that these rights must usually be exercised through male kinsmen and husbands.

In this section we will discuss the major cultural values that bear on women's roles and fertility, and examine evidence about potential sources of change.

#### 1. Motherhood, Seclusion, and Children

Middle Eastern culture, through the socialization of children, structural arrangements, law and custom, and the system of social sanctions for conformity to cultural role expectations, provides strong support to a traditional conception of women's roles that is highly pronatalist. Motherhood is the central and highly valued role for adult women; alternative roles are few, their social value is low, and they typically do not compete with the mother/wife role. The exclusion of women from most extrafamilial roles and their protected status within the family and household uphold cultural values of seclusion, and

maintain the acceptance of the secluded status, as valued in itself or at least preferable to the main alternatives. These and related points have been discussed above, in relation to women's economic roles and demographic conditions.

Sons are particularly valued; daughters confer less prestige on the family and, because they will leave the household at marriage, they contribute less to the future security of their mothers. Daughters are not without value however, and available evidence on infant mortality does not show life-threatening disregard of female children. Daughters are important for the help they give their mothers and other female kin in the many domestic tasks that women do, and in some areas girls too young for seclusion may help their mothers by running errands outside the house, carrying water, or doing other tasks that require exposure to public view.

Through their adult sons, women gain security and power. This is especially true of widows, who can live in their sons' households. The power of the mother-in-law is legendary, and young wives must seek to adapt to a household dominated by this figure; having a child of her own is important to the young wife, in part because it confers the status and power she needs to secure her place in the household and to reduce the demands her husband's mother can place on her.

Male dominance is accepted as a value, by both men and women in the traditional Middle East. This is not to say, however, that women are uniformly without influence or without important social and economic roles. Particularly in landowning families and in villages, women play

important roles in the planning and management of large-scale agricultural production and animal husbandry. In rural areas, where kinship and relationships of property are interlinked, women play an important mediating role among kin groups (Maher, 1974). And, in most places, even though marriages may be formally arranged by senior male members of the household, the actual planning and negotiating is done by women (Aswad, 1978). On the whole, however, power and influence are available mainly to older women, through their roles as wife and mother, and in deference to their age and experience. Thus, motherhood is the main avenue to respect and influence, in the long term as well as the short term, and women's positions of influence do not compete with fertility.

In this context, an important question can be raised about the influence of women and its cultural supports in a period of social and economic change. Village women in the traditional Middle East have often had substantial influence and major economic roles, as described above. They are less secluded in the village than in the town, and their kinship connections and visiting activities give them access to information as well as to avenues of influence and negotiation (Aswad, 1978).

We can hypothesize that many of the forms of change associated with agricultural development may actually weaken the position of influential village women. The reasoning can be suggested briefly, below. Evidence is not available to test this hypothesis, but it is proposed as one that is important in the study of the impact of change in the rural Middle East on the position of women.

On the whole, although village women may have considerable influence, dealings with others outside the village have to be mediated through men, because of the value placed on the forms of female seclusion. In a village, and in a static or slowly changing society, this is not likely to be a disadvantage. Women know the politics and economics of the system, and can operate effectively within the framework of the value system to achieve the ends they and their families seek. In a situation of greater change, however, their position and power may be eroded because new information and new understandings are necessary in order to understand the changing conditions and to work within the new conditions and understandings. It is here that women appear to be vulnerable, since new information tends to be obtained through the activities and reporting of male intermediaries. Such information may be biased, inaccurate, out of date, or otherwise inadequate, and women may find their position eroded by the fact that the rules of seclusion prevent traditional women from obtaining more direct access to the information they need in a period of change. High female illiteracy may also contribute, since few women can obtain information through reading; although the radio may help, it may also present insufficient or edited information.

If this is the case, planning needs to take into account both the importance of women's roles in the economy and in decision making, and the fact that much of their participation in the larger society is mediated through channels that maintain the forms of female exclusion from the public domain. It may be important, for instance, to seek means to ensure that women receive the information they need to continue their

economic and political participation, and to ensure that their interests and needs are addressed through means that preserve the forms of female seclusion.

At the same time that traditional forms and values are maintained, there is evidence of social and economic change and possibly of resulting changes in expectations and values. Some of the main features of the changing economic conditions have been discussed in previous sections. These include: inflation; male rural-to-urban migration and international migration; and pressure on the limited land in many rural areas. One result of these economic pressures is that the potential income producing activities of women gain in value. For husband-wife families, the wife's income can improve the family's economic position, and help in the acquisition of land, consumer goods, or other things of value. There is some evidence, although fragmentary, that at least younger men are more favorable to having their wives contribute to the family income (USAID, 1978); this contrasts with the traditional view, in which women's paid employment was only undertaken by the poorest families, and women's exclusion from employment was an indicator of family status. This kind of change at the individual and family level also receives support from the national level in some countries of the Middle East. In countries such as Jordan that export male labor, women provide a major source of additional labor other than imported labor (USAID, 1978). As matters of government policy, some countries of the Middle East appear increasingly committed to increasing female labor force participation rates, for economic as well as other reasons. Although

much of this increased demand will be for educated, urban workers, the effect is likely to be felt in rural areas as well, through elite women serving as role models, and through changing public attitudes resulting from their participation.

More directly, worsening economic conditions in the rural areas and male out-migration threaten the economic security that has traditionally been provided Middle Eastern women by the protection of their male kin. As discussed in the previous section, there is evidence of a breakdown in kin group economic support for divorced women, pushing them into the labor force. Similarly, somewhat more single women are seeking paid employment (e.g., as seasonal agricultural workers in the area near their homes) in response to local marriage market conditions that lengthen the period until they marry, during which time they were traditionally wholly dependent upon family support.

The experience of young women provides at least some with labor force experience prior to marriage. Although it seems unlikely that many new agricultural skills are learned (since girls have already acquired them in the family), the experience of work and of receiving income for work may predispose them to work again later in life. The experience of divorced women is also important. Many Middle Eastern women experience divorce and, even for those who do not, divorce is an ever-present threat to the security provided by marriage. As women become aware, through observing the experience of friends and relatives, that family support after divorce is less sure than it had been in the past, they may have to consider alternative means of providing for

themselves and their children. If this happens, women may be more receptive to work and training opportunities that provide them with the ability to support themselves if and when they need to do so.

Some evidence relating to these concerns on the part of women is presented by Maher (1978). On the basis of her study of Moroccan women of the Middle Atlas region and earlier studies, she states:

If emigration is added to the high rate of divorce in this milieu and the tendency for husbands to be ten to thirty years older than their wives, even the most submissive woman must see that male support is unreliable and that it is essential to know how to stand on her own two feet. One woman expresses this view with great clarity: "If ever he (husband) dies, I'll be in a fine pickle. I'll have to see to everything though I have always been kept blindfolded, blinded. Nobody has ever let me see the world, but I want to see how things are, go with him to sell a cow, watch how he goes about it and learn in my turn to deal with life."

At the same time, any attempt to create training and employment programs needs to be sensitive to the fact that cultural values change slowly and unevenly, especially when they involve such fundamental societal concerns as the status of women. Insofar as possible, it is important that opportunities provided be congruent with traditional female roles and with the constraints under which women's economic participation takes place. It is particularly important that training or work not be of such a nature as to threaten women's chances for re-marriage. This is fundamental to the acceptance of change by women, for whom marriage and motherhood are the central and most highly valued roles in the society.

### Social-Psychological Factors

This section continues the discussion of attitudes and values that affect women's roles and fertility in the rural Middle East. The preceding discussion dealt with attitudes and values that are closely linked to fundamental cultural values. Here we examine somewhat more individual and variable factors, involving aspirations, role expectations, and the value of children.

Social and economic change in the rural Middle East appears to be affecting a range of social-psychological attitudes, particularly in the areas of value of children and aspirations for children.

In many rural areas, young mothers represent the first generation of women to have had any exposure to education, and this may affect their aspirations for their sons' and daughters' education and their achievement in later life. Simmons (1974) describes the situation in a Tunisian village. A number of the young mothers there had received some education, but had only been allowed by their families to complete the first few years of primary education and were forbidden to go on for education beyond that level. Although they, and their less-educated mothers had acquiesced in this decision, a number reported that they wanted their own children to get more education and to improve their opportunities in life through education. This kind of attitude, put in terms of economists' conceptualization of the family, is conducive to a shift in family investment from child quantity to child quality, with more investment in a smaller number of children. This kind of aspiration, then, is favorable to fertility reduction.

School children, in turn, may have an influence on their mothers' roles and expectations. Both boys and girls in school are exposed to new values and expectations, and bring these home to their mothers. Thus the influence may be a cumulative one: mothers favor greater education for children because of their aspirations for children; and children, when they attend school, bring home attitudes and information that may reinforce changing aspirations and values. The role of children as a source of new information and expectations is especially important in light of the conditions discussed earlier, in which much of women's contacts with the outside world are mediated through others. Children, in constant interaction with their mothers and other female kin, are a potentially powerful change agent under these conditions.

At the same time that women's aspirations for children are rising, potentially resulting in a shift in child investment from quantity to quality, several other factors reinforce this shift. Important among these are improved infant and child survival probabilities, and increasing economic costs of children. These are treated in more detail in other state-of-the-art papers, and will be discussed only briefly here, focusing on their implications for female roles and for fertility.

Simmons (1974) reports on a Tunisian village in which members of an extended family group lived in small apartment-like units organized around a central compound. Sons, their wives, and their young children all live here. In this setting, he reports that there is a widespread feeling that there are too many children: improved child survival has increased the effective family size over that experienced in childhood

by today's adults; in the compound setting, children are a source of noise, disruption, and conflict among family units. For men as well as women, the presence of many children was increasingly perceived as a burden, both on financial and on other resources, and several said they intended to limit family size for this reason.

Maher (1973) comments that children are less valuable to their fathers now than in the past, particularly under conditions of high male migration which means children are more costly and less economically valuable at young ages. Furthermore, as economic conditions have worsened in the area of Morocco she studied, the larger kin group appears less willing to carry the costs of fostering children of the family, and more of the costs of children are being transferred to the mothers and fathers of the children.

These shifts in the distribution of the costs of children, combined with improved child survival and rising aspirations for children, appear to underly attitudes increasingly favorable to the limitation of family size. The limitation of family size may in turn facilitate women's participation in paid employment or other extrafamilial activities, by reducing the period of time during which women have responsibility for infants and small children.

In addition to attitudes and values concerning children and family, attitudes about women's roles and opportunities for women are important to examine. One study relevant to this issue surveyed attitudes about women's emancipation in Tunisia in 1967 and 1973 (Tessler, 1978). The earlier date represents a period in which there was a heavy commitment

on the part of the government to social change, including improvement in the status of women; at the later date, there was substantially less governmental commitment to planned change, but unplanned change had continued. The survey findings showed that support for women's emancipation declined among both men and women, both in Tunis and in the towns. The decline in support was greatest among men in the smaller towns, and the 1973 level of support was lowest among this group. This appears to reflect both the conservatism of this social milieu and the marginal economic status of many poorer men, for whom improved opportunities for women are a threat to their economic position and status. One important implication of these findings is that the attitudes of rural and small town men to opportunities for women maybe a significant barrier to planned change, particularly in the absence of strong governmental support for change. Governmental commitment thus appears to be a significant factor in establishing the climate of receptivity to change in the status of rural women. Another important factor noted in this study was that women are more united in their support of women's emancipation than in 1967, with smaller differences among women at different educational levels (although overall support dropped among women over the period studied); and that, because of sex differences in the amount of decline in support, the disagreement between men and women is greater than in the past. This holds the potential both for greater coordination of efforts by women of different backgrounds, and for greater conflict between men and women. Both have important implications for the planning of development strategies for both rural and urban areas.

### Power and Political Participation

Women's power within the domestic unit and her participation in political activity are structured by the values and forms of female seclusion.

Women's formal political participation is low, despite legislation providing for female emancipation. Thus, in Egypt, men are required by law to vote, but women are not; and in many rural villages women were not permitted to join the Arab Socialist Union (the single political party) and, because this is a prerequisite for voter registration, were excluded from voting (Smock and Youssef, 1977: 67-68).

More informally, women--particularly older women and those of powerful and prestigious families--exercise considerable power within the community (Aswad, 1973; Maher, 1974). Aswad (1973) describes the position of women of elite families in Turkey, and the institution of the kapul, the daily round of systematic visiting engaged in by these women:

Women in these families have certain rights over land and other property, and they have influence over their male kinsmen, including their sons. They are active in arranging marriages, a political and economic function, and they may even be responsible for influencing their husbands to place certain men in political positions. They have public prestige and respect. They are also recognized as negotiators in factional disputes involving property, marriages, and other problems within and among the families. They serve in the informal establishment of the patron-client relations of their male kinsmen. Thus they have power and the society accords them high status; their actions and style of behavior reflect their position . . . To some extent the kapul is an example of institutionalized gossiping that takes on a public function. . . The nature of information gathered and exchanged in these meetings. . .

(includes) . . . information of an economic nature, ranging from the agrarian conditions, prices, and marketing situations in the villages under their control, to the prices of latest Paris fashions. . . (and) information of a political and social nature regarding the villages.

However, as discussed earlier, this structure of influence may be vulnerable in a period of rapid social change, in which older understandings and responses may be unable to adapt to change without effective information flow. And they may be particularly vulnerable to disruption by rural development interventions that are unaware of or insensitive to the forms and the content of power and influence in the rural Middle East.

#### Family Planning

As described in the preceding sections, traditional values, social structure, women's roles, and economic and demographic conditions in the Middle East have all had significant pronatalist effects. High infant and child mortality meant that having large numbers of children was an important form of insurance against being left without children. Children, especially sons, were valued in themselves, for their contribution to family prestige, and for their economic role in agricultural production and in providing support for their parents in old age. Widowed women need adult sons to provide them with a home, support, and respect. Large families have been valued, especially if they contain many sons. And the fact that children could help in agriculture and domestic chores, and that they could be left with grandparents or other kin in case of need, increased their value and decreased the costs to the parents of the children. Particularly after divorce, women were traditionally

freed from responsibility for their children, who they would not take into remarriage, so prior childbearing provided little disincentive to high fertility in remarriage.

More recently, with improved child survival, rising aspirations for children's education and achievement, and economic conditions that threaten the breakdown of the kin group's ability to support divorced women and their children, there is some evidence of growing interest in family limitation and in the means of family planning, in rural areas as well as in the cities.

Thus Simmons (1974) after a study of Tunisian village, reports:

. . . There is widespread familiarity with the concept of birth control. Almost every woman under forty with whom I spoke expressed a desire to limit the size of her family. All, even the men and the midwives, agreed unequivocally that there are too many children in Tazoghrene.

Younger women, in particular, are interested in limiting family size, though reluctant to go to a hospital or government clinic for the specific purpose of seeking information and assistance in family planning (Simmons, 1974).

Prothro and Diab (1974), in a study of the family in Lebanon, also report that younger women are much more favorable to smaller family sizes than are older women. Although rural women want larger families than do urban ones, even in rural areas women of the younger generation want smaller families than do women of the preceding generation.

Most countries of the Middle East have government population policies and family planning programs, some of which are more than ten years old (Youssef, 1978; Mauldin and Berelson, 1978). Youssef (1978) reports

that data on receptiveness to family planning practices and utilization of abortion (legal only in Tunisia and Iran) show the strength of the desire of both men and women in urban areas to limit family size. Contraceptive utilization has been less in rural areas than urban ones, which is attributed, at least in part, to the lack of accessible family planning programs in rural areas (Nortman, 1977). However, the use by urban dwellers includes use by low-income migrant groups, who are similar in many characteristics to the rural populations and who may also bring information and new attitudes to rural kin through rural-urban networks of communication and exchange. And studies in Egypt and Jordan have found that rural women's knowledge of family planning was not much lower than that of urban women (Rizk, 1977).

These data suggest that, in many rural areas, the basis exists for acceptance of maternal-child health programs or other programs that include a family planning component and that facilitate access to contraception in ways congruent with cultural values concerning women and family. This appears to be particularly true of younger women, who are currently in their main childbearing years, and even of the husbands of an increasing number of young women.

#### THE HYPOTHESES

1. Women's Participation in Subsistence Agriculture is Compatible with High Fertility

Evidence from the Middle East supports this hypothesis. The great majority of rural women are active in subsistence agriculture, typically as unpaid workers in family based production. Children are valuable

for such work, and women can arrange their work schedules so that they can care for young children or have them cared for by older children or other kin.

2. Women's Participation in Cash-Cropping is Compatible with High Fertility

Available evidence for the Middle East does not allow one to distinguish between women's role in the production of cash crops and subsistence crops. However, even if women do participate in growing cash crops, the impact of this participation on economic and familial roles and on fertility is likely to be limited. Traditionally, men have controlled the marketing of crops and women have received no independent income from work on family agricultural production. Consequently, there is unlikely to be any separate effect on fertility directly attributable to the fact of cash-cropping. In general, women's participation in agriculture in the Middle East has been compatible with high fertility.

3. Women's Employment in Off-Farm Industry Would Have a Negative Impact on Fertility

The traditions of seclusion and of family economic support for women have effectively precluded participation in off-farm industry. Only the poorest women have undertaken such work, and only because family support was unavailable. Proposals have been made for the development of forms of off-farm industry congruent with Middle Eastern cultural values and sex-roles, notably Dixon's (1976) proposal for cooperatives for young women. These are discussed in the next section, and their potential effect on fertility is discussed. One intention of

these proposals is to provide women with the resources to postpone marriage and with alternative or supplemental income-producing roles; both appear potentially to have a negative effect on women's fertility.

4. Women's Participation in Home-Based Industry is Compatible with High Fertility

There is some cottage industry in rural areas of the Middle East, typically organized as an adjunct to or extension of women's other domestic roles. This kind of activity has been consistent with high fertility, as would be predicted.

5. Women's Employment in Trading and Commerce Is Not Necessarily Incompatible with High Fertility

This hypothesis remains generally untested in the Middle East, as women are largely excluded from trade, especially in rural areas.

6. Women's Access to Resources Will Decrease Her Desired Family Size

On the whole, women's access to resources external to the domestic unit has been largely mediated through male kinsmen in the Middle East. On the whole, women from wealthy and powerful land-owning families have had high fertility, reflecting the high value placed on motherhood and on large families for all women.

7. Literacy Training Will Lead to Declines in Desired Family Size

Youssef (1978), in an analysis of fertility in the Muslim Middle East, found that the female literacy rate was the measure of women's status most strongly associated with the fertility level.

There is also some evidence that women who have had some exposure to education have higher aspirations for their children's education and

achievement, and seek to reduce family size to provide their children with better opportunities. This is one means through which education, including literacy, appears to contribute to the desire for smaller families among young rural women in the modern Middle East.

8. Non-formal, Vocational Training Will Reduce Desired Family Size If It Strengthens Women's Income-Generating Activities

Under present economic conditions, more women are likely to experience the need to support themselves and their children. These women may need to limit their family size, in order to reduce the burden of child-support they have to carry. For the same reasons of economic need, women appear likely to seek training that will help them learn skills necessary for income-generating work, and non-formal training appears to be a particularly important means for them to learn these skills. Thus, vocational training and reductions in desired family size appear to be linked, but not in the causal order suggested; rather both are interpretable as responses to the worsening of the economic position of divorced women and other female heads of households.

On the basis of evidence for the Middle East, we can suggest several additional hypotheses linking women's roles, rural development and fertility in this region. The first of these--aspirations for children--may be effectively subjected to public policy interventions, such as greater education and return on education. The remaining three concern changes that appear to be occurring in the society, but that are largely outside the scope of direct policy intervention. These are included primarily because they concern changes that appear likely to create new needs and new or larger target groups in need of services and support.

9. Aspirations for Children's Education and Opportunities Reduce Intended Family Size (see also Hypothesis 7, above)

In the woman's role as mother, her aspirations for her children are important determinants of behavior. The shift in child investment, from quantity to quality can be seen as an adaptation to changed circumstances that reflects fundamental values and obligations in the role of the mother in the rural Middle East.

10. Economic Conditions that Weaken the Kin Group's Commitment to Support Non-Married Women (Single, Divorced, Widowed Women) Are Likely to Reduce Fertility

The hypothesized effect operates through two mechanisms: exposure (if unmarried or divorced women, or young widows, are not supported by their families, they are likely to take longer to marry, and if they are in a culture--like the Middle East--in which non-marital reproduction is severely sanctioned, this time is effectively subtracted from their childbearing years); competing roles and options (if women develop new skills and attitudes because of this, these roles may provide alternatives to very high fertility).

11. Economic Changes That Transfer the Cost of Children from the Kin Group to the Mother or to Both Parents Change Women's Roles and Reduce Desired Family Size

In the past, divorced women did not have primary support responsibility for children and did not take them into a remarriage. One result is that women entered remarriage in the childless state, similar in some ways to that of women entering a first marriage. Under these conditions,

both the fact that they did not bear the costs of childrearing and the fact that they did not receive the personal and economic rewards associated with children and the mother role meant that conditions favored high fertility in remarriages. Changing conditions both change these factors and may discourage remarriage (if new husbands are unwilling to bear the costs of the woman's children from a prior marriage), both of which have negative fertility consequences.

#### RURAL DEVELOPMENT STRATEGIES AND PROJECTS

In this section we examine the major AID rural development strategies in relation to the Middle East, focusing on questions of women's roles and fertility.

Much of this discussion is necessarily speculative. The concern with evaluating the socio-economic impact of rural development projects and with integrating women into rural development is relatively new, and projects that incorporate these goals have only recently been developed and introduced into the field. Consequently, there are few specific projects that can be analyzed as examples of the kind of rural development project that is of central interest to population impact analysis. This has been particularly true of projects in the Middle East, and particularly of projects in that region that specifically involve women or directly concern women's roles and activities.

#### Participation of the Rural Poor

Increasingly in recent years, there has been concern for involving the rural poor in the planning of development projects, as well as in the activities of the projects once they are in the field. A frequently-

noted problem has been the bias toward regarding men as the only economically active members of the rural population, and not involving women in the planning process. As a consequence, women's traditional roles in agricultural production are disregarded, and projects and plans favor male agriculturalists and largely exclude women from the benefits of innovation. In particular, new technology and new opportunities for income-producing agriculture favor men over women.

In the Middle East, the situation is further complicated by the restrictions on women's participation in the public domain. These are described above, and will not be repeated here. A fundamental point is that, in traditional Middle Eastern societies, the forms of female seclusion and exclusion from the public domain of power and influence often masked very real (and widely acknowledged) power, especially among high status women and women with special talents and roles (e.g., midwives and religious leaders). These are resources that can effectively be tapped in the planning of rural development projects, but to do so requires considerable sensitivity to the realities that are left unspoken (or are systematically misrepresented to outsiders) in a culture like that of the Middle East. In addition, class differences in rural areas and the power and roles of women of different classes need to be taken into account in planning for women's participation.

To involve rural women in program development will require special mechanisms. In many areas, women's clubs exist, and may be one useful avenue to eliciting women's participation, through means that are acceptable to both women and men in the society. Increasingly, rural develop-

ment planning projects are drawing on resources such as these, but more needs to be done both to use these groups and to recognize and draw upon the informal networks that are important in many areas.

#### Off-farm Employment

Off-farm employment, in non-agricultural activities such as light industry, is hypothesized to reduce fertility by engaging women in economic activities removed from the household that impose inflexible demands and thus induce competition with fertility and other family roles. In the Middle East, both the feasibility of introducing off-farm employment and the effects of such employment, even if successfully introduced, on fertility need careful examination.

Two key factors limit the possibilities for developing off-farm employment opportunities for rural women. The first is female exclusion from open participation in the public sphere and the restrictions on women's involvement in work activities that result in the inability of male kinsmen to supervise and control her movement. The second is one of supply and demand for labor in rural areas.

The issue of seclusion has been discussed at length, and the discussion will not be repeated here. Off-farm employment activities, if they are not to conflict with fundamental cultural values and not to threaten women with unacceptable personal and social risks (notably, the risk that an impaired reputation will endanger her marriageability) need to be thoughtfully and sensitively designed, with consideration for the concerns of a whole range of social audiences: women themselves (especially young unmarried women, divorcees, and married women seeking to increase

family income); their mothers and other female kin; and men, both those of the older generation and younger men. The kind of project suggested by Dixon (1976), discussed below, is an example of this kind of approach.

The issue of supply and demand involves questions both of women's roles and of the potential for incorporation of women into off-farm employment. In areas experiencing male out-migration, women's traditional domestic and agricultural roles have expanded to include agricultural tasks traditionally carried out by men. In the absence of men, young rural wives--who were already heavily burdened by daily productive activities--find themselves even more heavily burdened. In light of the importance of land in the rural economy and of agricultural production for family well-being, the supply of female labor available for off-farm employment may be limited. In other areas, characterized by rural underemployment and the economic marginality of male family heads, other problems may arise. In these areas, efforts to generate employment opportunities for women need also to provide opportunities for men, so that women are not perceived as a threat to the position of male heads of families.

#### Extension of Social Services

Social services include maternal and child health and nutrition services, nonformal education and literacy training, agricultural extension services, vocational education, and so on. In the Middle East, especially in rural areas, key questions involve both the demand for such services, and, once demand is established, the culturally appropriate mechanisms for service delivery.

Women's roles, and changes in the society and their roles, are sources of demands for various kinds of social services. Women's responsibility for children's well-being provides an incentive to seek and utilize health care services that contribute to the health of children. The concern for children's welfare and the facts of increasing child survival and childrearing costs appear to contribute to a willingness to consider family limitation and to utilize contraceptive means to achieve this goal. In the Middle East, as in many other areas, the delivery of family planning services in conjunction with maternal and child health services appears advisable. It draws on women's role obligations and interests as mothers, and avoids the possible stigma involved in going to a clinic for the sole purpose of obtaining contraceptive services.

Available evidence suggests that potential demand for the extension of literacy and educational services is substantial. Exposure to education appears to be a factor contributing to women's rising aspirations for their children, to have more and better chances than their mothers had. For most young rural Middle Eastern women, however, their own education is slight, and these women may be particularly receptive to programs designed to facilitate their attainment of literacy and other educational goals, both for themselves and for the contribution they can make to their children's lives.

Another important source of demand for social services lies in the increasing uncertainty of the lifetime support traditionally provided by the kin group to the woman and her children. Increasingly, women must

face the possibility that they will be unable to rely on kin in times of need, and need to seek ways to provide alternative means of supporting themselves and their children when and if necessary.

The issue of women's perception of greater risk and insecurity in their social and economic position was discussed previously. Relative to the extension of social services, this perception is likely to increase women's receptivity to educational and training services that may help them prepare for paid employment in case of need. It seems likely that women will be receptive to training programs designed to prepare them for employment congruent with the forms and expectations of limited female participation in overtly public activities, and will be interested in opportunities to prepare for traditional women's occupations, such as teacher or nurse (which primarily involve services to other women and largely keep women out of public view in their occupational roles). Although this kind of change may appear small and slow, it has the potential for greater change in coming years, particularly if current economic trends continue in combination with traditional family and marital patterns (particularly high divorce rates). Mothercare training services, which help to train young women in childrearing and other domestic responsibilities, provide one means of introducing other forms of training important for young women in a period of rapid change in both opportunities and obligations, to help them prepare for the kinds of activities they may need to undertake on behalf of themselves and their children in coming years.

### Marketing Systems

In the Middle East, rural women have generally been excluded from the marketing of their product and, in many areas, they are forbidden even to go to the local market as purchasers of routine household goods. In this setting, rural development efforts aimed directly at rapid increases in women's role in marketing are likely to meet strong resistance, and would be further hampered by the fact that many women have little or no marketing experience on which to build new efforts.

There is some evidence of change and some potential for projects with a marketing component. Thus, for instance, male out-migration from many rural areas means women may have to take on some role in market activities. In these areas, for these women, programs that seek to develop their skills and experience in a wide range of production and marketing activities may be effective and be sought by women. In other areas, where female seclusion continues to be more secure, other approaches may be necessary. In these areas, projects that seek to engage women in income-generating activities (e.g., handicrafts, egg production) need to make special efforts to determine the present procedures for marketing, the role women play in marketing, and the mechanisms through which new or increased production could be marketed. Without consideration of marketing problems and strategies, the effects of projects that seek to increase women's income-generating capacity may be severely limited, if marketing is handled solely by men and much of the income potential is diverted in the process. Rural development strategies that increase women's independence, through such means as providing them with

an independent source of income, have the potential for reducing fertility by providing women with alternative roles and responsibilities in addition to childbearing and thus reducing the pressures to have very large numbers of children. Income-producing skills also strengthen women's position by giving them the ability to support themselves after divorce or in other periods when they do not receive kin group support. This may have an additional fertility reducing effect: women's greater independence from dependence on the husband, mother-in-law, and their own kin may relieve them of pressures to conform to kin group desires for large families (especially large numbers of sons); in light of the evidence that older generation men and women desire larger families than do younger ones, greater independence from kin demands may free women to follow their own desires for smaller numbers of children and for greater investment in these children's futures.

In this context, marketing systems take on great importance, since they can facilitate or block younger women's independence and ability to control their own incomes and own lives. Because of this, it is particularly important that rural development projects in the Middle East be concerned with the problem of marketing for and by women, and with the ways that marketing strategies can strengthen the position of young rural women in a changing rural economy.

#### Rural Financial Markets

Many of the same considerations apply to rural financial markets as to marketing systems for women in the rural Middle East. Traditionally women's seclusion and "protected" economic status has largely blocked

access to sources of credit as well as to other resources outside the household and kin group. Although women have legal rights to land, women have rarely been in a position to demand these rights, instead foregoing their claims in exchange for the expectation of lifetime financial support from the kin group. And even wealthier rural women who may own some land in their own right have had to have the formal management of the land and its production carried out by husbands or male kin. (The major exception has been older widowed women, who have greater freedom of movement and greater independence; however, the potential impact of their experience on fertility is small because of their age.)

Better access to banking and credit facilities is necessary for effective projects to increase women's production of income-producing commodities and their marketing of the product. Means for access to credit need to be incorporated into such projects, and are likely to require an approach that is both innovative and culturally sensitive, to avoid meeting massive resistance.

#### Area Development

Area development strategies typically seek to integrate a wide range of projects and services, including such things as support services, increased income-generating activities, and participation of the local population in planning and project implementation.

In the rural Middle East this kind of integrated, area-wide development strategy appears particularly important for changing the roles of rural women in ways that facilitate fertility decline. Seclusion of

women, their exclusion from the public domain, and the whole range of socialization and structural mechanisms that make large families necessary to their position constitute the fundamental conditions of the lives of the majority of women in the rural Middle East.

In order to bring about change in women's roles, or to help women cope with the kinds of changes already underway because of economic and other reasons, rural development interventions need to address a range of problems simultaneously. Production, marketing, training, access to credit and other extrafamilial resources, and other changes require an integrated approach to ensure that change in one area is not rendered ineffective through the continuation of traditional role expectations and activities in other areas.

#### Rural Development Projects: Examples

A variety of rural development projects that concern women, directly or indirectly, have been proposed or are being carried out in the Middle East. These include a number of projects that seek to provide education and training, for children, for out-of-school women (non-formal education), and for women who provide services to other women (e.g., social workers, health care workers, teachers). Others are directed at particular aspects of women's traditional roles. Examples of these include a U.S. AID project in Yemen to develop village water systems and another to improve poultry breeding techniques in the same culture (U.S. AID, 1978: 134-135). Since carrying water and managing poultry are traditionally women's responsibility in this culture, such projects are more productive. The ways in which projects like these will change women's roles

are still to be determined, and, even if they do bring about such change, their demographic impact may be relatively small.

Several other existing or proposed projects are directed at the particular situation of women in the Middle East and at facilitating change in their situation. Thus, for instance, several donor agencies (U.S. AID, IBRD, UNICEF) have projects to build residence halls for rural women to attend institutions of higher education in Afghanistan. The description of the U.S. AID project notes that there is evidence that a large proportion of rural Afghan women who receive training in Kabul return to their home provinces. These projects, then, by providing residence facilities for women who would otherwise not be allowed to attend university because of prohibitions on women's living alone, meet a need typical of Middle Eastern societies; and, based on the expectation that these women will return to rural areas of the country, the project may have a long-term effect on rural women, through the trained women providing services, instruction, and role models. Again, the impact on the roles of rural women and, particularly on their fertility, is likely to be relatively slow and, at least in the short run, to be modest. Over time, however, and in conjunction with a range of other programs and projects, the effect may be substantial.

Dixon (1976) has proposed a kind of project, as part of a larger program of rural development, that is specifically addressed to the roles and needs of women in Muslim societies and others practicing female seclusion. The proposal is, briefly, to establish small-scale, women-only, collectively organized light industry, including residential

quarters for young, single women. This proposal addresses several key features of the situation of women: the provision of residential quarters and the restriction of all employment in the enterprise to women is consistent with the cultural prohibition of unsupervised contact with non-kin men; and the kinds of light industry planned could be based on traditional women's handicrafts, and thus be consistent with sex-role definitions of tasks. At the same time, the objective is to affect the participants in a variety of ways that, taken together, may begin to make significant changes in their life experiences and chances. Thus, by providing economically for daughters, the pressure on parents to ensure that they marry early is reduced, while, at the same time, the girl may gain greater independence and power within the family (through the experience and income), and thus have greater control in decisions about marriage. The enterprise can also provide experience in management skills and mobility opportunities for at least some women. At the same time, by bringing women together outside the household, it can reduce their isolation and dependence, provide opportunities for them to work with other women, allow for exposure to attitudes and values other than those of the household, and facilitate the delivery of health, educational and other services to individual women and groups of women. Taken together, such changes may have several kinds of demographic impact. Thus, for instance, delaying marriage may have the effect of slowing the pace of fertility, while also increasing women's access to skills, information and other resources and thus potentially increasing their independence and their power in couple decision-making. At the

same time, the skills, knowledge, and experience may make it easier for women to risk the loss of security involved in seeking to participate more actively in work, politics or other activities outside the family-- or may provide an alternative form of security through work skills for women who, for whatever reason, are without the economic support and security traditionally expected of the kin group.

### Conclusion

In this section we have examined a number of aspects of the economic and familial roles of rural women in the Middle East and analyzed their relationship to fertility. We have also discussed social and economic change in the area, and their implications for women's roles and fertility. Some specific projects and proposals are also discussed, in relation to the social, economic, and cultural setting.

Relative to the question of the position of rural women in particular, and its relation to their fertility, there are several points that should be stressed in concluding. First, although changes in both values and opportunities have historically been greater in urban areas, and are likely to continue to be so, the pace of change in rural areas appears to be becoming more rapid than it has been in the past. Such economic factors as male out-migration combine with national commitments to rural development and improvement in women's educational status to increase the potential for change now and in coming years. Second, there is reason to expect that rural fertility will continue to be high, since children are valuable for agricultural labor and for old age security, and since the pattern of early and nearly universal marriage

is unlikely to change rapidly. However, an expansion in the need and opportunity for rural women to participate in non-familial roles has the potential for contributing to reduced fertility, through a variety of mechanisms: role incompatibility between familial and other activities; greater exposure to new attitudes and values; the reduction of isolation and dependence within the family; and perhaps through improvement of nutritional status and child survival as well.

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1974

"The employment of women and the reduction of fertility: implications for development." *World Development* 2(2):23-26.

Well-documented theoretical piece suggesting that the employment of women in well-paid jobs outside traditional family roles makes a powerful positive contribution to development. The assumption is that reduced birth rates are imperative for development and that there is a relationship between fertility and employment. The author reviews numerous studies and concludes that the key to the fertility/employment dynamic is the degree to which the separation of work and home is made worthwhile by real economic gain, i.e., that a clear negative relationship exists between fertility and well-paid work outside traditional family roles. She counters arguments that well-paid jobs for women take away from the employment of men by pointing out that: 1) female employment is generally associated with service and support industries that supplement rather than supplant men's employment; and 2) female employment generates consumer demand, which stimulates further employment for both sexes. The author notes that female employment in economically rewarding jobs raises the expectations of both men and women and thus leads to a significantly improved climate for development. (from Rihani, 1973)

Ahmed, Wajih  
1974a

"Constraints and requirements to increase women's participation in the role of women in integrated rural development with emphasis on population problems." UNIDA. Cairo.

Because most of the work that rural men do is drudgery, it is unlikely at this point that women would want to demand equality. However, women covet even the dulllest and most underpaid jobs in many instances which have been classically "women's domain" for fear of being crowded out by unemployed men.

Probable effects of women's participation in non-agricultural employment are: 1) village girls, instead of a burden on parents, will become a new source of outside income, therefore, the impetus to marry at a young age will be reduced; 2) when village women are not under economic pressure to marry, they will take more time and marry for social and personal reasons; 3) this freedom over marriage may lead to greater freedom over reproduction; 4) work may direct creative energies to goals other than motherhood; 5) "education that prepares a women for employment may give her a sense of being able to control her family size."; 6) place of work may be a place for delivery of family planning services; 7) higher education plus employment may lead to a lower fertility.

1974b "The pill and the pickle--thoughts on women's role in rural development and population." Paper presented at Seminar on the Role of Women in Integrated Rural Development with Emphasis on Population Problems. UNFPA. Cairo.

Criticizes population programs with "monomaniac zeal" for promoting birth control above all and rural development schemes that aim at raising cash crop production for the resultant over-specialization "which turns rural people into fossil fuels of international modernism" and keeps women producing male farm laborers. Urges women's participation in non-agricultural employment which he feels will result in lower fertility and population decline, better quality of life for women and a ready locale for dissemination of contraceptive information.

Birdsall, Nancy  
1976 Women and Population Studies. Signs: Journal of Women in Culture and Society 1(3):699-712.

The major point of this essay is that changes in women's status, particularly in terms of their labor force participation, can contribute to fertility reduction but are neither a necessary nor a sufficient condition for such a reduction. The success of policy interventions that improve women's status as a means for reducing their fertility depend on the mediating influence of the parents' interest in the economic utility of children, on the wife's role extensiveness and the nature of her occupation.

Birdsall, Nancy and William P. McGreevey.  
1978 "The second sex in the Third World: is female poverty a development issue?" Paper prepared for the International Center for Research on Women Policy Roundtable, Washington, DC, June.

Essay highlights main findings with regard to four major issues: (1) women and work; (2) women and want; (3) women and household structures; and (4) measurement issues.

Blumberg, Rae Lesser  
1974 Techno-Economic Base, Fertility and the Status of Women. Cairo: FAO-UN Seminar on the Role of Women in Integrated Rural Development. Mimeograph.

Although concentrating on horticultural, agricultural, and industrial economic activities, the author postulates that every techno-economic base is associated with and influences the sexual division of labor and strongly affects both the status of women and the pressures for or against high fertility. Proposes that the techno-economic base influences the sexual division of labor in subsistence activities by setting levels of required labor inputs, and by offering varying degrees of compatibility with simultaneous child-care respon-

sibilities. While the relationships are not direct or automatic, it appears that economically productive women have higher status than those who have no control over the means of production and allocation of surplus. Women in gathering societies have high productivity, women in agrarian societies have low productivity and status. Women's fertility in these societies depends on the compatibility between child-care and work, the economic value of children, and the status that fertility can provide.

Boserup, Ester  
1970

Woman's Role in Economic Development. New York: St. Martin's Press. London: George Allen and Unwin.

An excellent, comprehensive analysis of women's participation in the labor force in Africa, Asia, and Latin America under rural, urban, and transitional economic systems. The author presents a dynamic analysis of statistical comparisons among world regions and between sexes for a great many economic variables. One of the main arguments is that the change from traditional to modern economic systems widens the gap in the levels of knowledge and training between men and women and augments men's prestige at the expense of women's. One of the main solutions is to devise new educational and training programs for women in a wide range of economic activities (women should not be trained for specific functions). Apart from the obvious effect of reducing the productivity gap between the sexes, this would also: a) have the possible effect of reducing the birth rate; and b) help accelerate the growth of the economy beyond the rate attainable by the use of male labor alone, since, among other things, it might help keep rural-urban migration within bounds (from Rihani, 1978, edited).

Boserup, Ester  
1975

and Christina Liljencrantz  
Integration of Women in Development: Why, When, How. New York: United Nations Development Programme.

General description of the issue of women's integration in development; it briefly covers women's roles in urban and rural societies; the persistence of traditions and attitudes discriminating against women; education and employment; population and health; and proposals for action--including legislative and administrative measures and types of programs to be undertaken. Authors take an economic approach to the issue, stressing the fact that income opportunities for women will be the key to successful development and that women's integration into the development process is a must in any effort to utilize national labor reserves (from Rihani, 1978).

Boulding, Elise  
1976a

"Dualism and productivity: an examination of the economic roles of women in societies in transition." Paper presented at the Conference on Economic Development and Income Distribution, Estes Park, Colorado.

Examination of how--when societies begin to modernize--a gender-linked division of labor or "dualism" often occurs, leaving women with the subsistence tasks of growing and processing food, child care, and domestic manufacturing for home consumption, while men enter the market and urban-based economics. This gender-based dualism combines with other dualistic structures in the economy to increasingly deprive women of access to resources. Compared to the greater resources available to men, women's economic productivity suffers accordingly. The author examines the economic participation of women in 21 countries (based on the framework developed by Irma Adelman and Cynthia Taft Morris in *Society, Politics and Economic Development: A Quantitative Approach*, Johns Hopkins Press, 1967) and presents analyses of capital formation and the productivity of women in the traditional sector of several Third World societies (Morocco, Indonesia, Nigeria, and India). The relevance of these kinds of data for policy decisions affecting women's participation and the maintenance of dualistic economic structures is evaluated. Some key conclusions: a) in all countries examined, women are excluded from policymaking planning roles that would enable them to promote the integration of labor and capital resources of the women's sector into the larger society; b) the imbalance created by the growing "invisibility" of the women's sector and the growing domination of a class of urbanized male clerics and decision makers is dangerous; c) policies need to be developed that will short-circuit the dynamics of gender-based dualism and allow the productivity of both women and men to contribute to the economy as a whole (from Rihani, 1978).

1976b

"Familial constraints on women's work roles." In Martha Blaxell and Barbara Riegan (eds), *Women and the Work Place: The Implications of Occupational Segregation*, Pp. 95-118. Chicago: University of Chicago Press.

A historical analysis of the occupational roles of women as producers and the constraints of familial "feeder-breeder" roles on that occupational role. The author discusses the social, cultural, legal, and technological factors that have contributed to these constraints in each age and society and analyzes the effects of the segregation of the sexes and the male dominance that with few exceptions have invariably resulted. She optimistically concludes that, while neither the unequal burdening of women with both feeder-breeder and production roles nor the wage differential between the sexes is new, the vision of a more fully realized human potential for both men and women if the burdens and joys of these roles are shared is new. The author sees this new vision as a major contribution of the twentieth century to the intellectual and social development of the species. The study provides useful background reading for exploring the economic roles of women (from Rihani, 1978).

1975a

Female Alternatives to Hierarchical Systems, Past and Present: A Critique of Women's NGOs in the Light of History.. International Women's Year Studies on Women 3. Boulder, CO: University of Colorado, Institute of Behavioral Science, Program of Research on General Social and Economic Dynamics.

If women are to contribute to innovation in society it must be on the basis of a realistic assessment of their historical experience and capabilities, including their handicaps. Women's international movements are criticized for tending to emphasize separate identities and programs instead of thinking in terms of the overall magnitude of the global problems they try to address. They have few links with UN agencies, and other linkage systems are scarce and weak. To vitalize their institutions it is recommended that women relearn older, pre-industrial network and communication skills and unlearn the socialization into male dominance systems they have undergone. They need to be freshly inventive about new non-hierarchical patterns for working in large organizations. But "none of this can happen as long as women are attached to old status systems, and yet the old status systems give them what recognition they do get from the 'male world'" (from Rihani, 1978).

1975b

Women and Food Systems: An Alternative Approach to the World Food Crisis. Boulder, CO: University of Colorado.

Statistically documents the heavy participation of women in all stages of the world food system and suggests that serious variations in the impact of food policies and programs result from the failure of policymakers and program administrators to recognize either the extent or the nature of women's involvement. Most existing programs deal only with the food preparation and household duties of women and ignore the 30 to 80 percent average participation of women in food-related labor force activities outside the home. When possible, levels of female participation are documented by UN statistics, although the author is careful to point out deficiencies in this data. The paper examines the "invisible" male-biased conceptual gaps in current academic disciplines which hinder realistic food policy and program development--e.g., in agricultural economics, nutritional science, medicine, and agricultural science. Exploration suggests that these disciplines overestimate world food problems because they underestimate food resources outside the male-dominated market system and--because of ignorance and misinformation about obstacles to conservation stemming from women's severe workload--overestimate what can be done. The author suggests that this ignorance and misinformation about women (who form the bulk of Third World poverty-level food producers) could be ameliorated through women's participation in policy and program analysis and decision making (from Rihani, 1978).

Bruce, Judith  
1977

"Setting the system to work for women." *Populi* 4(1):36-43.  
New York: UN Fund for Population Activities.

An evaluation and critique of the UN Development Programme's "Guidelines of women, population, and development." Leadership is seen as a key to successful implementation of guidelines which will require considerable commitment and open up new areas in which work needs to be done. The author considers the lack of women in programming positions within UNDP to be a constraint to the organization's responsiveness to the guidelines, which depict a challenge without providing the mechanism for meeting that challenge.

Burke, Mary P.  
1978

"Women: the missing piece in the development puzzle." *Agenda* 1(3):1-5. Agency for International Development.

Excerpts from the author's book, *Women and World Economics: Some Suggestions for a More Creative Role for Women in World Economics*. Women's contributions to LDC economies both in the home and the marketplace must become part of the development picture.

Buvinic, Mayra  
1978

and Nadia H. Youssef with Barbara Von Elm  
*Women-Headed Households: The Ignored Factor in Development Planning*. Washington, DC: International Center for Research on Women.

From an analysis of marital status data from census statistics of 1974 LDCs, the authors have arrived at rates of potential female household heads, i.e., women who are widowed, divorced, abandoned, or whose husbands are absent or a marginal member of the household. The data show high country-wide variabilities in percentage of potential female household heads (from a low of about 10.0 percent in Kuwait to 40.0 percent or higher in Botswana and Panama). The average for the 74 countries is 18.0 percent. The data, according to the authors, "suggests a direct linkage between processes of modernization--particularly those stemming from economic development and its policies--and the use of households headed by women." Migration (internal and international); mechanization of agriculture, the development of agribusiness; urbanization; overpopulation; lower class marginality; and the emergence of a class system of wage labor are modernization variables that the authors suggest are related to the emergence and increase of women-headed households. Since these households represent the poorest segments of the population the authors note the policy implications of identifying these women.

Castillo, Gelia T.  
1977

The Changing Role of Women in Rural Societies: A Summary of Trends and Issues. Seminar Report 12. New York: The Agricultural Development Council, Inc.

Summary report on a seminar session organized by the Fourth World Congress for Rural Sociology held in Torun, Poland, August 9-13, 1976. The session focused on the burden of rural women's work and the constraints that custom and tradition place on these women. More than two dozen research papers delivered at the conference pointed to the following trends: 1) the long, hard hours worked by rural women are only marginally reflected in labor force and income statistics; 2) industrialization, collectivization, and mechanization of agriculture have involved mostly male peasants; however, in Poland, Yugoslavia- and Romania, these have led to a feminization of basic agriculture in which women have taken over--at great hardship--an important group of activities previously carried out by men; and 3) rural women in practically all countries are less well trained and have lower educational attainment than men. Also discussed are the effects of economic development and modernization of women's status; women's economic independence and participation in decision making; agricultural mechanization, modernization, and employment for rural women; and the consideration of women in research and development efforts (from Rihani, 1973).

Cebotarev, E. A.  
1976

"Rural women in non-familial activities: credit and political action in Latin America." Wellesley, MA: Women and Development Conference, Wellesley College (June 2-6).

Describes the Colombian Institute of Agrarian Reform's (INCORA) economic and political activities for rural, low-income women in its sponsored voluntary associations. INCORA associations were begun in 1967 to offer women opportunities to participate in non-familial activities in the public sphere and access to credit for business and industry. The author explores the successes and failures of the process of women's adoption of new roles by examining class-determined sex roles, female-male dependency, and the present institutional and occupational structures. The organization and its background, accomplishments, and problems are discussed. Problems occurred in the use of specialists who lacked appreciation of the local situation, the people, and practical concerns. Market competition with already established large businesses proved difficult. Priests, businessmen, and politicians in the local power structure tried to subvert and take over projects. It appears that urban middle and upper-class women preferred to stick to culturally defined feminine roles and not compete with men, while their poorer rural sisters were willing/compelled to break barriers. Excellent reference section (Abstract from Rihani, 1978:55).

Center Magazine  
1974

Women Around the World. Santa Barbara, CA: Center for the Study of Democratic Institutions 7(3).

For L. B. Iglitzin, "women-as-property" has been and is still a central aspect of patriarchal societies. Taking the case of Latin American research as an example, N. S. Kinzer states that the social sciences are "pervaded with the idea that the only society worth researching is society as men experience it." For J. Van Allen, development is pushing African women toward complete dependency on men. Other brief articles describe the situation of women in West Germany (P. Merkl), the Israeli Kibbutz (R. L. Blumberg), the Soviet Union (G. W. Lapidus), Algeria (K. Boals and J. Stiehm), and Sweden (S. R. Herman). In the final remarks, A. Myrdal suggests areas to be studied (from Buvinic, 1976).

Ceres: FAO Review on Development  
1975

Women: A Long-Silent Majority. UN Food and Agriculture Organization 8(2).

Interesting collection of articles on the Third World, particularly Africa and Latin America, all transmitting the message that agricultural modernization has made women poorer instead of richer. Agrarian reform, the green revolution, and credit programs in the Third World have shown the sex bias of development. The articles by Wajihuddin Ahmed and Clio Presvelou provide good short overall views of the situation of women. Includes interesting interviews with Dias Bandaranaike, Prime Minister of Sri Lanka, and Fransisca Pereira, Governor of the Bolama Region, Guinea-Bissau (from Buvinic, 1976).

Chaney, Elsa M.  
1977

"Agridina: domestic service and its implications for development." Agency for International Development. Office of Women in Development, November.

The focus of the paper is to present information on the life of a domestic servant from the point of view of the women themselves. Preliminary findings question the conclusions of Smith (1973) that domestic service is a channel for upward mobility for migrant young women. A parallel study by Villalobos (1977) found that 90 percent of the street vendors she studied had begun as domestic servants; 77 percent of the factory workers had begun in the industrial sector. Chaney therefore suggests that women may move laterally into vending, but that they do not better themselves either within or out of the occupation of servant. She also provides some interesting data on contact with rural areas: only one-half of her sample of domestic servants had journeyed back to their native town even once. Therefore it is questionable to what extent they serve as role models or change agents in their native communities.

CIDAL  
1974

"An anthology on women in Latin America." First Special Issue of the Boletín Documental Sobre Las Mujeres, Coordinación de Iniciativas para el Desarrollo Humano de América Latina, Cuernavaca, October.

A small anthology of texts related to women in Latin America. Entries, written by both women and men, all take into account the Latin American environment and stress the direction in which women as a group have to move in order to become more integrated in the development of their countries. The texts include "Towards a Methodology of Women's Liberation, Latin American Style," by Enrique Dussel; "Is Man So Much Dominated, After All?" by Alaide Foppa; "Archetypes and Religious Stereotypes: Their Impact on Man-Woman Relations," by Aurelia Gpe. Sanchez M.; "It is Good, But a Sin." by Arnaldo Zenteno, S. J.; "Women, the Center of the Revolution?" by Luis Lenero O.; "Population Growth and the Legal Status of Women," by Violeta Sara Lafosse; and "Women as a Non-Valued Human Resource in the Rural Environment," by Lucia N. Leban de Cavia (from Rihani, 1978).

Deere, Carmen Diana  
1978

"Intra-familial labor deployment and the formation of peasant household income: a case study of the Peruvian Sierra." Paper presented for the conference on "Women in Poverty: What Do We Know?" International Center for Research on Women (April 30-May 2).

Directs attention to the question of rural women's contribution to the formation of peasant household income. Proposes that intra-familial labor deployment within the peasant household is determined by a complex interaction of class and family structure variables, as well as the social valuation of the activities of male and female.

Dhamija, Jasleen  
1975

"Handicrafts: a source of employment for women in developing rural economies." International Labor Review 112(6):459-465.

The author presents arguments for using handicrafts as a means of increasing the economic participation of women and makes recommendations for the successful implementation of such programs. The central theme is that handicrafts provide employment and income without damage to existing values or the social structure. Other points made include the following: a) handicrafts are compatible with the traditional roles of women and draw on their existing skills; b) new, improved technology that is relatively easy and cheap should be introduced; and c) the marketing

of handicrafts is not in direct competition with the goods of industrialized countries. Recommendations include developing a long-term village-based institutional framework for education and providing some common facilities and materials. The article fails to deal with criticisms frequently made of handicraft programs (from Rihani, 1978).

Dixon, Ruth B.  
1975

"Women's rights and fertility." Reports on Population/Family Planning 17. New York: Population Council.

The status of women in the areas of education, employment, the family, and public life can be considered as both a determinant and a consequence of variations in the timing and number of marriages and births. Evidence from a number of countries suggests that a compelling argument can be made for the existence, under specified conditions, of a strong relationship between the exercise of women's rights in private and public life, on the one hand, and their reproductive behavior, on the other. The current and potential impact of women's status on fertility is increasingly attracting the attention of demographers and policy planners concerned with reducing runaway population growth rates. The importance of birth planning in facilitating the exercise of the human rights of women as individuals, regardless of its demographic consequences, is as yet less fully acknowledged or understood.

Fagley, Richard M.  
1975b

Rural Women as Food Producers: Initial Responses to a Recent Questionnaire. New York: Commission of the Churches on International Affairs.

Summarizes responses to a questionnaire exploring issues related to the role of women as food producers in poor rural societies. The report provides a useful overview of the level and nature of women's involvement in food production in Asia, Africa, and Latin America--in each of the regions, over 50 per cent of the family's food supply is produced by women. The author identifies useful tools and techniques that ease the work and increase the effectiveness of women and suggests that the women's organizations and/or extension services (many of which are listed) that already exist locally could be called upon to perform or facilitate needed change. The primary tribal or social factors that oppose change in each area are noted. Although the sample on which it is based is small (about 20 individuals familiar with rural conditions in developing countries) and not statistically valid or reliable, the report provides a careful summary of conditions in each region (from Rihani, 1978).

1973

"Population, nutrition and the role of women." Speech to Conference on World Food and Population Problems, New York.

Concludes that "not much" is being done by international agencies to meet the needs of a great underprivileged sector: the village women of the underdeveloped world. Cites four reasons for this neglect: 1) Males dominate international agencies and, even more, national planning bodies. 2) Both the elite and Western officials are primarily interested in the market economy - and the feminine sector is largely outside this economy. 3) Women in underdeveloped countries use primitive technology, and therefore need experts concerned about simple improvements in tools, but neither national nor international agencies have much ability to "think small."

Findlay, Sally E. and Ann C. Orr  
1978

Patterns of Urban-Rural Fertility Differentials in Developing Countries: A Suggested Framework. Prepared for OUD/DSB/USAID.

Presents a thorough review of fertility studies in developing areas with particular attention to urban-rural differences. Based on their analysis of age-specific fertility differentials, they find that most urban women begin childbearing at a later age and complete families sooner than do their rural counterparts. Latin American countries show very clear differences in urban-rural fertility, which the authors argue is related to socio-cultural and economic factors peculiar to that region. In their case study of Peru, they posit that the key factor is dependency, growing out of the patron-client relationship of the hacienda system. Of particular note is that, even with land reform and communal farming, rural women remain powerless and economically dependent. They suggest that an "environment of diversity" where opportunities and ideas are more varied may provide new options, particularly reliance on oneself. Contains very useful statistics, an extensive bibliography, and discussion of previous studies.

Germain, Adrienne  
1974

Some Aspects of the Roles of Women in Population and Development. Paper prepared for the International Forum on the Role of Women in Population and Development. Warrenton, Virginia: Airlie House.

The 1974 World Population Conference and the formulation of a World Population Plan of Action suggest an increasing concern about the relationship between population trends and national development, about its implications for distributing wealth throughout the world, and about its meaning for the achievement of a better quality of life. An understanding of the socioeconomic determinants of population trends and of the consequences of these demographic trends for development requires

cognizance of the current and potential role of women in national development and recognition of the relationship between women's status and population trends. The integration of women in the development process through equal opportunities for education, training, employment, and full social and political participation is likely not only to create conditions that are more conducive to free and responsible choice about family size but also to speed the achievement of development goals and ensure the ability of all people to exercise their basic rights. (Author's abstract, edited by Rihani, 1978)

1975 "Status and roles of women as factors in fertility behavior: a policy analysis." *Studies in Family Planning* Vol. 6, 7: 192-200.

Reviews the evidence on the relationship between the status of women and fertility on the premise that this relationship is fundamental to understanding demographic trends. While the relationship between education and employment, measuring the status of women, and fertility varies among nations and within nations, there is sufficient evidence to suggest that broadening the roles of women and improving their status will strongly affect fertility motivations and thus reduce societal fertility. Possible strategies for policy-oriented research and programs are outlined. (from Buvinic, 1976)

Goldstein, Sidney

1972 "The influence of labour force participation and education on fertility in Thailand." *Population Studies* 26(3):419-436. London, England: Population Investigation Committee, London School of Economics.

Using a one percent sample of the 1961 census data, author finds that the directions of fertility differentials between economically active women and housewives are opposite in urban areas and rural areas, being important in the former and neutral in the latter. Data on relationship between fertility and education indicate rural-urban differential is largely attributable to higher educational levels of urban women, as well as to employment outside the home. One of the more detailed and more careful analyses.

Hass, Paula Hollerbach

1976b "Fertility decision making in the Latin American context." Paper presented at Wellesley Conf., Wellesley, Mass. 78 pp.

Challenges the traditional belief and assumption of most fertility models that people in developing nations have large families because they want them. The author believes

that in Latin America the rural populations (which constitute the bulk of the population) and young, less educated persons who engage in episodic sexual intercourse may misperceive their susceptibility to conception because of lack of knowledge about reproduction and contraception, misinformation about the side-effects of contraceptive methods, or fear of ill effects to health. Others are aware of methods but are not able to obtain them. Most fertility models do not study the lack of privacy during physical examinations at family planning clinics; this could be a basic factor undermining the willingness of Latin American women to return to the clinic. The lack of decision making regarding fertility goals also affects the decisions of the less educated and rural residents. The paper concludes that greater knowledge, availability, and acceptability of birth planning will result from increased awareness of the disadvantages of large families. The widespread availability of birth planning through nonclinical distribution systems and the integration of family planning into a maternal-child health framework are regarded as primary ways to increase the population's knowledge of birth planning. (Abstract from Rihani, 1978:106).

Jaffe, A. J. and K. Azumi  
1960

"The birth rate and cottage industries in under developed countries." *Economic Development and Cultural Change* 9:52-63.

Using data from Puerto Rico and Japan (1955) authors demonstrate that fertility of women working in cottage (at home) industries in rural areas is close to that of nonworking women, in contrast to women working in the modern sector, away from home. Article suggests that only an incompatibility between work and home activities lowers fertility.

Leibenstein, Harvey

An Interpretation of the Economic Theory of Fertility: Promising Path or Blind Alley: *Journal Economic Literature* 12 (2):457-479.

Author traces development of the microeconomic theory of fertility developed by the Chicago School with penetrating analysis of its shortcomings, noting particularly that the price effect is unlikely to be significant enough to explain lower fertility of higher income groups. He outlines an alternative theory based on different cost pressures felt by different "social influence groups" which have different target living standards and family size preference. Notes that for some goods, including children, there can be increasing marginal utility until target is attained. Successful synthesis of economic and social theories of fertility.

Mbilinyi, Marjorie

1971

"The participation of women in African economics." Economic Research Bureau. University of Dar es Salaam.

An analytic study of roles of women in traditional African economies and how they are affected by underdevelopment. Though women had economic roles as cultivators, traders, etc., their essential function was to produce children. Colonialism excluded women from administrative posts, cash crop production, mining. Women were left in the subsistence sector. They continue to be left out of potential growth sectors. Low educational attainment levels restrict women from most African government jobs. Though women are a big part of the agricultural working force, it is not they who are studying agriculture. In development-oriented fields like science, engineering - women are not there either. Technical/vocational education for women generally centers on home craft-courses, not usually leading to jobs or increased economic activity of women. Women frequently share men's attitudes towards women. Family planning can be used to help women participate more fully in the economy. A plan for women's participation in an African socialist setting is offered. Women must be involved at all levels of planning.

McCabe, James L. and Mark R. Rosenzweig

1976

"Female employment and family size." In R. Ridker (ed.), Population and Development. Baltimore: Johns Hopkins University Press.

Authors most important conclusion is that the various studies which show a relationship between female labor force activity and fertility "can never support the following hypothesis conclusively: that an exogenous increase in the number of attractive jobs for women will, other things being constant, decrease the birth rate." However, they do suggest that one policy which might depress fertility is the availability of jobs which are less compatible with child bearing, such as secretarial work.

McGreevey, William P. and Nancy Birdsall

1974

The Policy Relevance of Recent Research on Fertility. Interdisciplinary Communications Program. Washington, D.C.: Smithsonian Institution.

The monograph contains three chapters: 1) a review of the literature on the determinants of fertility, including female employment; 2) a review of evaluation studies of family planning programs; and 3) an agenda for further research. The policy and research implications of the state-of-knowledge of the correlates of fertility in developed and developing societies are examined.

Miro, C. and W. Mertens

1968

"Influences affecting fertility in urban and rural Latin America." *Milbank Memorial Fund Quarterly* 46(3, Part 2):89-117.

Describes results of survey in three countries of rural and small urban fertility. Finds no significant differential between fertility of working and nonworking women in these areas, where work is linked to traditional mode of life.

Misch, Marion Ruth and Joseph B. Margolin

1975

*Rural Women's Groups as Potential Change Agents: A Study of Colombia, Korea and the Philippines.* Washington, D.C.: USAID.

The major conclusion from this preliminary study is that rural women's groups can function as effective change agents for development. While most organizational characteristics are culture-specific, a small number of general principles emerge: Activities that begin to satisfy economic need, local decision making, an adequate range of activities, and peer approval are basic to behavior change. There is a need for sensitive instruments for determining local needs and attitudes and for improved leadership training and village-level dissemination methods. One of the paper's recommendations is, therefore, the development of an international rural women's resource center. The paper is based on a six-month study in the three nations selected. There is a separate report on the specifics of each country and an evaluating chapter with cross-cultural generalizations and recommendations. (From BUVINIC, 1976).

Mitchnik, David A.

1972

"The role of women in rural development in the Zaire." Oxfam Publications.

Looking at introduction of poultry schemes into a rural community without accompanied water supply, finds that the introduction of agricultural technology and mechanization not only has not involved women, but has increased their work schedules. Studies daily activities of women in rural Zaire, and points out negative impact on women of unplanned innovation. Examines voluntary agencies rural development projects in Zaire to determine what is being attempted to promote women's welfare. Projects are aimed at promoting better child care, nutrition, rural health care, agriculture and livestock production. Very few of these projects have taken into account the importance of women as producers and their contribution to rural development. Consequently, the majority of the projects have met with little success. For example, the goal of the agriculture and livestock projects is to increase the farmers' output. The projects, however, have included only men, even though the women do most of the farming. Concludes that the

voluntary agencies have undertaken too wide a range of activities, which has resulted in a large number of small projects, thus dissipating their scarce human and financial resources. Urges that these agencies narrow their range of activities and concentrate on those which can best be carried out by them. Women must be included if goal of rural development is to be met. Training schemes for women should be broadened to include agricultural training, processing of agricultural produce, cottage industries and family planning. Suggestions are made on how training programs can be carried out and financed.

Office of Women in AID Development

1978

Report on Women in Development. Washington: Agency for International Development.

A report on the impact of development programs, projects and activities on the integration of women into the developing economies of countries receiving assistance, in accordance with Section 113 of the Foreign Assistance Act of 1961 as amended August 3, 1977.

Pala, Achola O.

1974

"The role of African women in rural development: research priorities." Discussion Paper No. 203. University of Nairobi: Institute for Development Studies.

Women have always been important in rural economies in cultivation, cattle-tending and trade, but specific strategies to integrate them in development planning usually are lacking. Paper does historical analysis of contribution of women in subsistence production. Areas of research and need are enumerated, with an indication of the types of data about women's activities that are needed to aid the planning of rural change. Author concludes, "The stagnation and exploitation of the majority of women is one of the major factors contributing to the underdevelopment of the countryside, and the social costs of this situation may soon prove very great."

Rural agricultural research has concentrated on commercial agriculture in the hands of expatriate or African men. Extension services tend to reach "progressive farmers"--which usually means those with access to much land and/or capital and who tend to be men.

1976

African Women in Rural Development: Research Trends and Priorities.<sup>1</sup> Overseas Liaison Committee Paper No. 12. Washington, D.C.

Rural development theorists have not put forward many explicit ideas on the role of women in agricultural production, while

extension services have tended to exclude women or teach them things that do not enhance their skills in agriculture. Suggests research priorities access to land, labour allocation, time-budgeting, decision-making in the household, male out-migration, agricultural training, participation of women in marketing and cooperative societies, women's self-help and work groups, women in pastoral societies and marginal areas and nutrition, family planning and community health.

Palmer, Ingrid  
1976

The Basic Needs Approach to the Integration of Rural Women in Development: Conditions for success. Wellesley, Massachusetts: Paper presented at the Conference on Women in Development, Wellesley College.

According to the author, rural women have become the center of development 'planners' concerns because women are the target of family planning, the chief food growers, "poorest of the poor," affected more intensely by poverty, and the focus of the "basic-needs approach"--an anti-poverty strategy which defines basic needs as nutrition shelter, clean water, and child care. The author asks how women should be helped in order to achieve full integration--whether they should be encouraged to concentrate on domestic affairs (living healthy lives, but having little social visibility) or whether they should be given access to the skills that will allow them to move forward into the wage market with its concurrent problems; perhaps a lateral movement is possible with the thoughtful application of technology. Relevant factors in a basic needs approach are presented in three synopses of situations in Java, Kenya, and Mexico. The synopses illustrate the overburdening of women in the formal wage market or otherwise; that sex-typing of jobs works to the detriment of women in many ways; and that changes-technological of developmental (i.e., monetization of the economy)--may decrease women's economic independence. Reforms must address the question of the sexual division of labor and access to credit, class interests, and sex-based class interests. A great danger in the emphasis of the basic needs strategy on the provision of adequate employment is that it will merely provide unemployed and underemployed men with adequate work while overburdened women will be left with inadequate delivery, since decision-making patterns, a woman's economic independence, and her available time will be factors in determining how much is delivered. The issues of authority and economic independence of women must be an integral part of any basic needs strategy from the start, since they depend on the redistribution of assets not only among income classes but also between the sexes. Sexual politics thus becomes an unavoidable factor in the advancement of human welfare.

Rahman, Jowshan Ara  
1976

Role of Women in Population Planning. Paper presented at the Seminar on the Role of Women in Socio-Economic Development in Bangladesh, Dacca. Mimeo.

Three women from different cultures--Bangladesh, China, and Latin America--describe the desperate status situation of rural women and the curse they feel it is to have been born a woman. A clinical-medical approach to family planning alone is not enough to ensure its acceptance. Mass social education is needed, as well as the liberation of women, so that women will be free to make conscious choices about whether they will or will not become mothers. The freedom of women to own and control their bodies plus measurements taken to uplift their status and provide them with sources of income are necessary steps to decrease the fertility rate. The author recommends educating and training women, encouraging late marriage, better access to different contraceptive methods, better nutrition and sanitation measures, and the creation of radio clubs as population planning forums. (from Rihani, 1978)

Reining, Priscilla. Fernando Camara, Beverly Chinas, Rosalie Fanale, et al.  
1977  
Village Women, Their Changing Lives and Fertility: Studies in Kenya, Mexico and the Philippines. Washington, D.C.: American Association for the Advancement of Science.

Research was conducted in villages in Kenya, the Philippines, and Mexico and a literature search undertaken to study how change brought through modernization might influence family size. The following were among the key conclusions: 1) number of children does not necessarily determine a woman's status--in fact, her status may influence decisions on family size; 2) motivations for family planning differ by place and group; 3) strategies influencing decisions on family size reflect values and characters as well as socioeconomic conditions; 4) a breakdown in the subsistence economy can lead to rural prosperity as well as rural poverty; 5) rapid field research can produce adequate data for the design of population programs, provided that good socioeconomic and cultural studies of the area are available and skilled professionals do the research; 6) cross-cultural comparisons of demographic rates must be based on appropriate local-level units; national statistics alone are inadequate. A detailed analysis of each case study is presented, along with selected interview data. A useful comparative summary also is provided. Good bibliography.

Riegalman, Mary Ann  
1975

"A seven country survey on the role of women in rural development." Washington, D.C.: Development Alternatives, Inc.

Report based on findings of a field study of existing rural projects and of a preliminary survey of constraints on and opportunities for women in the economies of Ghana, Kenya, Lesotho, Nigeria, Bolivia, Paraguay, and Peru. Focuses mainly on rural women's active decision-making and participation roles in agricultural production, and, among other things, finds that: a) Women appear to play active roles both as decision makers and participants in most work related to rural development. Despite this, external development projects designed to transfer technology to rural people seldom incorporate women as participants. b) Major behavior changes by women occurred significantly faster through activities dealing with agricultural production than through family-care projects. c) Integration of women into the rural economy will proceed more quickly if it takes place within the context of a development project rather than by means of "women only" projects. d) Truly relevant statistics on involvement of women in the rural sector are not available. Calls for field research to obtain data, especially on women's participation and decision making in agricultural production. Asks planners to take into account two aspects of project implementation: the structure of rewards and incentives for male and female administrators and managers; and the creation of a monitoring and evaluation system to measure the success of women's involvement in the project.

Tinker, Irene and Michele Bo Bramsen  
1976 "The adverse impact of development on women." Women and World Development. Washington, D.C.: Overseas Development Council.

Criticizes the Western model of development not merely as being inadequate, but as having negative impact on women. The model exports a Western, middle-class value judgment of what is appropriate for women which undermines traditional occupations that give them status in society. Modern technology, created and exported by men, implies a preference for male employees. The author contends that a close inspection of real economic activity would reveal that women play a larger and more unrestricted role in pre-developed economies. The gap in male/female earning power is widening. Women's roles and jobs in a number of societies are briefly described as are the changes in these roles as a result of colonialism, modernization, education, and urbanization. The author calls for a more comprehensive understanding of the impact of the development process on women.

United Nations Children's Fund  
1974 "Women and development." UNICEF News. New York: 82:4.

Entire issue is devoted to investigation of the conditions and problems of women. "UNICEF's Women" examines the conditions of women throughout Asia and includes a frank appraisal of UNICEF program policies affecting women. "The Feminine Factor in Population" discusses women's greater responsiveness to change and how this relates to the population problem. "Some Glimpses of an African Woman's Life" cites some examples of customs and traditions of women, such as a rural woman's daily chores, an urban woman's special problems, job opportunities for women. "The Indian Woman" provides vignettes of nine women of different walks of life, revealing their dependence on males. "Syria's Women Volunteers: A Force for Development" describes the efforts of one voluntary organization to help women advance economically, socially, and culturally. "The Veil is Dropping in Afghanistan" provides some insights into the new influences on women and how they are becoming increasingly modernized. "Juana Washes Clothes...and Hopes" describes the hard life of a mother living in Latin American poverty, and how too rapid migration to urban areas has caused worsening conditions for the poor. In "Speaking with 'Kine': A Child Worker in Senegal," a young African woman tells of the obstacles and rewards she finds in trying to introduce modern ideas to mothers in remote areas. "Setting New Sights for Latin America's Women" presents highlights of a recent meeting to seek ways to improve the lives of the vast majority of Latin American women.

United Nations Department of Economic and Social Affairs  
1975 Status of Women and Family Planning: Report of the Special Rapporteur Appointed by the Economic and Social Council Under Resolution 1326 (XLIV). New York.

Reports findings of UN study on interrelationship between status of women and family planning. Indicators used to measure status include years of schooling, employment of women, occupation, representation in politics, age at marriage, family rights and obligation; data is listed for nearly 20 African countries. Feels family planning may be a force for change in and of itself. Stresses need for education of women because of relation between educational level of women, family size and family planning. Lower fertility will result in rise in the standard of living only if policies lead to equality of resource distribution. Thus high fertility obviously is not the cause of underdevelopment.

United Nations Economic Commission for Africa, Human Resources Development Division  
1974 "The changing roles of women in East Africa: implications for planning family-oriented programmes." FAO/SID workshop for intermediate level instructors in home economics and rural family-oriented programmes in East and Southern Africa.

This paper looks specifically at changing roles of women in Tanzania, Kenya, Uganda, Ethiopia, Somalia, Zambia and Malawi. In these countries, most rural women work 9-10 hours in the fields. Men put in approximately 1.8-3.5 hours. Women spend an additional 5 hours collecting firewood, cooking, drawing and carrying water, and pounding or grinding grains and legumes. Modernization has affected rural women in some cases by provision of more bore-holes and water taps, health facilities, transportation facilities, and participation opportunities (in the Ujamaa villages of Tanzania). In a negative way, farm mechanization has been directed mostly at men, as have extension services. Commercial agriculture is beyond the female domain. The author views education as an important resource for women from which they may begin to make better plans and decisions for themselves, their families, and their participation in national development. However in both formal and non-formal sectors, women make up about one quarter of the students. As a result, women's labor force participation in the modern sector is very limited. Because of high unemployment overall, the author predicts that the proportion of women in the labor force will decline in the future.

United Nations Educational, Scientific, and Cultural Organization  
1975 Report on the Relationship Between Educational Opportunities and Employment Opportunities for Women. In collaboration with the ILO, Document No. ED-74/WS-56, New York.

A study carried out in Argentina, Lebanon, the Ivory Coast, Sierra Leone, and Sri Lanka, examining the relationship between educational opportunities and employment opportunities for women. The study includes descriptions of the status of women, their position in the educational system and in the technical and vocational training fields both inside and outside the educational system, along with forecasts and conclusions for each country. The study admits to providing only an incomplete approach to the problem because of a lack of adequate statistics and records. The position of women in employment is characterized by very low rates of participation that become even lower at higher levels, marked differences in male/female representation in different sectors, and the vulnerability of women to under/unemployment. The position of women in education is characterized by the same lack of equal access. Rural women's situations are particularly critical. Obstacles to women's participation include traditional resistance, a shortage of schools, the remoteness and expense of schools that do exist, early marriage and other responsibilities, a lack of strategy guidelines, and the fact that curricula based on exogenous models are generally ill-adapted to national requirements.

United Nations Food and Agriculture Organization  
1975 The Role of Women in Rural Development. Mexico City: International Women's Year Conference, E/Conf.66/BP/11. New York: United Nations.

Women everywhere, but especially in rural areas, constitute an underprivileged group that through tradition and poor preparation is characterized by inferior social status. They themselves develop negative attitudes toward participation in the social, economic, and political life of their country. National self-interest should encourage countries to devote their resources toward improving the conditions and status of women and giving them equality with men. In the rural sector, with which this report is concerned, the efficient use of women working together with men is one of the primary means by which improvements in many areas can be fostered--e.g., food production, animal husbandry, and the land tenure system. The current involvement of rural women in productive activities is discussed and the reasons for the current situation evaluated. A first attempt is made to clarify and codify types of "social visibility" of women and to list the obstacles limiting women's performance in developmental tasks.

United Nations Funds-In-Trust  
1975 Report on the Seminar on the Role of Women in Integrated Rural Development With Emphasis on Population Problems. Rome: Fiat Paris.

The goals of the seminar are a) to focus attention on the interrelationships among the status and role of women, integrated rural development and population problems, b) to assist the governments of countries in the region to increase women's participation in development and to develop criteria for planning, evaluating and coordinating rural programs in relation to women's participation in development and to review and evaluate existing programs. The report includes case studies in Pakistan, Sudan and Lebanon.

United Nations World Food Programme, Intergovernmental Committee  
1975 The Contribution of Food Aid to the Improvement of Women's Status. Report by the Executive Director. Rome. Mimeo.

Food aid is a form of assistance that has considerable potential as a means of improving women's status, since women often play an important role in organizing, distributing, and preparing food on a community basis. Programs

which make full use of the potential of food aid as a contribution to women's health, education, training, and employment opportunities are rare, and the number of women who benefit from them remains small. The report concludes that a more conscious effort, following a fundamental change of attitude on the part of sovereign governments, to plan for the inclusion of women's interests in WFP-assisted activities is needed.

Ware, Helen  
1977

"Women's work and fertility in Africa." *The Fertility of Working Women*. New York: Praeger Publishers.

In this excellent article, the author refutes the basically western idea that women's role in the labor force is inversely related to her fertility. She cites numerous examples of studies, primarily in West Africa, which show that women's roles as producers, traders and even professionals are not viewed as alternatives to childbearing, but mutually compatible with bearing and bringing up children. Low fertility in tropical Africa is most closely associated with medical infertility (Romaniuk, 1967; Retel-Laurentin, 1974; p. 2). In Ghana, Cameroon, and Tanzania, in fact, participation levels do not drop during childbearing years, but continue to rise up to age 45-54. As traditional primary food producers, women have evolved an image of their role which combines participation and childbearing without conflict.

The author dispells the myth that women's farm work is dependent upon the possibility of remaining close to the home. In the Brong Ahafo region of Ghana women whose average fertility was 7.3 children (Gaisie, 1972; p. 3) spend an average of 7.4 hours away from home each day. Women take infants to market and to the fields on their backs and leave older children with relatives, second wives, or (in the case of professional women) with paid domestic help.

Wiesblat, A. M.  
1975

*A Seminar Report--Role of Rural Women in Development*. New York: The Agricultural Development Council Inc.

The recognition that expansion of a poor country's resource base requires full utilization of its existing resources has demonstrated the need to know more about the traditional and changing economic roles of rural women. Brief examples of rural women's roles are given and their lack of access to opportunities for increasing the productivity of their work

is cited as the reason for their dwindling traditional economic role in a modernizing society. The lack of available data on what women do, their relative lack of access to services, the constraints on women's productivity, and how changes in one set of women's roles affect their other roles are all seen as potential areas for research that will have implications for policy formation. Suggested programs to advance the status of women include income-generating activities, income-utilizing activities, and programs designed to increase their capacity to organize.

Youssef, Nadia H.  
1974

Women and Agricultural Production in Moslem Societies.  
Princeton: Paper presented at the Agricultural Development Council Seminar on Prospects for Growth in Rural Societies: With or Without Active Participation of Women.

An empirical study based on U.N. statistics that show that in Moslem countries the female labor force in the agricultural sector is very small, presumably because strict seclusion prevents women from engaging in such activity. There is evidence, however, that girls do farm work, although they are not paid for it. The reason for this seeming contradiction may be that men are reluctant to report that women in their families are working, because to a certain extent status is based on keeping women in seclusion. Pakistan has a higher incidence of female agricultural workers than other Moslem countries. The author suggests that women are a marginal, expendable labor force whose participation tends to exacerbate male unemployment. She recommends that specifically female rural industries be developed to improve women's status and sense of self and to further their independence. Very interesting data which point up the need for more such studies.

Zeidenstein, Sondra  
1976

Report on the First Two Years of the IRDP Pilot Project on Population Planning and Rural Women's Cooperatives.

Interim report on an experimental population planning women's co-op project in rural Bangladesh. A woman buys into one of ten cooperatives (each co-op is projected to have 120 members); she is then entitled to credit-in-kind for income-generating activities approved by the project staff. She also has access to training and services in rural economic activities, family planning, functional literacy, and health care. An additional 100 male cooperatives are to be involved in the family planning phase. This project, partially financed by the Ford Foundation

and the World Bank, began in 1974, with a planned duration of three-and-one-half years. Training is a key component: biweekly or monthly training is provided to five representatives from each women's co-op and to three representatives from each men's co-op; these representatives then communicate to co-op members at weekly meetings in the villages. Ninety women are to receive intensive training (2-18 months) in horticulture, seed preservation, food processing, cottage crafts, animal husbandry tailoring, and paramedics. The greatest portion of this document is given to describing how the project was organized; an evaluation plan is presented with minimal detail. The author recommends that male co-op staff be integrally involved in and committed to the women's project in order to maximize its potential success.

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