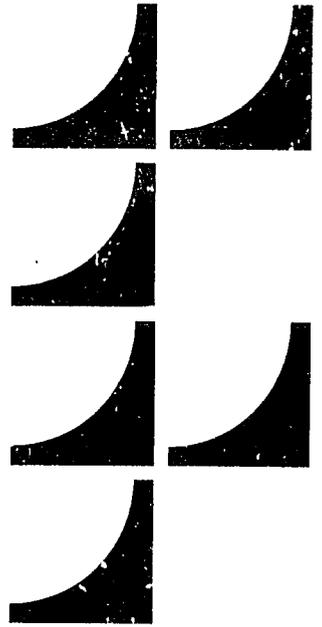


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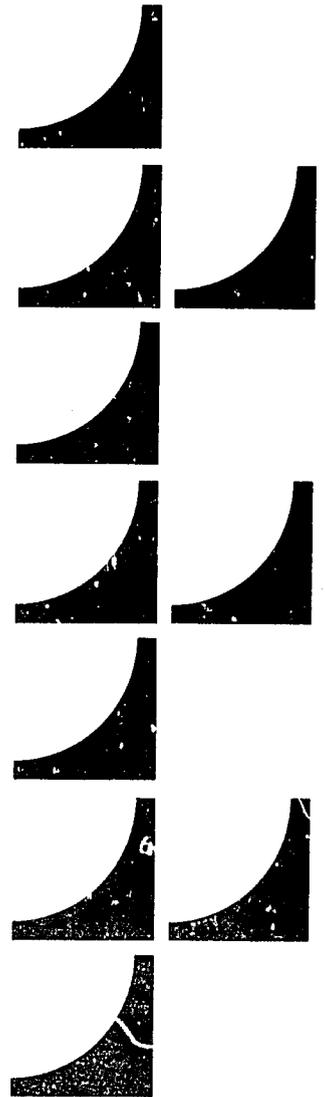
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PRIORITIES IN THE DESIGN OF DEVELOPMENT PROGRAMS:

WOMEN'S ISSUES

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INTRODUCTION

by

Mayra Buvinić and Nadia H. Youssef

In 1979, the International Center for Research on Women (ICRW), at the request of the Development Support Bureau of the Agency for International Development (DSB-AID), participated in a collaborative effort to explore ways in which concerns specific to the situation of poor women in Third World countries could be incorporated into DSB's program portfolio. Two main components of this task were to, first, assess how the Bureau's program portfolio included the issue of women in development and second, explore what program innovations addressing women's concerns could be considered by different offices within DSB.

The Development Support Bureau is the applied research arm of the Agency. Its main functions are to experiment, evaluate and disseminate the results of research for operational purposes, and provide the Agency with technical expertise on development issues that transcend a single country focus. The Bureau, therefore, is well equipped to take a leading role in initiating research on women in development for operational purposes and translating the results of research on and evaluation of these issues into technical know how. This research/technical assistance component of DSB's role within the Agency guided our work with the Bureau. Within the Bureau we worked directly with the Offices of Agriculture, Education, Population and Rural Development and participated in two of the Bureau's intersectoral working groups -- on employment and on delivery of services. With staff from these offices we reviewed current programs and identified future program areas which looked promising for enhancing women's roles in the development process.

This volume contains a revised and expanded product of our work. It includes four background papers prepared at the request of individual offices, and two reports that deal with issues which cut across

the Bureau's activities and administrative divisions: employment and the provision of services.

Three caveats about this volume need to be made at the outset. First, while the papers benefited greatly from the inputs of Bureau staff, the views expressed in them are of the authors and should not be attributed to the Agency, the Bureau or its staff. Second, the papers outline program guidances that can be generalized across countries or situations. In order to be useful, these guidelines need to be tested, examined and reevaluated in light of country-specific circumstances. Third, these papers represent only one dimension of the work undertaken with the Bureau.

From the beginning the Bureau and Center staff approached this project as an exercise in collaboration. Throughout, we were fully aware that, if the tasks outlined in the scope of work were to be accomplished in a meaningful way, the process of interaction was as critical a component as the actual written products to be delivered. Although the value of this interaction remains unrecorded, the benefits derived by the ICRW from the exchange of ideas with Bureau staff proved to be the most productive aspect of our work.

Three themes lace through and provide continuity to the contributions to this volume: First, the topics are all grounded in a specific program project or activity of DSB. Second, all papers are molded by a central proposition, namely that women in the Third World are economic beings: they play a central role in production as well as the income distribution process. Last, the themes reflect the substantive issues of what it means to include the concerns of the poor in development programs.

The central objective of the women in development focus is to achieve economic growth with equity, with the participation and productive contribution of women. This is a goal that responds to the profound changes that have occurred in the last decade in the conceptualization of development processes and formulation of strategies. Women contribute to development or underdevelopment through their economic functions; the economic returns women obtain affect the distribution of income and the levels of consumption. Women's multiple roles--as economic producers as well as reproducers--are critical and should be reflected in programs and projects that seek to attack poverty directly.

We believe that the issues facing poor women in the developing world are but a special case of the issues that the poor in general encounter every day; their solution will have a positive impact upon women, and upon men and children as well. Ultimately, the concerns of poor women ought to be integrated into all development programs

reaching the poor. For these reasons, the entries in this document describe additional dimensions to understanding the development process, attempt to widen the inquiry of what goes wrong with development efforts, and suggest ways in which programming can be made more responsive to the needs of the poor.

The first two papers in this volume address the causes and consequences of the persistent failure to acknowledge women as economically productive beings. The consequences of sex-related biases and the exclusion of women from the productive sector are discussed for both market and non-market economies. The first paper describes how limitations intrinsic to operational definitions of concepts and measurements designed to capture employment trends in census practices combine with cultural biases against women's employment to influence the under reporting and under counting of women's participation in the marketplace.

The second paper deals with the economic value of the work women do in home and subsistence production. It was possible to "locate" this particular issue into the Progress Indicators for Development Planning project of the Office of Agriculture. Using a multipurpose household survey designed for the country of El Salvador, we identify the kinds of information that multipurpose household surveys need to generate to have more reliable data both on the situation of rural women and on the patterns of productivity and income distribution in the rural environment. We hope that the two papers will be useful to the recently established Small Enterprise and Employment Unit within the DSB Bureau.

The greatest potential for improving the lives of men and women in developing countries lies in strategies that expand women's access to resources and services. Three of the volume's papers address different dimensions of this problem by singling out access to credit, access to education and the provision of specific services as critical elements to maximize women's income-generating capacity.

The Director of the Office of Rural Development requested our technical assistance in two current projects: Off-farm Employment and Rural Financial Markets. In response to this request, we wrote a paper on credit which defines concrete opportunities for this office to provide rural women with access to credit through the development of field experiments and demonstration projects. There are now several mechanisms for delivering credit and providing rural women with access to resources (cooperative movements, for instance) that require careful testing. This paper attempts to show that the challenge at hand is the creation of credit projects with strong evaluation components so that people working in this area will have a sound basis to develop projects.

The timely preparation of an "Education for Out-of-School Youth" project design undertaken by the Office of Education provided a unique opportunity for ICRW to highlight the particular educational needs and priorities of rural female adolescents. The background paper we prepared for this project documents past and present inadequacies of rural education and provides guidelines to maximize female participation in nonformal educational programs--not merely as an issue of equity, but as a means to open up options for women beyond the narrow confines of "traditional roles."

The paper on Provision of Services develops a woman-centered rather than a service-centered approach by arguing that poor women have a critical need for services that enhance their productivity and income-generating capacity. These go beyond the traditionally acknowledged ones of health, nutrition and family planning, mostly directed at women's domestic roles and meant to improve their survival skills. By documenting how service needs which result from women's economic roles have gone unmet, and drawing examples from the areas of water, childcare and housing, the paper concludes that enhancing women's productive capacity is a valid strategy to meet basic human needs and achieve growth with equity.

The last contribution reviews the State-of-the-Art Paper "Rural Development, Women's Roles and Fertility in Developing Societies" which was prepared by the Research Triangle Institute and commissioned by the DSB Rural Development and Fertility Project. It identifies some of the critical forces conditioning the impact that rural development projects have on the status of women, and how such impact--if and when it obtains--is reflected in rural fertility behavior. It concludes by proposing several other factors that contribute to the understanding of the dynamic relationship between social status and the reproductive behavior of rural women.

We hope that this volume will add to current efforts that seek to translate research in the area of women in development into program priorities and be of use to groups both within and outside AID involved in the design of innovative projects which fully utilize human resources in the development process.

(October, 1980)

SEX-RELATED BIASES IN CENSUS COUNTS:

The Question of Women's Exclusion From Employment Statistics

by

Nadia H. Youssef

Increasing productive employment in the Third World has been a major concern of the Agency over the past ten years. The relationship between employment and bilateral development assistance programs was first articulated in 1972 and vigorously stressed again in 1978 in the Agency's basic policy paper, "A Strategy for a More Effective Bilateral Development Assistance Program."

In 1979 productive employment came to be defined by the Executive Branch of the Agency as a fundamental and essential element of a basic human needs approach to development (DDC, 1979).

In May 1980 the Development Support Bureau of the Agency of International Development created a special Employment Unit to provide technical backstopping on employment generation, focusing in particular on resources and support concerns related to the supply of labor. The unit will be a functioning effort within the Development Support Bureau to deal with the promotion of productive employment and an integral component of the larger Intra-Agency Steering Committee, in which the Bureau of Program and Policy Coordination, the Office of Labor Affairs, the Office of Women in Development and the Regional Bureaus set forth policy related to employment.

The Agency's commitment to promoting productive employment as an integral component of its programmatic emphasis has important bearing on development efforts on behalf of women. The relationship between increasing the use of women's economic resources and improving the economic picture of underdevelopment is only now beginning to surface. AID projects have recently begun to address women in their productive role. However, fuller planning efforts are thwarted by the absence

in the Third World of a system of statistics showing the reality of women's economic contribution. National censuses, which are the primary source of data for development planning, have up to now consistently undervalued the productive contribution of women to the national economy. Unless corrective action is introduced, women will continue to be excluded from social and economic development planning.

The following pages are intended to mark a contribution in this direction by offering a critical discussion of the sex-related biases intrinsic to the conceptual and operational definitions underlying census operations. Understanding the nature and direction of biases in the labor force literature and seeking corrective action through redefinition of concepts and improvement of measurement is critical for the development of employment-focused strategies on behalf of women. A sound statistical basis is needed now to provide a realistic assessment of women's productive contribution in order to make possible a fair estimation and projection of female labor supply and an accurate assessment of the changing needs and responsibilities of women in developing economies.

NEED FOR NEW CONCEPTS OF EMPLOYMENT

The failure to properly conceptualize women's economic participation in developing societies, and the implication of this failure for recognition of women's economic contribution in these societies, has become recognized¹. The International Labor Office (ILO) is attempting to redefine the parameters of women's work to depict more accurately women's productive contribution to the economies of the Third World. The ILO has proposed a framework to improve data collection in order to encompass the heretofore unmeasured work and activity patterns of women. Such an improvement cannot take place, however, unless new meanings are given to the notions of labor and paid jobs, to the concepts of employment and productivity, and to ideas about intensity and efficiency.

The perennial problem is that internationally adopted standards, the operational definitions of concepts, and measures of employment are grounded in a system of identification and evaluation of economic activity based on developed and industrialized economies. Methodologically, such an approach is inadequate for developing economies, because it focuses on individuals as stable wage earners and thereby fails to capture the totality of men and women's productive contributions. In this paper we argue that conventional measures of what constitutes work and the processing, analysis, and reporting of labor force data in the census also fail to acknowledge the full range of women's economic activities. The census statistics for women, more

than for men, are fraught with ambiguities in definitions and sex-related biases. This tendency is due to the interaction between two factors: (a) the inadequate setup of the census format and (b) the cultural bias against female employment that influences the reporting and recording of results².

Policy Relevance of Sound Statistics on Women's Work

Assigning a social or economic value to women's work has implications beyond improved statistics. The development of sensitive measures of women's work to address the critical questions "What is woman's work?" and "Who among the women are labor force participants?" directly bears on the formulation of employment policies for women. This fact is a result of increased use of statistics in the development of national planning processes (Population Council, 1979).

Most national governments consider the counting of women and the measuring of their productivity a matter of low priority. Several areas of government contribute to this tendency. First, policy makers continue to resist the notion that women are economic beings and their resistance is nourished in part by the tendency of available data to depict women's productive contribution as minimal. It is not always clear whether statistics on women are ignored by planners; whether such statistics are consulted but inaccurate; or whether they are simply unavailable because they were never collected, tabulated, or disseminated (Dual Labs, 1980). Technicians resist revising current measures because (a) they are more concerned that what they measure be neat and manageable rather than that it reflect actual behavior; (b) they fear that country specific redefinitions of this concept would undermine the feasibility of international and historical comparisons of labor force data.

Empirically, we now know that the consequences of development cannot be relied upon to work to the advantage of women, particularly in the economic sphere. Special intervention is necessary to direct planners to the importance of enhancing women's productivity and encouraging their wider participation in the economy. However, employment policies to assess the need for or to evaluate the effect of current strategies for women are meaningless unless a sounder system is put into effect. Such a system must produce statistics and interpretive materials that are both accurate and useful for the design and implementation of national, bilateral, and international employment-generation strategies focused on women.

Development policies have reflected the current inadequacy of data on women's economic role, which in turn reflects the belief that women's place is in the home. Women have been targeted as concerns of development planners because of their reproductive and childrearing roles, not because of their economically productive functions. Since

the economically productive activities of women have not been reflected in censuses and world tables, development policies whose goal is to raise the standard of living of the poor have not used women's economic resources. Policy makers have not realized that women's inefficient and underpaid economic activities add to the grim overall economic picture of underdevelopment. Nor have they become aware that increasing women's productivity is crucial to improving this economic picture.

If policy is to be directed toward employment creation strategies for women, two types of information are needed: first, the extent and type of actual female participation must be assessed to develop coverage of women's work that equals that of men's in standards, concepts, and measures of productivity. That is, we need to determine not only the size of the economically active population but also its distribution by occupation and employment status³. And, second, there is need for the kind of economic activity data that make it possible to identify the determinants of the available supply of female labor. These data will serve to establish the relationship between work and employment variables and the demographic characteristics of women⁴.

The way planners interpret women's low levels of economic activity in a given population is paradoxical. For general populations, low activity rates at the aggregate level are seen as clear indications of a large surplus of available labor. However, when planners see statistics depicting low levels of economic activity among the female population specifically, they do not cite the link between low participation in the economy and oversupply of labor. Rather, they interpret women's low visibility in the work force as indicative of a shortage of female labor supply generated by cultural and familial constraints on women's entering the marketplace. Such a sex-biased interpretive stance, based on mere assumptions, has now become conventional wisdom; and it is a powerful excuse for policy makers in developing societies to ignore the need for creating employment-focused strategies for women.

Employment Issues For Women

Before we single out some of the limitations intrinsic to current operational definitions and measurement of work in standard census practices, it is necessary to state some facts about why work and women's employment are an important issue in development planning.

Women's Economic Roles: Empirical evidence shows that low income households where the only able-bodied worker is a woman are on the increase. This fact is as a result of the death, desertion, divorce, migration, or incapacitation of working-age males⁵. Where data are available, the evidence is compelling that such households are at the lowest level of poverty⁶. In intact marriages women's earnings from productive activities have also become more critical

than ever for impoverished households⁷.

Women's Earnings and Family Well-Being: Field observations imply that drastic reductions in female income generating capacity will have substantial negative effects on the welfare of most low-income household members, for two reasons: (1) Women, more than men, spend their income on their children; thus women's work status and earning capacity is reflected in children's improved nutritional status. (2) Women customarily use their earnings to obtain food and shelter rather than consumer goods⁸.

Differing Impact of Modernization on the Sexes: Recurring patterns across developing regions point to the fact that economic modernization is helping to marginalize women's work. It is squeezing women out of the formal sector into the lowest echelons of the informal labor market. The tendency in development literature, as noted previously, has been to explain women's low participation in the economy and their location at the periphery of the job market as indicative of a shortage in labor supply. Little systematic attention is given to identifying structures that restrict levels of demand for women workers, or to assessing how practices of stereotyping, or statistical discrimination⁹, operate to curtail the access of women to work opportunities.

Typically, two factors have been singled out as constraining forces: childbearing and cultural prescriptions on appropriate work for women. According to recently compiled data, however, the influence of such factors is by no means universally predictable. High fertility does not necessarily deter women's entry into the workforce. Increasingly, women, particularly from low-income groups, with large numbers of children are actively engaged in the workforce (PREALC, 1978, Peek, 1975; Pecht, 1976; Dixon, 1978; Stoler, 1977; Wolf, 1979; das Gupta, 1976; Cain et al., 1978). Neither are cultural ideals regarding appropriate work for women as deeply entrenched as postulated. Women and men have shown little resistance to redefining sex-specific work roles when confronted by factors such as economic need, labor shortage, and migration, all of which have pushed women into previously male domains. Sex designated patterns in labor market job segregation have been intruded upon not only in Latin America (Merrick and Schmink, 1978; León de Leal and Deere, 1979); but also in traditional Yemen (Hammam, 1979), Nigeria (Debo Akande, 1979) and Bangladesh (Cain et al., 1979).

Restricted Demand for the Labor of Women: Women's work is increasingly marginalized by restricted demand factors, predominant among which are high male unemployment rates and the introduction of technological innovation. High overall unemployment rates become a critical component in the dynamic interaction between sex-specific supply and demand factors,

by discriminating against women workers. Several countries indicate that overall unemployment rates function to the disadvantage of women in two ways: they lessen women's employability and encourage the growth of sexual dualism in the marketplace (Standing, 1978). There are also compelling data to show that women are squeezed out of the workforce as a result of capital-intensive development, brought about by the introduction of commercial, export-oriented agriculture and highly technical and mechanized industrial development. It is conditions such as these rather than restricted supply that have led to the pauperization of the working woman. This pauperization is reflected in the following situations:

Concentration of Women in the Informal Sector: The boundaries of informal sector activity have expanded over the last few years. Today it can include the work of all the self-employed; all jobs held at noncontractual levels; and blue-collar jobs, industrial and service work and other jobs at this level. Despite this more inclusive definition, however, women working in the informal sector have access to only the lowest status and lowest paid jobs. Though both sexes may be initially relegated to these lowest echelons, it is men, not women, who eventually display mobility by joining in the formal sector or by gaining entry into higher level jobs in the informal market (Mazumdar, 1976; Frankel et al., 1975; Lubell and McCallum, 1978). By contrast women enter and remain locked in domestic work¹⁰, street-market vending and low-level unskilled industrial jobs. For women workers the informal sector is decidedly not a springboard from traditional to modern employment; for men it is¹¹.

Women as the Lowest Earners: Women are allowed entry into jobs which pay the least by blatant exclusion from some sectors¹². Where workers are integrated, women's wages are typically one-half men's across industries and occupations (Thosangun, 1970; Nohan, n.d.; Lim, 1977)¹³. This is true even when education for both sexes is similar (Merrick, 1976). In parts of Latin America, education bolsters earnings only for males; completion of primary education leads to a 60 percent increase in men's earnings, but a 6 percent increase in women's earnings. Higher education completion still means that women receive salaries between 50 percent and 70 percent of men's. In the informal sector, women's earnings equal one-half of men's.

Unpaid Labor of Women: In sub-Saharan Africa the percentage of women who are unpaid family workers ranges from a low of 33 percent in Botswana to a high of 76 percent in Liberia; in the North Africa/Middle East region, Algeria reports 9 percent and Turkey 73 percent; in South/Southeast Asia, India 21 percent and the Republic of Korea 69 percent; and in Central/South America, the range is 10 percent in Nicaragua, Costa Rica, Honduras, and Guatemala, to 70 percent in Puerto Rico (Dixon, 1979).

Declining Role of Women in Agriculture: The work of rural women is now becoming marginalized because of their declining role as agricultural producers. This trend has occurred as a result of agrarian reform, land fragmentation, and changing systems of agricultural production. The rural woman finds herself at a further disadvantage because off-farm employment in sectors that have the potential for income generation is not sufficiently promoted for women.

MEASUREMENTS OF WORK: WOMEN'S PRODUCTIVITY

The primary source of comprehensive data on labor force participation is the population census. Some countries conduct regular and systematic labor force/household surveys to generate economic/employment data during the intercensal period.

Standard census practices use the labor force approach in collecting data on economic characteristics. According to this approach the economically active population is identified as "at work for pay or profit during a specified brief period, either one week or one day; with a job but not at work, or actively seeking employment."

The reply to this screening question determines whether or not the respondent is acknowledged as economically active or inactive. This measure, originally developed in the United States during the Depression to assess the extent of unemployment, fails to capture the reality of working conditions in the Third World which are in no way characterized by stable wage employment in the formal sector. The current concept "economically active" is inapplicable to developing economies because of the following reasons:

- a. Much of production is family based and for home consumption.
- b. The agricultural cycle generates sharp seasonal variation in activity.
- c. The length of working days is not uniform.
- d. Most wage work is for daily wages.
- e. Individuals engage not in one, but a variety of economic activities in a variety of sectors in the course of a single year.

Furthermore, the analytic concept of economic activity is often meaningless in developing economies because (1) there is no clear conception of what is and what is not work; (2) it is absurd to distinguish between labor-force and other forms of work; and (3) it is difficult to distinguish between economic and noneconomic activities in settings where the total social structure revolves around agriculture. The net result of these measures and concepts is that a gross undercount of economic productivity, and thereby of economically productive workers, occurs.

Activity rates are reported to be lower than they are in actuality; labor surplus is overestimated; and efforts to compare labor-force behavior between industrialized and developing economies becomes meaningless. The flaws intrinsic to these conventional measures are more acute for women than for men because of a deeply entrenched bias against female employment. This bias takes the form of failure to report on the productive contribution of women to economic life. Such a bias influences not only the self-reporting process--because women themselves do not consider their work to be economically important¹⁴, --but, is also instrumental in setting up the interviewer to accept a married woman's designation of herself as "housewife," without further probing into a possible distinction between the economic and noneconomic value of the activities she performs.

Statistics in Which Women Count

Women will continue to be dropped from the labor-force count unless more categories of activity status (full-time, part-time, seasonal worker, and the like) are introduced, unless occupational classifications are set up to fit the specific types of work women pursue, and unless interviewers themselves are trained and sensitized to probe into the economic value and functions of the activities women perform¹⁵.

The Gainful Worker Approach: A recent report from the Food and Agriculture Organization suggests adoption of the gainful-worker approach to improve the statistics on women in the workforce instead of or in addition to the labor-force approach (Fong, 1979). The gainful-worker approach, because it stresses the usual activity in the past year, is expected to reveal more seasonal and sporadic work than the labor force reference period of one week--which, in theory excludes all persons not working the preceding week. Given the seasonality of women's work in agriculture during peak periods, application of a one-year reference period will capture the seasonal and sporadic work performed by women, which tends to be dropped in the restrictive labor force approach. FAO has suggested that seasonal work be considered as a recurring though not necessarily a full-time activity.

Survey Methodology of Economic Activity: Survey methodology has been characterized as being a more sensitive method for the probing and identification of women's economic contributions than census data and as being capable at the same time of generating microlevel results. Survey questions can be designed to distinguish between economic and noneconomic activities, between visible and invisible underemployment and employment; and to capture the economic significance of women's intermittent work activities, their participation in informal-sector activities, and their unpaid family labor.

A comparison of census and survey findings on the question of economic activity status invariably reveals that surveys identify a larger percentage of working population than does the census. The discrepancy in results obtained is striking in the case of women. Survey results report considerably higher work participation rates for women than do national censuses¹⁶.

Screening Questions: The Latin American experience suggests that the format of the screening question on economic activity status be constructed intentionally and explicitly to single out as first priority women who work and/or are actively seeking work.

The most successful way to ensure maximum inclusion of economically active women proved to be through a format of questions that tapped women's involvement in a variety of activities, read out one by one without indicating a priority to the respondent the full range of choices available¹⁷.

THE LABOR FORCE APPROACH AND WOMEN WORKERS

A rigorous interpretation of the concept "economic activity," as utilized in the labor force approach, is disadvantageous to women because of the following:

Domestic Production

The concept excludes activities connected with domestic production which do not result in the actual production of market goods, such as personal services. The need to expand the production boundary in the statistical system to include production that brings a return, whether money, goods, or services, even if it occurs outside the conventional economy, has been stressed by economists in recent years.

Reference Periods

Women are more likely to be misclassified as economically inactive because of the reference period. To facilitate accurate recall, censuses and labor force surveys inquire about work performed

in the past week or month. Since most men work almost every week or month of the year, the short reference period will seldom lead to misclassification of men's long-term labor force status. Many women, however, work irregularly, since they either constitute the reserve labor force used to meet seasonal and other agricultural peak labor demands or engage intermittently in urban informal-sector activities. The shorter the reference period, the more likely that women appear as nonworkers, unless surveys are repeated several times a year to obtain year-round data. It is the agricultural woman worker in particular who is affected, not only because her work is highly seasonal but also because census and survey timing are planned to coincide with the low season so as not to interfere with farming activities.

International comparisons of labor force behavior are difficult to validate, because not all countries apply the same reference period to this screening question. Some use the past week, others the past year or a combination of both. Within reference periods there are additional time limits that qualify persons as being economically active. For example, Chile applies a one-day workday within the past week as a minimum limit; Paraguay specifies the minimum limit at two days and Argentina at four days. Such variations create further problems of comparability between countries.

Subsistence Activities

Women in traditional subsistence activities tend to be dropped from the labor force count. Many agricultural societies are still characterized by traditional subsistence activities, which remain outside the market but still provide for some people's livelihood. Such activities are family labor, exchange labor, and labor provided to meet social obligations. They are typically discarded by enumerators as having no economic significance. Given that the subsistence economy is mostly in female hands, excluding such forms of labor operates to decrease further the number of women reported in the statistics as being part of the labor force.

Excluding women's work in subsistence agriculture from the economically active group stems in part from problems of definition intrinsic to the census format, but part of the responsibility for omission must also be borne by the reporting process. Male respondents are often reluctant to identify the productive work performed by their women as having an economic value¹⁸. Women involved in subsistence activities perceive their productive work as part of household chores. On the crucial screening question on activity status, such women will report themselves as housewives.

Three questionnaire modules designed as time frames have recently been devised by FAO to assess more adequately women's work in agriculture, the extent and magnitude of the seasonality of

female farm labor, and the sporadic participation of rural women in the rural informal sector. These modules are designed as additions to ongoing rural labor force surveys¹⁹. In an effort to capture the female agricultural workforce, FAO recommends that a woman who worked in agriculture at any time during the year should be viewed as a contributor to the agricultural economy and that the length of her work period should be measured and included in agricultural employment statistics. In other contexts it has been stressed that indicators be developed to assess the rural woman's productivity, not only in terms of food production, but also in regard to food preservation and various forms of market participation²⁰.

Unpaid Family Workers

The category of unpaid family labor is meant to exclude household work such as food preparation and care of livestock used for family consumption, but may include similar farm activities which result in the sale of products and services.

Following ILO specifications, most surveys and censuses require that a person work at least one-third time during the reference period to qualify as an "unpaid family worker." This specification has proved to be disadvantageous to women, in that "unpaid" female workers in particular are misclassified as "economically inactive." This is in part because many women when interviewed are unable to distinguish between time allocation for economic and for noneconomic activities in the household and therefore misreport time actually spent in market-related aspects of agriculture. Likewise, enumerators biased toward the family consumption functions of women merely assume without further probing that less than one-third of a woman's time is allocated to the marketing aspects of agriculture. In either case, work time is arbitrarily set equal to zero and women are recorded as "housewives." The omission of "unpaid labor" from the labor force count stems in large part from the methodology and techniques used. When survey and census findings were compared in Sao Paulo (1970) the discrepancy in the percentages of women appearing as "unpaid family workers" was striking. The surveys, in contrast to the census, identified three times as many unpaid family workers in the 20-24 age group, five times as many in the 25-34 age group, and four times as many in the 35-44 age group.

Informal Sector

Women's work in informal-sector activities is unrecognized. A widespread phenomenon in Third World countries is the build-up of an extensive shadow economy developed as a necessary complement to expanding wage labor. Most activities carried out in this economy

sector are on the periphery of the job market and as such are often difficult to identify because of lack of industry coding by formal and informal sectors of the economy and detailed occupational breakdowns (Dual Labs, 1980).

The tendency to exclude informal-sector activities from the labor force count has led to a considerable underestimation of the number of women who are in actuality economically active. Women working in this sector have been more adversely affected than men, for two reasons: (1) where efforts are made to secure accurate statistics, it is evident that in relative terms more women than men are engaged in the informal sector (in some cities between 50 percent and 70 percent of urban women workers are in the informal labor market, compared to 12 percent to 18 percent of the urban males (Mazumder, 1976; Merrick, 1978; Papola, 1978). (2) The majority of women in the informal sector have access only to the lowest status, lowest paid jobs. Their concentration in marginal activities makes it least likely for them to be picked up by enumerators, even when extensive efforts are extended to include the shadow economy in the labor force count.

Multiple Roles

Multiple economic roles of women are not captured. According to standard census definitions, individuals are classified as economically active or inactive on the basis of a series of questions clustered around the concept of principal economic activity. In developing economies, however, the formulation of such a question does not reflect the totality of work involvement, for both sexes are engaged in a multiplicity of economic activities at different levels of productivity. A total profile of the multiplicity of economic roles cannot be captured by limiting the concept of economically active to a single activity.

In this distortion it is once more the women who lose out, because their day, more so than that of men, is characterized by a constant and subtle alternation between numerous activities with economic significance. Within the context of their domestic duties, no statistical acknowledgement is made of women who intermittently engage in small-scale trade and in short-duration income-earning activities on the borderline between housework and economic pursuits. Some of these activities, such as chicken raising, cultivating vegetables, processing food of which a part will be sold, taking in laundry, knitting, weaving, and the like contribute to GNP. To reduce such underreporting, extensive probing is needed to monitor more adequately this widespread phenomenon in developing countries. This can be done through identifying the multiple economic functions men and women perform, the working time involved in each, the income

derived, and productivity output. Such identification can be made by checking a list of activities or by recording chronologically the total spectrum of the respondent's activities per day or week.

Suggestions have been made that two more questions be added to the traditional census screening on principal activity so as to insure appropriate recognition of the multiplicity of economic roles. The suggested addition would read as follows (Population Council, 1979):

1. Do you have any other activity? If so, what is it? (To include noneconomic activities as well.)
2. How many days, or equivalent, did you devote to this activity last week?

Responses to the question on other activity can be classified according to occupation, industry sector, and employment status, parallel to the questions that follow the recording of the current question on principal activity. The function of the second question is to establish a quantitative base for weighing not only the second but also the principal activity of the respondent both in economic and in noneconomic terms (Population Council, 1979).

The Underestimation of Unemployment and Underemployment

A major objection to the standard labor force approach is that it is inappropriate for measuring two factors: (1) actual unemployment; (2) the extent and incidence of labor underutilization, where underemployment is a more widespread symptom of underutilization than is open unemployment.

These shortcomings affect men and women alike. Nevertheless, there are certain incidents where there are clear sex differences in the effect that standard labor force measures have in identifying the labor force supply of women and men in the population.

Unemployment: The common assumption is that women have lower unemployment and underemployment rates than men. This assumption is supported in part by inaccurate census data that are due to problems in measuring employment, the number of active job seekers, and labor utilization. One reason for the inadequate attention given to female unemployment is the notion that women's work is not important. Another is the impression that since female participation rates are low, the absolute number of women unemployed would be considerably less than the number of unemployed men. The facts are, however, that unemployment rates of women are higher than unemployment rates of men because of the usual preference of employers for men. This fact is concealed because statistics have underestimated the actual

rates of unemployed women--particularly those who are married. This underestimate is due to a tendency among census takers to attribute the status "housewife" rather than the status "unemployed" to married women who were not working at the time of the census count (Safilios-Rothschild, 1972).

The conventional census practice is to determine the rates of unemployment from reported "open unemployment," that is, the number of respondents who declared they were "actively" searching for work "in the previous week." But open unemployment is in fact a mere statistical artifact, dependent upon (1) the particular way an activity rate is measured and (2) the particular definition of "employment."

Many women who are unemployed are in fact not counted. The conventional practice of defining the actively unemployed as those who sought work in the previous week leaves out of the count the passively unemployed group of women: those wanting or needing work but discouraged (concealed unemployment) and the groups of women who wanted a job and would have accepted one if it had been offered. Inclusion of the passively unemployed group--group which may have more members among women than among men--in the unemployment rate would give a more accurate measure of the number of women available for employment than the strict labor force definition.

Where special efforts have been made to measure unemployment, the findings indicate the following trends:

- a. In some countries female unemployment rates are higher--sometimes two or three times higher--than unemployment rates for men, e.g., parts of Kenya, Colombia, Sri Lanka, India. (See Kenya Employment Mission, n.d.; Lubell and McCallum, 1978 for Colombia; Univ. of Colombo, 1979, for Sri Lanka; Ryan, 1979, and Gulati, 1976 for India.)
- b. Unemployment rates for women have drastically increased during the 1960-1970 decade, e.g., Morocco, Sri Lanka. (See Youssef, 1977 for Morocco; University of Colombo, 1979, for Sri Lanka.)
- c. Women at both extremes of the age hierarchy experience the highest incidence of unemployment in both absolute and relative terms compared to men, e.g. Indonesia, Sri Lanka (See Sethuraman, 1976, for Indonesia; University of Colombo, 1979 for Sri Lanka.)
- d. Female unemployment often increases with years of schooling, in both absolute and relative terms.

- e. In countries where the educational level of the unemployed is greater than that of the employed, educated women are at a greater disadvantage than educated men, e.g., Sri Lanka, Indonesia (See University of Colombo, 1979, for Sri Lanka; Sethuraman, 1976, for Indonesia.)

Underemployment: The labor force approach is also inadequate for measuring labor underutilization in low-income economics. This is due to the following:

- a. Underemployment is more widespread than visible unemployment.
- b. Open unemployment does not measure underutilization of labor.
- c. Many of those designated as "employed" are in fact underutilized by virtue of:
 - (1) Earning less than they're able or willing to (low income);
 - (2) Working at a lower level of productivity than they are capable of (low productivity);
or,
 - (3) Working for shorter periods, less intensively than they are willing or able to work (low input).

No clear assessment of the aggregate supply of female labor can be made unless a wider range of dimensions is taken into account in both the census and the survey formats, which would mark the distinction between the following:

Visible underemployment of women (i.e., women involuntarily working part time or for shorter periods than preferred).

Invisible underemployment (women employed full time but in inadequate type of work)

Disguised underemployment (women employed in jobs that do not permit full use of skills or where earnings from employment are abnormally low)

Potential underemployment (women employed in economic units whose productivity is abnormally low)

The limited efforts made in the direction of measuring women's

underemployment point to the following:

- a. In general, underemployment is higher than unemployment in developing countries, and in some cases it is higher for women than for men (Lewin et al., 1977).
- b. More women than men tend to be underemployed by reason of low income and low hours of work (this is particularly true for the married, divorced, and widowed) and by restricted access to certain jobs (Redmana et al., 1977; Hansen, 1969).
- c. Underutilization of women's labor increases with age in urban areas and decreases with age in rural areas (Redmana et al., 1977).
- d. Underemployment in rural areas is highest for women and lowest for men; the converse is true in urban areas (Berry and Sabot, 1976).
- e. The higher underemployment of rural women (compared to men) is often due to the seasonal nature of their agricultural work and to their restricted access to non-farm activities (Hansen, 1969).

Improved Measurement of Women in the Labor Force

The possible differential effect of standard labor force measures on identifying sex-specific labor force supply in a given population suggests the need for a variety of new measures of labor force involvement. Work experience notes have been identified as one measure that permits identification of the extent of contact with the labor force over a period of time and is helpful in estimating the importance of part-year workers. In addition, classification of individuals on the basis of both primary and secondary activities will also help ascertain the true extent of the labor force involvement of women. Questions designed to measure the number of non-labor-force participants who would accept a job at the going wage rate will aid in providing measures of the number of discouraged workers.

Information that will permit human capital endowments (education and training) to be related to wage rates and job characteristics will be useful in identifying underemployment problems. Thus, for example, if women with the same education and technical qualifications as men are receiving lower wages or relegated to the informal labor market, underemployment may be indicated (which may in turn be caused

by labor market discrimination). Finally, inclusion of measures of willingness and capacity to work (stated preference data), such as the amount of time workers would desire to work at a given wage, will also provide some indication of underemployment.

Including such additional labor force measures will be useful in developing policies for incorporating women more fully into the labor force. Such information can distinguish among passively unemployed, the underemployed and discouraged worker categories; help identify voluntarily and involuntarily underemployed women; and indicate whether female underemployment patterns are created by choice or imposed by women's marginal status in the work market. They will help to highlight some of the employment problems faced by women in developing countries, as well as the extent to which women are likely to respond to improvements in market opportunities.

The incidence of active and passive unemployment among women should be pursued in much greater depth. Data gathering should accurately assess the employment and economic needs of women and the available supply of female labor than is presently possible with the strict labor force definition. Thus it is necessary to introduce sets of questions into census and labor force surveys that mark the distinction between forms of unemployment among women and tabulate these by marital status and fertility.

To increase accuracy in the assessment of the available supply of female labor and of the incidence of underemployment of female labor, a wide range of dimensions need to be taken into account. The following is illustrative of some possible directions the questioning can take:

It is possible to extend the conventional labor force approach to include questions about aspirations, expectations, and intentions to gain clearer impressions of the potential supply of labor as well as the immediately available supply. Extending the labor force approach in this way allows one to analyze the relationship between present intentions (conditioned by past experience) and subsequent behavior (Standing, 1978).

Experience and Preference: Past experience and stated preferences related to work can be probed along the following lines.

- a. An assessment of past work behavior can be made by questioning the following:

Amount of time spent working in the past week;

Number of days spent working; and,

Approximate number or days/weeks/months spent in economic activities during the past year²⁰.

- b. Stated preference to work/reported capacity to work. This measure allows for:

The distinction between voluntary and involuntary unemployment among women, passive unemployment, and the incidence of discouraged workers; and,

The identification of underemployment and the assessment of whether it is voluntary.

Supply of Female Labor: Specific questions to tap the available supply of female labor can probe the following areas:

- a. Do women who are not working have free time during the day during which they could work to earn money? How much free time?
- b. What is preventing women who wish or need to work from doing so?
Lack of employment/job opportunities
Lack of education
Lack of time
Traditional attitudes and social customs
Structure and size of family or household and ages of family members
- c. What skills do women possess? What skills do they need? What kind of work would they like to do? (Population Council, 1979)

The typical question "Are you willing to work?" though an improvement over some data collection practices, still ignores the institutional constraints under which unemployed and underemployed women live and which determine or influence the conditions for their availability for work. There is need to take into account the institutional world in which unemployed and underemployed women live and relate the typical question "Are you willing to work?" to the effect a woman's job would have on task allocation in the household. This can only be done through complementary studies at the micro level that identify social and economic constraints on women's full-time wage employment. Only then can one realistically measure the available supply of female labor.

Likewise, one needs to gain insight through microlevel studies into women's underlying motivations, prejudices, and goals with respect to work and income generation capacity and to explore factors that may shape these sentiments in different ways, such as life-cycle stage, ethnic/religious affiliation, and family status.

FOOTNOTES

(1) In recognition of this, the U.S. Congress in 1973 directed AID to develop a data base on women's role in the economy. The World Plan of Action of the UN International Conference on Women in 1975 also called for an accurate assessment of women's productive contribution to the economy. In 1979 the UN issued special recommendations to national statistical offices for the 1980 census which include specific directives for improving data collection on women's economic roles. (See appendix A for summary listing of UN recommendations for the 1980 census with respect to economic characteristics of population).

(2) In their effort to reduce sex-biased stereotypes in the 1980 census round, the UN Statistical Commission has stressed the need to train more women as census enumerators, in order to collect accurate information on the sex of the de facto household head and on the various economic functions performed by "housewives."

(3) A review of 17 national censuses in the Middle East region indicate that in one-half of the cases no cross-tabulations by sex are available on the industrial classification by occupation and by employment status (Population Council, 1979).

(4) Most countries lose out on cross-tabulations of employment by marital status and fertility. Of 17 Middle Eastern countries only Syria tabulates female activity status by number of children ever born.

(5) Woman-headed households account for 35 percent of all households in many parts of the Caribbean. Between 1960 and 1970 the proportion of such households doubled in Brazil and increased by 33 percent in Morocco. The potential female heads of household as a proportion of all households is estimated at 18 percent in India, 23 percent in Indonesia, 46 percent in Botswana, 18 percent in Kenya, and 15 percent in Iran.

(6) In Santiago, Chile, a 1973 field inquiry in marginal slums showed that 29 percent of the women who headed families, as compared to only 10 percent of the men, fell into the lowest income bracket. In Guayaquil, Ecuador, a similar survey indicated that 37.5 percent of the women heads of household and 17 percent of the men heads of household fell into the lowest income brackets. A representative sample survey of metropolitan Belo Horizonte, Brazil, showed that 41 percent of the female-headed households, as compared to 26 percent of the male-headed households, were at poverty levels. Moreover, when households headed by prime-age divorced and separated women were

singled out, the proportion at poverty levels reached 60 percent. Reports from a rural income distribution survey in Botswana showed woman-headed households to be significantly poorer than man-headed ones.

(7) On the Mexican-American border zone, where male unemployment is chronically high and demand for female labor has recently increased, women contribute, on the average, more than half of their weekly wages to their households, despite the fact that 70 percent of them are single women between the ages of 17 and 25 (Kelly, 1979).

Interviews conducted among working women in Brazil, Colombia, Costa Rica, Mexico, and Venezuela reveal that their wages amount to 50 percent of the total family income, making clear the importance of their contributions to the well-being of the family group (CEPAL, 1979). Among the landless in Indonesia, women and girls work longer hours and contribute more to household income than do men and boys, especially during the slack periods of low labor demands (Judd, 1978). In Java women contribute 49.6 percent of household income and their husbands 26.9 percent; these women must seek employment outside the sphere of agriculture and successfully earn one-half of total family income (Peluso, 1978).

In Korea (Choi and Kim n.d.), Sri Lanka (Wolf, 1979), Indonesia (Stoler, 1977) and India (Safilio-Rothschild, 1980) women's economic responsibilities and contribution to household income increase as household income decreases, as male unemployment and underemployment rise, as land holdings diminish, and as the demands of urban life become more pressing.

(8) In Colombia women who worked part time had malnourished children in 52 percent of the cases; when women worked full time, the figure was reduced to 32 percent (Wray and Aguirre, 1969). In rural Kerala, India, a doctoral study conducted in 1977 showed that among landless households increases in maternal wages were significantly associated with children's improved nutritional status; in cases where women did not receive wages, increments in the husbands' incomes did not generally improve the nutritional status of the children (Safilios-Rothschild, 1980). In the Philippines, statistics show that among the lowest income families the protein and calorie intake of children with working mothers is higher than that of children of women who do not work, although the positive relationship between children's nutritional intake and mother's work is not statistically significant (Popkin and Solon, 1976).

(9) Women's limited access to certain job categories is often explained by practices of statistical discrimination by employers, where decisions regarding recruitment, hiring, job designation, remuneration, promotion, etc., are based on group-derived probabilities rather than on individual actual behavior. Employers may thus

reduce female wages, restrict women's entry to low-productivity sectors, and promote and upgrade women more slowly than men in compensation for higher fixed labor costs associated with anticipated female turnover and absenteeism.

(10) Census data for the Latin American region for the 1960-1970 decade show that of the non-agricultural female labor force, more than 50 percent were employed in the service sector, mostly in domestic service. More than 33 percent of the economically active urban female population were engaged in domestic service during the same period (CEPAL, 1978). In Brazil, 54 percent of the women working in the service sector were domestics; the corresponding figures for Chile was 58 percent; for Colombia 73 percent; and for Peru 60 percent (CEPAL, 1978). In spite of the measurement problems of the economically active population, it is still striking to consider that in Colombia, for example, close to one-half of the economically active urban women are employed as domestic servants.

(11) For additional evidence of the lower earnings of women and the concentration of women in lower level jobs see Agarwal (n.d.) for India; Boulrier and Pineda (1977) for the Philippines; Cain (1979) for Bangladesh; Deyo (n.d.) for Singapore; ILO (1979) for Egypt; ILO (1971) for Sri Lanka; Chaney (1977) for Peru; Kossoudji and Mueller (1980) for Botswana; Meesook (1976) for Thailand; Mohan (n.d.) for Colombia; PREALC (1978) for Latin America, Brazil, Colombia, Chile, Costa Rica, Ecuador, Mexico Panama, Uruguay, and Venezuela; Sethuraman (1976) for Indonesia.

(12) Bangladeshi women are excluded from wage employment in rice/jute cultivation and assigned tasks related to rice processing and seasonal labor involving the separating of jute fiber from its stalk (Cain, 1979). In Botswana, men are reserved the more attractive earning possibilities, particularly cattle raising, from which women are excluded (Kossoudji and Mueller, 1980). In Colombia women are assigned to do only weeding, transplanting, and home garden cultivation. Until recently women in Colombia could not work on coffee plantations because they "infected the crop." In India, women almost exclusively are involved in nursery bed raising, transplanting, weeding and thinning (Ryan and Ghodake, 1979).

(13) In Sri Lanka minimum wage rates for 16 out of 31 trades show blatant discrimination against women; the difference is 2 rupees daily (University of Colombo, 1979); in Kenya over three times as many women than men reported monthly earnings below 200 shillings (Kenya Employment Mission, n.d.). In Botswana, when age and education are controlled, the wages earned by women heads of household are equivalent to one-half the wages earned by men (Kossoudji and Mueller, 1980).

(14) When performing the functions of major economic provider for their families, women will still identify themselves as housewives. A recent micro survey of poor rural households in Honduras revealed that of the ten women interviewed in randomly chosen households, all ten performed, in addition to their housewife's duties, two types of economic activities for which they received remuneration. Though these women worked for pay, the open question "Do you work?" elicited the traditional response, "No, I'm a housewife" (Buvinic and Youssef, 1978).

(15) Even between one developing country and another there is little uniformity in the manner in which the operationalization and measurement of female labor is performed. All Latin American countries in the 1970's used the labor force approach; most displayed considerable uniformity in the way the screening question was posed, but differed in the interpretation of the date obtained (CEPAL, 1978).

(16) A recent household survey carried out in several South American cities reports work participation rates for women that are anywhere from 14 percent to 30 percent higher than corresponding rates reported in the respective national censuses (Recchini de Lattes and Weirnerman, 1979). In Sao Paulo (1970) a comparison of survey and census results shows that the percentage of female agricultural workers reported was four times higher in surveys for women aged 20 to 44 and 55 to 64 and twice as high for women age 45 to 64. In rural Bolivia activity rates of women age 20 to 39 were shown by a survey to be twice as high as those reported in census (CEPAL, 1978).

(17) The format used in some Latin American countries was as follows: "From the following types of activities, which one did you engage in?" A list of precoded choices is then read out to the respondent, the first set being those related to work, followed by choices directed to identifying causes for not working/being unemployed. Finally, distinct categories are set up to identify the economically inactive. The instructions are read out in a predetermined order, pausing at the first affirmative response.

(18) In a recent rural labor force survey, Syrian men were asked whether their wives "worked," to which a large number said "No." Later the men were asked: "If your wife did not assist you in your work, would you be forced to find a replacement for her?" The answer was overwhelmingly "Yes." (Population Council, 1979).

(19) Module A is structured in format, and is designed as an extension of a traditional type of survey aimed at correcting the under estimation of women's income-earning activities, using "over one year" and "the last week" as reference periods. Modules B and C collect time-use data over the entire range of market and nonmarket

activities occupying women's time, each to be used in conjunction with an annual income or agricultural survey. Module B places women's income-earning activities in the context of other time uses, using "the past week" and "the past 12 months" as reference periods. Module C employs the so-called "yesterday" method of inquiry as a reference period, which has been shown in some cases to be the most accurate way of obtaining time-use data. The method is valid only if a series of 12 reinterviews, for example, over the year can be carried out with each woman at one-month intervals over the course of the agricultural year (Fong, 1979).

(20) In rural areas only a rough estimate of annual work time can be made, though ideally one should measure degree of labor utilization by the number of hours in which women are involved in work over a year. For labor supply purposes a rough classification of annual work direction is preferable to no information and also to estimates for a short period, which are assumed to be representative of the entire year. Annual data on work duration should be obtained by interviewing the same household several times in the course of a year. If quarterly summaries are feasible, accuracy can be improved by rewording the question for annual data to refer to the past quarters (Fong, 1979).

APPENDIX A - UN RECOMMENDATIONS FOR 1980 CENSUS
(List of Tabulations Dealing with Economic characteristics)

1. Population...years of age and over by activity status, marital status, age and sex
2. Economically active population by occupation, age and sex
3. Economically active population by industry, age and sex
4. Economically active population by status in employment, age and sex
5. Economically active population by status in employment, industry and sex
6. Economically active population by status in employment, occupation and sex
7. Economically active population by industry, occupation and sex
8. Economically active population by occupation, educational attainment, age and sex
9. Economically active population by industry, educational attainment, age and sex
10. Economically active population by occupation, place of usual residence, duration of residence, age and sex
11. Economically active population by educational attainment, place of usual residence, duration of residence, age and sex
12. Economically active female population by occupation, marital status and age
13. Economically active female population by status in employment, marital status and age
14. Population not economically active by functional categories, age and sex
15. Economically active employed population by hours worked during the week, age and sex
16. Economically active employed population by months worked during the year, age and sex
17. Economically active employed population by time worked,

occupation and sex

18. Economically active employed population by time worked, industry and sex
19. Economically active employed population by monthly income, occupation and sex
20. Households and population in households by annual income and size of household

Source: United Nations. Economic and Social Council, Statistical Commission. Draft Principals and Recommendations for Population and Housing Censuses, Part 2, "Topics and Tabulations for Population Censuses," (E/CN.3/515/Add.2), 1978.

WOMEN'S ISSUES IN THE DESIGN OF PROGRESS INDICATORS
OF RURAL DEVELOPMENT

by

Mayra Buvinić and Jennefer Sebstad

The last decade saw profound changes in thinking about development processes and formulating development strategies. Recognizing that the transfer of capital and technology had not filtered down to the poor in developing countries, development agencies established a new priority: to reduce Third World poverty and improve the levels of living of the poor. A target group strategy, helping the poor directly was adopted and was soon followed by recognizing the need to have appropriate criteria to measure development progress (see, for instance, the Humphrey Amendment to the Foreign Assistance Act in McGreevey, 1980).

Parallel to this shift in foreign aid strategy, a change occurred in thinking about the determinants of development progress. There was an awareness that development, or the lack of it, was a result of a combination of social and economic factors, and that purely explanatory models that did not include social variables were inadequate to understand the process of growth (Baster, 1976).

The existing methods and measures became inadequate to express this new understanding of development factors and these new directions in development assistance. Economic measures of aggregate product, such as GNP, do not provide reliable measures of levels of living and do not translate easily into distributional measures of income and consumption. New measures are required --measures that can express both social and economic variables, capture the distribution of income and consumption, and assess progress toward an established goal. The use of socioeconomic measures for development planning and the collection of information through multipurpose household surveys and time use studies meet some if not all of these requirements.

Reflecting these changes in concepts, strategies and measures, the Office of Agriculture of the Development Support Bureau, AID, launched a Progress Indicators Project. Its purpose is to develop and use measures of levels of living to improve the ability of national planning units to define rural development problems and design and evaluate rural development programs. The project relies on a multipurpose household survey designed for El Salvador.

The objectives of this paper are (1) to establish the need to have specific indicators of women's socioeconomic participation when measuring development progress, (2) to identify priority issues in this area that need to be measured by indicators and (3) to suggest ways in which the AID Progress Indicators Project in El Salvador in particular, and multipurpose household surveys in general, can gather and use socioeconomic information on women. Because of the nature of the Progress Indicators Project, the paper focuses on the socioeconomic participation of rural women and highlights what is known about rural women's participation in Central America and the Caribbean.

THE NEED FOR NEW MEASURES

Socioeconomic indicators have two main functions. First, as instruments of social analysis they are used to explore relationships between variables relating to social conditions and social trends. They indicate the level of living of various economic groups as affected by social and economic changes. Socioeconomic indicators yield improved descriptive recording and analysis of socioeconomic changes (Yeh, 1976). Second, as tools for planning, these indicators are used to define policy objectives and program outcomes; that is, to crystallize the goal and development planning by setting targets and measure progress toward the goal in relation to the targets set (Baster, 1976).

Indicators can be seen as statistics with a meaning and a message. They reveal a socioeconomic reality behind the numbers and can convey disparities in this reality; they can become useful tools to identify these disparities and monitor progress in their eradication.

Current aggregate market-oriented indicators (GNP, balance of payments, sectoral growth rates, and the like) are particularly inefficient in describing the socioeconomic situation in rural areas where the market economy is less important; further, these indicators yield very little insight into the factors that affect the rural situation. Socioeconomic indicators can offer more sensitive measures of the level of living of particular groups, or improved distributional measures of income and consumption within the rural environment, while the time-use methodology can yield improved measures of rural productivity change. Multipurpose household surveys are one of the best methods for obtaining useful information about the poor (McGreevey, 1980).

Indicators have the potential of measuring progress toward development goals, but currently none of the poor countries have the longitudinal data needed to demonstrate the progress that has been accomplished or the degree to which particular individuals and households change their position in the income-earning structure over time. Although existing data are inadequate to judge progress in the alleviation of rural poverty, the measurement of the levels of living of different groups through socioeconomic indicators can help establish rural development targets and design development programs. The effect of programs on development progress can then be assessed.

Priority Development Issues

Women differentially affect the process of socioeconomic growth and are differentially affected by the changes brought about by it. Conventional measures fail to capture both women's contributions to development and the effect of development on women beneficiaries. This is especially the case in rural areas, where women contribute heavily to unmeasured rural productivity through home and subsistence production, and where the negative impact of development programs on women has been most extensively documented (Tinker and Bo Bramsen, 1976).

The purpose of devising specific indicators to tap rural women's economic participation includes but is not restricted to assessing women's conditions and designing programs for women. Indicators that accurately measure women's participation in rural economies will

improve measures of rural productivity and of the distribution of rural income and consumption; and, by providing dynamic indicators of development change, they will form a basis for assessing development progress. Women's work is intimately linked with the productivity issue and women's and children's welfare with the distribution issue. The next two sections examine both these issues.

PRODUCTIVITY ISSUES

National accounting systems undercount women's productive activities. Censuses and standard surveys, the building block for development planning, view women in one dimension: they contribute to development only through their reproductive functions. These aggregate statistics consistently undervalue women's economic participation by (1) failing to record women's contribution to domestic economies through nonmarket production and (2) undercounting women's participation in the market economy. These measures fail to capture information on women's productive contributions for one or more of the following reasons:

1. Questions on income and employment are often restricted to people's "principal activity." Women's principal activity is generally considered to be "housewife," even though they may generate income for the household, especially through intermittent informal activities and seasonal agricultural labor.

2. Questions focus on the "chief earner," who is generally assumed to be a man. Thus, the secondary earnings of women often go uncounted.

3. Measuring income and employment in the informal sector, where women are most active, in itself poses difficulties because of the irregular and intermittent nature of these activities.

4. The reference period of employment and income questions is often too short to account for many of the seasonal or intermittent economic activities of women.

5. Information on the contributions of unpaid family workers, which is a common role for women, is not included in many surveys.

6. Surveys and censuses do not measure women's time in household production, which may account for a considerable proportion of full household income, especially among lower income rural households.

Because the focus is on rural women, the remainder of this section expands on the lack of capacity of conventional surveys to measure women's productivity in the domestic realm (item 6 above) and in

the informal sector of the market economy. (See elsewhere in this series of papers for more detailed analyses of the failure of conventional measures to tap women's productivity in the modern sector of the market economy.)

Home Production: The farm and the household are traditionally seen as two independent units--one "productive" and the other not--whereas, particularly in subsistence and mixed economies, production central to family welfare takes place within the household. Most of the economic behavior of the poor lies outside the realm tapped by existing measurement, which, based on models from industrialized economies, considers that work takes place only in the marketplace.

The collection of information on the way people use their time offers for the first time a more realistic assessment of productivity and productivity change in nonmarket economies and of women's share in this productivity. Though the methodology of time-use studies was developed and used historically by anthropologists, economists are now analyzing time-use data to assess the household's allocation of time between home production, market production, and leisure; to impute economic value to home production; and to estimate the contribution of home production to household income.* To do the latter, economists have coined the term full income, that income which is achievable if all time and other resources of the family are devoted to earning income. Full income is either spent directly on market goods or spent indirectly by foregoing time in the market for time at home, either in home production activities or in leisure.

A principal macroeconomic reason for estimating full income is that including the value of output produced through nonmarket activities will provide a better indication of an economy's total output of goods and services than measures based on market output alone. This is particularly true in LDC's, where a sizeable fraction of output is generated through the home production process. In the United States the value added generated by the home sector seems to account for over one-third of the output produced at the market (Hawrylyshin, 1976). And in Pakistan, for a sample of urban households, home production was almost a third of GNP and GDP (Alauddin, 1980).

* Home production most often includes those "unpaid activities which are carried on by and for the members which activities might be replaced by market goods, or paid services, if circumstances such as incomes, market conditions and personal inclinations permit the sources being delegated to someone outside the household" (Reid, 1934, p. #11).

In addition, as economies industrialize and technological innovations occur, some production of a number of goods that traditionally occurred in the home is transferred to the marketplace, where economies of scale can be brought to bear. This transfer of the location of production will alter the allocation of time between home and market production and can change the nature of both nonmarket and market production over time. While the ideal is increased efficiency in both sectors, in reality it appears that technological innovations and economic changes have affected one area of production at the expense of the other. For instance, the higher productivity of labor observed in small versus large farms may have been purchased by placing a crushing burden of work on wife and children and by a demand for additional (male) children (McGreevey, 1980).

Therefore, measuring home production in LDCs will, first, allow understanding of the dynamics of development in modernizing economies. Second, it should help in designing development programs and policies that avoid unintended negative effects and make most efficient use of all available labor resources. Third, it will uncover women's role in rural development. The available evidence indicates that women and children contribute significantly to the household's full income in rural areas. In addition, it appears that women's entrance in market production has not been met with an offsetting decrease in the time spent in home production activities. Women's leisure time declines as they enter the labor market. Furthermore, these studies indicate that the leisure time consumed by men is generally greater than that consumed by women. More specifically, recent time-use surveys show the following:

1. When home production is acknowledged and added to market production, women's and children's contribution to the household (in terms of time spent at work) is often greater than men's. In a survey of urban households in Lahore, Pakistan, the nonmonetary work of housewives contributes about 38 percent of household income (Alauddin, 1980). A survey of rural households in Philippines shows that fathers contribute the largest proportion of average market income, but women and children together account for about 50 percent of this income. Further, if home production and school activities are added to market production, so that full income is considered, mothers contribute slightly more than fathers, and the average of four children per family as a group contribute more than either parent. Home production is half of these Filipino households' full income; and full income is higher, by about 16 percent, in households where mothers are employed (Quizon and Evenson, 1978).

2. In low-income LDC households women do not stay only within the confines of the home; they participate in both home and market production, and the poorer the household, the greater the time they devote

to market production. In her study of Peruvian rural households Deere (1978) shows that whereas women from the middle and rich peasantry provide only 21 percent of the total family labor days dedicated to agricultural activities, women in landless households provide 35 percent of the total labor. Cain, Khanam and Nahar (1979) state that in Bangladesh poor women spend twice the time in income earning that rich women spend. Although economic need increases women's participation in the marketplace, it seems that cultural variables influence the mode of that participation. In Peru, Deere (1978) finds that poverty breaks the sexual division of labor in the marketplace; in Bangladesh, however, Cain, Khanam and Nahar, (1979), observe a sexual division of labor that is rigid across economic class and is attributed to the power of patriarchy.

3. Women's and children's roles adapt to the differing requirements of household and market demands, while men's roles remain resistant to change. Increasing household time burdens, like the age of the youngest child or additional children, change women's and children's but not men's allocation of time between market work, work at home, and leisure (Birdsall and McGreevey, 1978; Mueller, 1970). This finding is replicated in industrialized societies (Hawrylyshin, 1976).

4. Women tend to work longer hours and have less leisure time than men. In Burundi, women rise half an hour earlier and during the day have more than an hour less leisure than men (Agripromo, 1979). In Upper Volta, the working hours of a small sample of rural women exceed those of men by about 27 percent; men, on the average, have two more hours of leisure per day. The greatest difference is that men take longer rest periods than women (McSweeney, 1979). The same is found in Botswana, where rural women appear to work 20 percent longer than men and have 20 percent less leisure (Kossoudji and Mueller, 1980).

5. Contrary to the evidence from industrialized societies that show trade-offs between women's market work and fertility, women in poor LDC households seem not to confront trade-offs between child care and market work, or at least between the former and market work close to home. When women enter the labor market, it is leisure time rather than home production that is reduced. Employed wives in Pakistan carry out market work at the expense of housework and leisure rather than child care (Alauddin, 1980). It is leisure that responds and adapts to time requirements. The demand for household income makes women's market work a necessity. There is no choice not to work for wages, nor is there surplus income to purchase household services (Mueller, 1980). In addition, responsibilities for household services frequently fall on other members of the family. Women who work in the marketplace may spend significantly less time with their children (Popkin, 1978); in this case, however, older children will often

replace mothers' child care and/or housework time (Oppong, 1980; Safilios-Rothschild, 1980).

Information on the productive activities of women within domestic production is particularly relevant to the design of interventions that seek to raise household income by (1) reducing the time requirements of household production, (2) increasing the efficiency, output, and returns of economic activities in which women currently engage, (3) transforming subsistence activities into income-generating activities, and (4) creating new employment opportunities for women (Dixon, 1979).

Market Production: Censuses also seem to systematically undercount rural women's wage labor in agriculture. Evidence of this is found in Brazil (Lewin, Pitanguy, and Romani, 1977), Colombia (Deere, 1979 personal communication) and Honduras (Buvinić, 1978). The discrepancy in the reported number of economically active Brazilian women between the population census and the agricultural census --the second reported a much higher number of working women than the first --is particularly salient for the 1950 population census, which defined employment by principal activity. Within a region of Honduras, estimates of women's wage labor in coffee and tobacco plantations, obtained by interviewing employers, yielded a figure of 10,000 workers more than the 1974 census, which had registered only 600 women working as wage laborers.

The productive activities of urban women are also underrepresented in censuses and surveys. Latin American women in particular have high participation rates in the informal sector in urban areas. Merrick (1977) reveals that 54.1 percent of the workers in the informal sector in Belo Horizonte, Brazil, are women. In Lima, Peru, even when women working as domestics are excluded from the definition of informal sector, 40 percent of the remaining informal labor force, 60 percent of the self-employed, and 18 percent of the formal sector workers are women (Mazumdar, 1976). Nolasco (1977) similarly shows the important economic role of urban women in a study of low-income families in four Mexican cities. Although in more than 80 percent of the families interviewed there was a male resident, in more than 40 percent of them the mother worked for wages. The important economic role of urban women in El Salvador in the informal sector is reflected in a World Bank report on a credit project in San Salvador (Blayney, 1978). The report indicates that over 80 percent of the recipients of loans for small business development are women. They are most often operating the smallest businesses, such as stores, family food services, clothing production, or handicrafts; and the majority are household heads with numerous children and overall financial responsibility for their families. The productive activities of rural women in Latin America are mostly unrecorded; this "invisibility," however, does not mean that they are less pervasive than the informal activities of urban women.

DISTRIBUTIONAL ISSUES

Aggregate measures of production do not translate into knowledge of distribution of income and consumption. Multipurpose household surveys provide household income and expenditure data which have been used to assess income distribution and measure absolute poverty. It is argued that these surveys are essential for studying the socioeconomic determinants of poverty and introducing measures to alleviate it.

As they are currently conceived, however, multipurpose household surveys fall short in reflecting the distributional issue--in measuring income disparities or poverty. Multipurpose household surveys share with more conventional methods like censuses two short comings in portraying the full extent of income disparities. First, they are not equipped to tap de facto family structures; and in developing countries, as in developed ones, such changes in family structure, portrayed by the rise in female headship, are bringing a decline in family income for poor households consistent with rising individual incomes (Buvinić and Youssef with Von Elm, 1978; McGreevey, 1980). Second, these surveys fail to probe below the household level to determine the distribution of consumption within the family unit, whereas sex and age are a much more important distributional criterion in low-income than in high-income households, and unequal treatment under scarcity conditions spells the difference between "survival and starvation, illiteracy and education with a chance to break away from generational poverty" (Safilios-Rothschild, 1980).

Defining the Household Head

The problems that censuses and surveys have in identifying women heads of households center on the difficulty of defining the term.

1. The term head of household can have more than one meaning (e.g., cultural, economic), and in many cases the definition is ambiguous. Of 16 countries defining head of household in their census manuals, eight followed the United Nations definition which says that head of household is that person designated as such by household members. Four had other highly imprecise definitions (such as the definition of the 1970 Brazil Census: "that person responsible for the family") and another four identified the head of the household as "that person who generally provides the chief source of income for the household unit". The definition would have been a specific, operational definition of a de facto head of household, if the four countries using it had not added the following qualifier: "or who is regarded as such by other household members."

2. In many surveys the definition of household head is left up to the respondents or enumerators, which introduces cultural biases

into the data. For example, in Latin American societies--where male supremacy is the cultural ideal--in the absence of the father, a son 12 years of age, instead of a wage-earning mother, may be cited or cite himself as a household head. And it is likely that a wage-earning mother will continue to identify herself as "housewife." The result of these responses is a gross underestimation of the number of women who are de facto heads of household.

3. When male household members are questioned on the activities of all household members, the likelihood of underreporting women's roles as de facto household heads increases. For the same cultural reasons that underly male supremacy, a man will report himself as the head even if he is not the main contributor to household income. This may also result in misreporting by men of women's (and children's) earnings and thus create further problems in determining household income.

In addition, surveys that use the household as the unit of analysis do not allow for considering the changing structure of households over time nor for identifying the composition of households where the functional and residential boundaries do not coincide.

Households Headed By Women

Women headed households account for a significant proportion of households in the Third World, and their numbers are increasing rather than decreasing with development "progress." They are found most often among the poor. Estimates of the number of households headed by women in El Salvador range from 29 percent to 45 percent. The number of women household heads in one World Bank financed housing project in El Salvador is 43 percent compared to 39 percent outside the project area (J. Otterbein, 1979, personal communication).

In Santiago, Chile a recent field inquiry in marginal slums showed that 29 percent of the women who headed families, as compared to only 10 percent of the men, fell into the lowest income bracket. In Guayaquil, Ecuador, a similar survey indicated that 37.5 percent of the women family heads, but 17 percent of the male, fell into the lowest income brackets. A representative sample survey of metropolitan Belo Horizonte revealed that 41 percent of the female-headed households, as compared to 26 percent of the male-headed households, were at poverty levels. Moreover, when households headed by prime-age divorced and separated women were singled out, the proportion who were at poverty levels reached 60 percent (Merrick, 1977). Reports from a rural income distribution survey in Botswana shows woman-headed households to be significantly poorer than man-headed ones (Kossoudji and Mueller, 1980). For 15 Commonwealth Caribbean countries, 59 percent

of female-headed households and only 21 percent of male-headed households reported "no income" or "income not stated"; on the other side of the spectrum, 54 percent of the male-headed households earned a thousand dollars or more per month whereas only 31 percent of the female-headed households earned this amount. While the data available for Latin America is mostly urban, along with rural labor migration of men one can also expect rising numbers of rural households headed by poor women.

The failure to identify these households is increasingly becoming a failure to identify households that would fall at the lower end of the income distribution scale within a country or a region. Additionally, ignoring these households is ignoring the operation of critical mechanisms of poverty and survival.

Recent studies among poor families in Central America illustrate some of the dynamic forces operating within these households. López de Piza (1977) identifies two types of family structures in Costa Rica where the woman clearly is the head of household. The first is the matrifocal structure. In her sample of eighty-two women, she finds that 39 percent of these women belonged in matrifocal families. The matrifocal family is formed around the women, generally the mother, and develops an organization in which the economic survival of the family group is assumed by the matriarch. In order to survive, however, all members of the family--the woman and her children--work. Their work is family enterprises, where generally the goods produced by the mother are sold or distributed by her children. The second type is the "queen bee" family structure that is present in 12.2 percent of López de Piza's sample. This family is composed of women united by kinship ties. The grandmother assumes the housewife role, administers the income, and takes care of her grandchildren. The daughters (alone or abandoned) leave their children in the charge of the grandmother and pool their salaries to sustain the family group. Their income is generated by participating in either the formal labor market or the product market.

In a study of 197 low-income households in San Salvador, Nieves (1977) established that 77 percent of the households were formed by a couple with their children and 21 percent were formed by people united by kinship rather than affective (i.e., marital or consensual union) ties. At the time of the study, the arrangements among this latter group included households of two or more women united by kinship ties with their children, households of two or more women with their children and with adult men relatives, and households formed by women alone with their children and older parents. The organization of these households was flexible, their composition could change rapidly over time, and they appeared receptive and adaptive to changes in household composition. It was also found that men frequently visited the women-only households and sporadically contributed to the family's income. In all these households both men and women worked and had

more than one occupation. According to Nieves, the fact that household groups united by kinship ties allows for multiple occupations gives women the flexibility to combine their mother and worker roles; and as such, these households are more functional in situations of high unemployment.

Below and Beyond the Household

Whereas the models on which household surveys are based assume homogeneity below the household level, the time-use data reviewed earlier show that work and leisure are not equally distributed within the household. Work burdens are not equally distributed among males and females within the household, nor is income equally invested in assuring the well-being of household members. In the Philippines, for instance, families spend more on food for boys than for girls (400 and 287 pesos, respectively); and on schooling parents spend 281 pesos annually for the education of boys, but only 152 pesos annually for the education of girls (Navera, 1978). The unequal distribution of resources within the household among male and female members defines and reinforces a vicious circle of poverty for women among the poor (Safilios-Rothschild, 1980).

A mechanism women often use to cope with this poverty is found beyond household unit. Support systems involving the transfer of money, goods and rights, the trading of labor services (i.e., child care) and rights to employment and visitation (in seasons where food may be scarce), all between relatives and nonrelatives who do not live together, are an important way for the poor to avoid some of the worst aspects of poverty. These support systems, however, are not considered in analyses of welfare, because they involve people who interact with others beyond the confines of the household, which is the standard unit of analysis (Birdsall, 1980; Oppong, 1980). It is critical to devise measures to tap these private support networks, because with socioeconomic development they are vanishing and are not being automatically replaced by public networks (Mueller, 1978). Development programs need to understand the effect of support networks on women's productivity, income, and family welfare, as well as the effect of development on existing support networks.

MEASURES THAT COUNT WOMEN: METHODOLOGICAL SUGGESTIONS

The models guiding the collection of reliable information in rural areas need first, to consider the household as a productive unit. Second, they have to overcome stereotyped notions about the structure and composition of households. Households are not always ruled by a stable male authority, nor do they have stable boundaries and/or membership. Third, these models need to allow for the fact that, within the household, work and benefits often are not shared equally among members. The incorporation of these social dimensions into economic

models will improve economic measures of productivity and income distribution and the explanatory power of these models, and it will also yield useful data for policy and planning.

From Home to the Marketplace

The measures used should be expanded to include sensitive measures of home production that can portray shifts in the location of the production of goods and services from home to marketplace. These measures should be based on empirically derived definitions of home production and leisure activities. When categorized by sex, measures of home production can:

- a. Yield the intrahousehold division of labor by sex and indicate the importance of economic and cultural factors in defining what is appropriate work for women
- b. Identify home production activities which are inefficient and the technology necessary to improve their productivity
- c. Check the sensitivity of labor force participation measures in recording multiple earners within households
- d. Reveal changes over time in women's participation in the modern sector of the economy
- e. Make possible the identification of areas for women's incorporation into the market economy.

Multipurpose Household Surveys

Women's economic activities: The design of multipurpose household surveys should give attention to the following areas (see Anker, 1980 and Mueller, 1978, for detailed methodological suggestions):

1. The definition of employment should be expanded beyond the "principal activity" of the "chief earner" to include the economic activities of all household members. Questions probing the existence of multiple jobs and work activities within the home need to be added. This information is fundamental in revealing secondary occupations and unpaid family work and creating a more comprehensive picture of production within the household.
2. Analysis of wage rates, annual earnings (for those in the informal sector who do not have wage rates), income in kind, and amount of time worked should be further emphasized.

3. The time frame of the reference period for employment and income questions should be long enough to account for the seasonality of labor. This is particularly important for women, who may be called upon when seasonal labor demands are high. The sexual division of labor may be structured so that women's jobs are intermittent and of limited duration. Attempts should be made to get at the amount of time women devote to market work over the period of a year. Ideally, this could be done through quarterly surveys with three-month reference periods for these questions.

Additional areas related to income and employment that should be covered in surveys to assess the institutional and economic environment of communities include the following:

4. Information on private support systems that represent transfers of goods, services, or cash is relevant to the household's and women's economic status, because these systems provide an important source of income, particularly for women in poor households. The characteristics of givers and receivers, the likelihood of women's using these systems, and the dependability of transfers should be considered.
5. Sex differences in access to formal sources of capital and types of technology should be identified.
6. Data on the time required for household work and child care should be collected. Time-use studies can assess the distribution of time between household work, child care, and income-earning activities and time use by various age and sex groups in the household. The impact of family composition and time use on household income can be a further focus of study.
7. Information on the location and setting of women's work (e.g., work at home, work away from home, child care arrangements, scale or size of workplace) is valuable because it is related to modernizing influences, fertility decisions, time and skills required, and wages.

8. Migration patterns by sex and marital status of the migrant, number of dependents, and reasons for migration should be identified.
9. Community-level information that can also be useful for studies of the economic and institutional constraints faced by women include:
 - a. the sexual division of labor in the market (in agricultural and nonagricultural activities) and the household, and the prevailing wage rates for men, women, and children;
 - b. the differential access of women and men to transportation, housing, water, electricity, and sanitation; and
 - c. the differential access of women and men to health services and education.

Structure of Household: For a more valid and useful representation of household structure, and of woman-headed households in particular, the design of multipurpose surveys should emphasize the following:

1. A clear and unambiguous definition of head of household--such as the person with the main economic responsibility for the household--is needed in surveys. The lack of such definitions in most surveys poses difficulties in analyzing household structure or changes in household structure over time.
2. Information, especially related to work (which could determine de facto household headship), should be obtained directly from household members to whom the information applies. Surveys that obtain information on women from male household members have problems for the following reasons:
 - a. Women are likely to know more about their own work and experiences than men, especially women in consensual unions and women other than the respondent's wife. This is particularly important among women who keep their economic affairs separate from their husbands;
 - b. Attitudinal data, if collected, must be obtained from women themselves. In these types of interviews women interviewers are desirable.

3. Care should be taken to ensure that survey samples include all kinds of women, especially women who are not wives of male household heads. Adequate representation should be given to the following groups:
 - a. Women household heads (distinguishing between those who have never married, and those separated, divorced or widowed)
 - b. Unmarried daughters of working age (over 14) in nuclear or extended families
 - c. Mothers, mothers-in-law, and other female relatives of household heads
 - d. Women living in rented rooms, rooming houses, or dormitories in urban areas
 - e. Women household members left behind with male migration.

Applications: El Salvador Household Survey

The Annex at the end of the paper contains a copy of the questions (in Spanish) included in the El Salvador household survey to measure economic participation and household structure. Below are suggestions to cross-tabulate and analyze some of these questions. The objective of these suggestions is to obtain a better understanding of the productivity and distributional issues as they relate to women.

The survey does not cover adequately the productive areas in which women are most active--within the household, as seasonal laborers, in informal activities, and as unpaid family workers--for several reasons:

1. The length of the reference period for employment is one week. This is too short a period to account for seasonal labor (this is especially relevant in rural areas where women are employed during peak periods of labor demand) or for irregular or periodic employment in informal-sector activities such as marketing, trade, or small-scale production. As this may result in underreporting of women's activities, the question related to employment and income should be interpreted with caution.
2. Respondents are given little opportunity in the survey to expand on secondary activities and on activities

as unpaid family workers. The secondary employment question (number 8) asks for a simple yes or no response to whether or not the person has any work besides the principal employment and asks what are the earnings from his work. To provide more useful information, this question should be expanded to include questions on the number and types of activities, the income derived from each of these activities, and the amount or percentage of time spent by each household member in these activities.

3. Survey question number 3 reflects the lack of emphasis on productivity within the household in the survey. The respondent is asked in this question if he/she worked in the preceding week without counting household work. If a man or a woman has only worked in the household, no other questions are asked regarding the actual or preferred number of hours and days worked. In the absence of subsequent questions on time use, the current survey fails to account adequately for the nonmarket productive contributions of both men and women. This is particularly important in rural areas, where household productivity accounts for a significant proportion of income in poor households.

Despite this restriction in measuring productivity, some of the basic information provided by the survey is potentially useful for analysis when broken down by sex of household head and sex of household members. Suggestions for analysis of the data include the following:

1. Test the validity of the question on household head. As a household survey, the questionnaire in general lends itself more to the analysis of woman headed households than to woman in households headed by men. But because a definition of household head is not provided in the questionnaire, the validity of the responses to this question should first be tested either through (a) reinterviews of a subsample of households, in which an explicit definition of household head is provided and the results are compared with the responses to the current survey or (b) cross-tabulation of two variables provided by the questionnaire: sex of household head by sex of main earner. If there is no correspondence between these two variables, we recommend using the sex of the main earner and/or marital status (where divorced, widowed, and separated women and single mothers would be classified

as household heads) as a proxy for household head. If there is a relationship between these variables, we recommend using the current designation of household head as the basis for further analysis.

2. Analyze differences between woman and man-headed households cross-tabulated by rural/urban with respect to:
 - a. Total household income
 - b. Number of household members
 - c. Dependent/earner ratios
 - d. Employment status of household members (i.e., employed or unemployed).

Although the survey does not cover all of women's work, it is important to look at that which is covered and to analyse sex differences in employment and income provided in the data.

3. Analyze sex differences in questions on employment:
 - a. Employment status (questions 2 and 3)
 - b. Employment history by sex (questions 6a, 6c, and 6e, on principal activity, occupational category, and age began work)
4. Analyze sex differences in questions on unemployment; in the following areas:
 - a. Rate of unemployment by sex
 - b. Time spent seeking employment by sex
 - c. Sources of income during unemployment by sex
 - d. A content analysis of question 7b--why the person has not been seeking work in the past two months--which could reveal some of the institutional constraints on women's work and the reasons women do not find work.
5. Analyze sex differences in levels and porportion of income from the following:
 - a. Principal activities (questions 6f and 6g)

- b. Secondary activities (question 8)
 - c. Other sources (question 9)
6. Analyze women's contribution to total household income.
 7. Cross tabulate all analyses by rural/urban.
 8. Develop a profile of woman-headed households according to level of household income, number and ages of household members, and rural/urban status. The objective of this exercise is to identify the poorest households and to develop a typology of a continuum of women's needs. Ideally, this typology should cover not only woman-headed households but also include women in households headed by men. Further questions geared specifically to eliciting information relevant to the needs of these groups of women can then be developed. The purpose of these more specific inquiries would be to provide information relevant to the design of policies, programs, and projects that address the needs of each of these groups.

Annex 1. Questions Included in the El Salvador Household Survey

TARJETA 2

FOLIO _____

REPUBLICA DE EL SALVADOR, C.A. Ministerio de Planificación y Coordinación del Desarrollo Económico y Social Dirección General de Estadística y Censos MUESTRA NACIONAL DE HOGARES - ENCUESTA DE MANO DE OBRA										Formulario de formularios CONFIDENCIAL: Este encuesta está autorizada por la ley. Toda la información se mantendrá con carácter estrictamente confidencial.				
Transcriba con lápiz negro de la Tarjeta de Registro de Hogares (TRH)														
REGION	URBANO RURAL	UNIDAD PRIMARIA MUESTRAL	UNIDAD SECUNDARIA MUESTRAL	No. DEL HOGAR		SEMANA	PERIODO							
FECHA ENTREVISTA		NOMBRE DEL ENTREVISTADOR								FIRMA				
FECHA SUPERVISION		NOMBRE DEL SUPERVISOR								FIRMA				
ESTADO DE LA ENTREVISTA <input type="checkbox"/> Entrevista completa → No. de línea del Informante _____ <input type="checkbox"/> Sin entrevista ↓														
TIPOS DE NO-ENTREVISTA														
A				B				C						
<input type="checkbox"/> Nadie en la casa el tiempo de la Entrevista <input type="checkbox"/> Ausente temporalmente <input type="checkbox"/> Refuso <input type="checkbox"/> Otra (ocupado)				<input type="checkbox"/> Vacante - Regular <input type="checkbox"/> Vacante - inadecuado <input type="checkbox"/> Vacante - construyéndose no - lista <input type="checkbox"/> Vacante - usada temporalmente para negocio o almacenaje.				<input type="checkbox"/> Demolida <input type="checkbox"/> Casa, tienda, trailer, mudada de sitio, etc. <input type="checkbox"/> Negocio o almacén permanente.				<input type="checkbox"/> Otra (Especifíquese) _____ _____ _____		
PARA USO DE LA OFICINA SOLAMENTE														
CARACTERISTICAS PERSONALES (Para menores de 10 años de edad de la TRH)														
No. de línea (Rubro 2)	Parentesco (Rubro 3)	Sexo (Rubro 4)	Estar en Años cumplidos (Rubro 8)	Estado Civil (Rubro 9)	Analfabetismo (Rubro 10)	Grado y tipo de enseñanza (Rubro 11)		Total años de estudio (Rubro 12)		Estudio actual - momento (Rubro 13)	Centro enseñanza (Rubro 13a)	Jornada Clase (Rubro 13b)		
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
				0		7				0				
				0		7				0				
				0		7				0				
				0		7				0				
				0		7				0				
				0		7				0				
				0		7				0				
				0		7				0				
				0		7				0				
OBSERVACIONES: _____														

DE 10 AÑOS DE EDAD Y MAS

<p>6. EMPLEO PRINCIPAL 6a. ¿Qué clase de trabajo realiza? (Describe cuáles son los principales, funciones, labores, tareas que realiza en su ocupación)</p> <p>270 <input type="checkbox"/> Nunca trabajó</p>	<p>48,47,48</p>	<p>7a. ¿Aceptaría... trabajo ahora? (en las condiciones normales de trabajo?)</p> <p>1 <input type="checkbox"/> SI 2 <input type="checkbox"/> TAL VEZ } (vea a 7b) 3 <input type="checkbox"/> NO 4 <input type="checkbox"/> NO SABE } (salte a 7c)</p>	<p>68</p>																
<p>6b. ¿Qué clase de actividad o industria es ésta?</p> <p>090 <input type="checkbox"/> Nunca trabajó</p>	<p>49,50,51</p>	<p>7b. ¿Por qué... no buscó trabajo en los últimos dos meses?</p>	<p>69</p>																
<p>6c. Categoría ocupacional (personas empleadas)</p> <p>1 <input type="checkbox"/> Empleador o patrón 2 <input type="checkbox"/> Trabajador por cuenta propia 3 <input type="checkbox"/> Empleado a sueldo fijo 4 <input type="checkbox"/> Obrero a sueldo fijo 5 <input type="checkbox"/> Empleado por pago a destajo 6 <input type="checkbox"/> Obrero por pago a destajo 7 <input type="checkbox"/> Servicio doméstico 8 <input type="checkbox"/> Trabajador familiar sin remuneración 9 <input type="checkbox"/> Nunca trabajó (salte a 9)</p>	<p>52</p>	<p>7c. ¿Cuándo trabajó... por última vez en un empleo o actividad que durara un mes o más?</p> <p>tocha <input type="checkbox"/> nunca trabajó (salte a 9)</p> <p>(si sucedió hace menos de 5 años, pregunte 7d de lo contrario salte a 9)</p>	<p>70</p>																
<p>6d. ¿Es (era) su trabajo</p> <p>1 <input type="checkbox"/> temporal? 2 <input type="checkbox"/> permanente?</p>	<p>53</p>	<p>7d. ¿Por qué dejó... ese trabajo?</p> <p>(describa el empleo en 6a, 6b, 6c, 6d, 6e y después salte a pregunta 8)</p>	<p>71</p>																
<p>6e. ¿A qué edad comenzó a trabajar por primera vez?</p> <p>a los _____ años de edad (si es trab. fam. sin Rem. salte a 6h)</p>	<p>54,55</p>	<p>8. ¿Tiene otro trabajo además de su empleo principal?</p> <p><input type="checkbox"/> SI → ¿cuánto asciende el ingreso por ese trabajo? \$ _____</p> <p>(dólar) <input type="checkbox"/> NO</p>	<p>72,73,74,75</p>																
<p>6f. ¿Cuál es el monto habitual de sueldo o cuánto recibe ud. de ganancia por esa actividad? Indique monto y forma de pago.</p> <p>Bruto \$ _____ Neto \$ _____</p> <p>1 <input type="checkbox"/> diario 5 <input type="checkbox"/> trimestral 2 <input type="checkbox"/> semanal 6 <input type="checkbox"/> semestral 3 <input type="checkbox"/> quincenal 7 <input type="checkbox"/> anual 4 <input type="checkbox"/> mensual 8 <input type="checkbox"/> otro } A/</p> <p>A/ Indique en qué meses recibe este ingreso</p>	<p>56</p>	<p>9. ¿Tiene... algún otro ingreso permanente?</p> <p><input type="checkbox"/> SI → (Indique tipo y monto) <input type="checkbox"/> NO (termine)</p> <p>Este ingreso proviene de:</p> <p>1- Jubilación o pensión? <input type="checkbox"/> SI \$ _____ <input type="checkbox"/> NO 2- Renta de alquiler? <input type="checkbox"/> SI \$ _____ <input type="checkbox"/> NO 3- Renta de alguna inversión? <input type="checkbox"/> SI \$ _____ <input type="checkbox"/> NO 4- Renta de algún negocio, comercio, industria, finca, etc.? <input type="checkbox"/> SI \$ _____ <input type="checkbox"/> NO 5- Otros? <input type="checkbox"/> SI \$ _____ <input type="checkbox"/> NO</p> <p>MONTO MENSUAL TOTAL \$ _____</p>	<p>76,77,78,79</p>																
<p>Mejor la equivalencia al mes de los ingresos netos recibidos.</p> <p>Ingresos netos \$ _____</p> <p>(Si es empleador o trab. cta. propia salte a 6h)</p>	<p>57,58,59,60</p>	<p>SOLO PARA PERSONAS QUE DESEMPEÑAN ACTIVIDADES AGRICOLAS</p>																	
<p>6g. Por este trabajo principal, ¿recibe regalías o bonificaciones?</p> <p><input type="checkbox"/> SI → ¿A cuánto asciende? \$ _____ (valoración mensual)</p> <p>¿En qué época?</p> <p>¿Recibe pago en especie?</p> <p><input type="checkbox"/> SI → ¿A cuánto asciende? \$ _____ (valoración mensual)</p> <p>Especifique</p> <p>MONTO MENSUAL TOTAL \$ _____</p> <p>(suma total regalías o bonificaciones y pago en especie)</p>	<p>61,62,63,64</p>	<p>10. ¿Qué producto cultiva (incluya el auto consumo)?</p> <table border="1"> <thead> <tr> <th>Clima</th> <th>superficie sembrada</th> <th>cant./unidad</th> <th>valor en \$</th> </tr> </thead> <tbody> <tr> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> </tbody> </table>		Clima	superficie sembrada	cant./unidad	valor en \$	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
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<p>6h. ¿Cuántos meses lleva trabajando (o trabajado) en esa empresa, finca, industria o actividad?</p> <p>_____ meses (salte a 8)</p>	<p>65,66</p>	<p>¿En qué partes incurrió para la producción de estos artículos?</p> <p>_____</p>																	
<p>7. (Si "no" en 6 o "nada" en 6a)</p> <p>¿Intenta... trabajar o buscar trabajo de cualquier clase en los siguientes 12 meses?</p> <p>1 <input type="checkbox"/> SI 3 <input type="checkbox"/> NO 2 <input type="checkbox"/> TAL VEZ 4 <input type="checkbox"/> NO SABE</p>	<p>67</p>	<p>TOTAL DE GASTOS \$ _____</p> <p>GANANCIA NETA... TOTAL \$ _____</p> <p>OBSERVACIONES _____</p>																	

OBSERVACIONES

CREDIT FOR RURAL WOMEN:
SOME FACTS AND FINDINGS

by

Jennefer Sebstad, Mayra Buvinić and Ilsa Schumacher*

Credit is not a panacea for the ills of underdevelopment, but it provides individuals with a way to acquire and mobilize productive resources. However, not all individuals have the same access to formal sources of credit. The restrictions the poor face in trying to obtain access to modern financial institutions limits their potential for increasing their productive contributions and further distorts income distribution and asset ownership.

Women have been and continue to be heavily involved in rural production. They need credit for the same reasons that rural men do: to increase the family's income through expanded production and investment and to improve the family's welfare through increased consumption. Restricting women's access to credit in rural areas intensifies inequality in income distribution, particularly given the rising numbers of poor households headed by women and the sexual division of labor prevalent in rural areas.

Raising the family's income by increasing men's productivity and income through credit and technical assistance (the "trickle-down" development approach) will not be effective for families without adult men, nor will it help raise the income of families whose men are absent for extended periods. Equally important, balanced economic growth cannot take place in rural areas without improving the economic contributions of both men and women, since their

*The authors would like to acknowledge the contributions of Judith Tendler and Sondra Zeidenstein in the preparation of an earlier version of this paper.

productivity lies generally in different economic areas. Men and women perform similar work only in very primitive horticultural and very advanced industrial economies. In most rural economies today there are clear divisions of labor by sex. Credit programs designed to raise the productivity of the economic activities of rural men will not affect the activities of rural women.

The expressed goal of AID's Office of Rural Development is to improve the "rural poor's access to income producing opportunities and to essential social services." Integral to this effort is the design and viable operation of credit services the poor can use easily and effectively. Before successful credit services can be designed, there is a need to know the meaning of credit for the small producer, its effect on productivity and the difference it makes to the economic viability of the poor. It must also be clear what effective access to financial resources is and what the conditions are for its creation and continued existence.

The Rural Financial Markets Project sponsored by the Office of Rural Development addresses these issues with a program of applied research and consulting. The long-term goals of this project are to help AID missions and host country governments (1) design and operate viable rural financial markets and (2) implement new and effective credit strategies, such as group lending and rural savings mobilization. One focus of the research is to single out constraints that the rural poor face in trying to obtain access to formal financial markets.

This paper explores these issues for rural credit users who are both poor and women: it identifies some of the constraints women encounter in seeking access to formal financial institutions and it stresses the constraints that are particularly limiting to women among the poor. Finally, it offers suggestions for designing credit programs for women, based on lessons learned from the informal credit systems women use and recent credit programs that have included women.

CONSTRAINTS ON WOMEN'S PARTICIPATION IN FORMAL FINANCIAL INSTITUTIONS

Credit can be used as a vehicle to raise women's productivity in both household and market activities, thus promoting increases in productivity and household income of the poor that would not otherwise occur. Women engaged in subsistence activities can use credit to make home production more efficient, commercialize certain household tasks, or do both. For certain household activities (e.g., grinding food staples by hand or fetching water) capital inputs can increase the efficiency of the activity and release women's time for income generation (i.e., credit can facilitate indirect increases in productivity by releasing women's time for income-generating work.)

In other cases, the capital provided by credit can be used directly to commercialize household production--for example, to start a cooperative day care center or a mechanized food-processing enterprise. Women engaged in market production need credit both to increase their productivity and income in traditional women's work and to use opportunities for income generation in new economic areas that are not sex-stereotyped. Credit for women in off-farm production can provide rural households with more flexibility in coping with landlessness and the instability of agricultural income.

Despite limited access to formal financial institutions, women are extensively involved in informal credit systems, in which participants include money lenders, pawnbrokers, relatives, shopkeepers, middlemen, and rotating credit associations. Women's participation in these systems, well documented throughout the developing world, shows that women are experienced in mobilizing private savings for productive purposes. As users of credit and as savers, women are particularly important resources in the mobilization of capital for rural development.

Many discussions concerning rural credit systems for women have emphasized characteristics of the users of credit and their credit needs. At this juncture it seems useful to go beyond questions such as why women need credit and for what. We already know that rural women seek and apply credit in a variety of ways. A more operational problem is that of delivering credit to those whose needs are not satisfied by present formal and informal sources. To improve credit delivery, a distinction must be made between constraints that are part of rural financial markets generally, and thus affect all rural credit users, and constraints peculiar to the characteristics of women rural credit users. Once these two areas are separated and explored, it is possible to begin formulating a strategy both for improving present systems and for resolving the constraints peculiar to women.

Rural Financial Markets

A major factor contributing to the problems women face in seeking credit is the unsatisfactory performance of financial markets as a whole, which affects the access of the poor, both men and women, to credit and savings institutions.

Over the past twenty years, strategies to accelerate economic development have often focused on the rapid expansion of financial services to particular groups among the poor. Little emphasis has been placed on mobilizing indigenous resources or on building long-term self-sustaining financial institutions. The large amounts of capital that are frequently force-fed by central banks to certain regions swamp local credit institutions. Low interest rates given

to special groups often retard savings and capital formation, cause inefficient allocation of resources, and end by fragmenting financial markets. And in many cases the absence of deposit facilities prevents the mobilization of savings for the development of solid financial markets. Additional problems include a shortage of well-trained people to fill positions in financial institutions, high administrative costs, slowness in making loan decisions, poorly designed repayment procedures, and lack of coordination between credit programs and other development efforts.

From an institutional (lender's) point of view, the consequence of conventional strategies of credit delivery to the poor is reduced program effectiveness; this in turn causes the institutions to resist lending to the poor. From the borrower's point of view, the problems that come along with conventional credit delivery strategies often result in high default rates and high transaction costs for borrowers. Higher total borrowing costs may strongly affect the willingness of the poor to seek loans from formal lenders. (Total borrowing costs include interest rates, changes in the purchasing power of money over the term of the loan, and transaction costs.) In summary, both lenders and borrowers are discouraged by current strategies: concessional interest rate policies for target groups and large lender transaction costs for servicing small or new borrowers discourage the institutions from lending to the poor; high concessional costs discourage the poor from demanding credit.

Sex-bias in Financial Markets

Financial markets have built-in sex-related biases that discourage women borrowers from obtaining access to these markets. Biases can be found in the definition of the client population, in the intermediaries, and in transaction costs.

Program orientation: The operational definition of the poor used by development and national banks seldom includes poor women; therefore capital fed through these institutions seldom reaches women. Agricultural lending is rarely aimed at women beneficiaries. As an illustration, only two of 123 small-scale farmers who borrowed from the Zambian Agricultural Finance Company were women (Due and Summary, 1979). The programs and loans of these institutions are not designed to respond to the type of work women do. Size, terms and repayment schedules of loans, and the hours of operation of the lending agency may be inappropriate for women borrowers. Banks may also require larger minimum savings deposits or down payments than those women can easily make. In many systems the repayment regulations are inappropriate in frequency and duration for women's needs. For example, in credit programs in both Africa and Asia, women have expressed a preference for paying back loans with frequent small deposits for fear that the money will be used elsewhere.

Distribution Channels: The intermediaries between the credit institution and the beneficiary (or the distribution channels for credit to the rural poor) are not designed to reach women and do not reach them. Credit to the rural poor is regularly announced through extension agents and established information networks. Most extension agents are men interacting with other men, and information networks where information on credit is usually delivered (for instance, agricultural cooperatives) are usually composed entirely or almost entirely of men.

Transaction costs: Transaction costs are usually higher for women than for men borrowers. For instance, if bribes need to be paid to the lender, women may be severely restricted from borrowing because of the impropriety of women bribing male officials. Additionally, in some countries the poor may be required to negotiate with someone outside the formal lending agency (an extension agent or a local official) before a loan application is formally reviewed. Often women are inexperienced and/or socially restricted in their freedom to negotiate with these people, who most often are men. Gifts or bribes may also be involved; again, there is a question whether women are able to afford these, or whether it is appropriate to offer them to male officials.

Two of the largest transaction costs for poor borrowers--the time and travel expense required for visiting a formal lender--are often greater for women. Borrowers of small amounts and new borrowers are generally required to visit a formal lender a number of times to negotiate a loan (these costs are incurred even if the application is denied) and to withdraw portions of it. Filling out papers, waiting in line, and traveling long distances are very time-consuming. Women frequently cannot travel alone the long distances between rural areas and banks in towns.

Lost work time, especially in peak agricultural periods, and work requirements which cannot be foregone (child care or other household tasks) become particularly important elements in raising women's transaction costs. Thus these costs are often raised to a point where, even if formal interest rates are low, total borrowing costs for small formal loans (especially costs incurred before the loan is approved, and with the chance it will be denied) make it more rational for women to seek a loan from an informal source. These restrictions and the higher transaction costs in obtaining formal credit may help explain why women are more actively involved than men in informal credit systems.

Limited Leverage of Women

The last major constraint is peculiar to women and is the result of the interaction of economic and social factors. Women

lack the leverage to demand credit both because they are poor and because they are women.

Sex segregation in the labor market and in occupational structure places women in a position of poverty where they, even more than poor men, lack profitable investment opportunities. Women's overall lower educational attainment when compared to that of men, in particular their higher rates of illiteracy in rural areas, contributes to their lacking profitable investment opportunities; additionally, their lower education level prevents them from requesting formal loans when loan procedures require reading.

Added to the lack of economic resources and the level of education required to enter the world of formal services, are social and cultural barriers that combine with economic constraints to inhibit women from applying to formal lending institutions.

A visible example of women's peculiar situation and a major hurdle to women's access to formal financial institutions is their inability to post collateral. Most individual titles to land or other property are in men's names, making women's independent access to credit impossible. Where businesses are accepted as collateral, women may not be considered good credit risks because they are engaged predominantly in small-scale, informal enterprises and do not have the documentation of formally registered businesses. Where regular salaries are required as collateral, women again fare badly, because they predominate in precisely those sectors of the economy where regular salaries are the exception.

INFORMAL BORROWING SYSTEMS

This discussion emphasizes the elements that make informal borrowing networks viable and attractive sources of credit for women. We attempt to identify these elements, understand their dynamics, and develop a strategy for incorporating the advantages of informal credit programs into the design of formal ones. In this effort, we distinguish between types of informal systems, clarify the details of their operation, explore their advantages, and provide examples to illustrate our discussion.

Relatives

The importance of relatives as sources of credit for women is widely acknowledged. Women in Bangladesh (Abdullah, n.d.) and the

Philippines (Ledesma, 1977) borrow rice from richer relatives to tide them over the last months before a harvest. Kenyan and Nicaraguan women sometimes get their start in business with loans from relatives (Okeyo, 1979; Bruce, 1979). Payment is generally in kind; and, although no formal interest is charged, it is usually implicit in the value at which the goods are priced. In Bangladesh, women borrowers are obliged to render a future unspecified service to the lender.

The advantages of borrowing from relatives are at the same time the disadvantages: Relatives are always around, and their presence and closeness make them easy and compelling sources to turn to. Yet the seeming availability of credit from relatives fluctuates, for it is directly dependent on the present supply of resources, the good will of relatives, and the number of borrowers in need of a loan at any given time. Sometimes these factors are conducive to lending, other times not. The difficulty of borrowing from relatives lies in its insecurity; borrowers never know whether they will be able to get a loan or not.

Moneylenders and Pawnbrokers

Borrowing from moneylenders and pawnbrokers is so prevalent among women that it is said to be at least as widespread a practice as among men. Reference to both kinds of lending to poor women has been made in India (Hariss, 1979; Jain, 1975) Indonesia (Germain et al., 1978; Milone, 1978); Mexico (Chiñas, 1973) and Nicaragua (Gillespie, 1977; Hagen, 1972). Moneylenders are people with ready sources of capital who are willing to lend money or goods on the reputation of the borrower, quickly and without written records.

In such a system administrative costs are low, since there is little or no paper work involved and money is immediately available. The collateral required is minimal, small amounts are obtainable, and few restrictions are placed on the use of the money. In addition, moneylenders are flexible with regard to repayment and often understanding if a payment is late.

Through pawnbrokers women can use personal items such as jewelry, ornaments, or gold as collateral to raise cash. Moneylenders offer the same advantages as relatives: repayment flexibility, little paper work, immediacy, and small loans. They also have the same relative disadvantages: women can borrow only limited amounts at any given time, and the amount available depends on the lender's liquidity. In the case of small-scale pawnbrokers and moneylenders, liquidity is often highly inconsistent.

Wholesalers, Middlemen, and Shopkeepers

Women often seek out these sources of credit for assistance in commercial activities (e.g., marketing, petty trade, sale of prepared foods) and in purchasing household items. Although these sources offer the advantage of providing women with direct assistance in meeting the family's basic daily needs, as a result women may find themselves having little financial flexibility and being perpetually in debt. Interest rates can be high, because borrowers have little choice when it comes to satisfying the family's basic needs. One reference indicates that urban women in India pay interest from these sources ranging from 10 percent per day to 25 percent per month (Jain, 1975).

Rotating Savings and Credit Societies

Women's informal savings and loan associations are common throughout the world. They have been documented in Malaysia and Korea (Aziz, 1977); Indonesia (Milone, 1978; Papanek et al., n.d.); Cameroon (V. DeLancey, 1977); Sierra Leone (Due and Summary, 1979) and Nigeria (Okonjo, 1979) among other places. These associations consist of a group of persons who agree to make regular contributions to a fund, which becomes the property of each contributor in rotation. Frequently one sex predominates, or group members all belong to the same sex. These organizations perform an important intermediate role in mobilizing capital and are often a very effective way for women to meet their credit needs collectively by providing mechanisms to both save and borrow during crucial periods. (See Geertz, 1962, for selected cases in Asia (East Java, Japan, China) and Africa (Cameroon, Nigeria); Barton, 1977, for Vietnam; and DeLancey, 1977, for Cameroon.)

A credit society in Nigeria offers a good example of the advantages of systems of this kind. The group is open to all women except those with poor credit ratings. Members deposit small sums either once a week or every other week; frequent contributions prevent money from being spent elsewhere. All members have a second member acting as guarantor for the first; if the first woman is not able to pay, the second woman assumes this obligation. Each woman in turn can take out the whole sum of money the group has collected. However, in an emergency or for special needs a woman can borrow by taking her turn earlier. In this system the negative effects of missed repayment on the accumulated savings of the group are minimized; group pressure is an additional factor supporting prompt repayment, and both measures serve to augment group savings.

Women spend their loans on clothes, food, education for their children, capital for retail and trading businesses, and building

or improvement of housing. Women seem to prefer this system, where they provide themselves with investment capital and crisis funds, to the system of the local post office savings, which requires larger deposits, does not provide for emergency and frequent withdrawals (except with a large amount of paper work and two weeks' notice), and does not permit loans. In other words, its savings and credit facilities are limited compared to those offered by the rotating credit mechanisms.

Informal Credit Systems

Advantages: The various informal credit sources offer certain advantages for meeting women's credit needs.

1. The small size of credit societies and the financial inter-dependency of the members serve to insure repayment and creates a considerable impact on the level of group savings.
2. The personal element existing between single borrowers and lenders, the flexibility of repayment schedules, the availability of small loans, and the timeliness of those loans is particularly attractive and appropriate in meeting the daily (and often unexpected) credit needs of women.
3. The freedom of rotating systems allows women independence in the use of loans and helps give them an attitude of control over credit investments.
4. From the perspective of the lender, advantages lie in the frequency of borrowing, the number of borrowers, and the low overhead costs in providing numerous small loans.

Limitations: Informal borrowing systems are limited by their high interest rates and the inconsistent and relatively small amounts available. When capital is owned by relatively few individuals, informal borrowing may be used as a lever of exploitation and may result in a vicious circle of indebtedness. The positive effects on savings rates are neither consistent nor secure; the success of a woman's investment depends on other women and on fluctuating borrowing conditions. These factors, to some extent, make for uncertainty in long-term investment and inhibit planning for future projects.

From the perspective of the lender, informal associations as well as many small-scale individual borrowers constitute higher risk. Lenders face potentially higher losses and lower earnings than do formal institutions, and they may translate this risk into higher interest rates, which then must be absorbed by needy borrowers.

Although informal credit systems are not always sufficient sources and mechanisms for the provision of credit to women, they do show that women use credit and suggest what features in a formal women's credit program would be desirable and workable. Further, they show that women save and will deposit their savings in institutions they trust. Credit programs for women that have incorporated into their design the positive elements of informal systems have been extremely successful.

CASE STUDIES OF SUCCESSFUL CREDIT PROGRAMS FOR WOMEN

Given the potential contributions of women through the use of credit, their current restrictions in obtaining formal credit, and the problems involved in depending entirely on informal sources, there is a need for planning and designing programs that better serve women's needs. Successful credit projects can provide insights and suggestions for important elements to be included in efforts to improve women's access to capital resources; these suggestions are outlined as "lessons" below and illustrated by examples.

Women-Specific Programs

Woman-specific credit programs are effective in overcoming the obstacles women encounter in mixed-sex programs designed to meet the credit needs of both men and women. Programs for women minimize unfair competition that is due to women's inexperience in dealing with formal situations, their lack of collateral, their illiteracy, and their consequent difficulties in completing the

paper work involved in loan acquisition. These disadvantages however, are minimized in woman-specific programs where women have to compete only with others of like borrowing qualifications.

The advantages of separate credit facilities for women are clearly illustrated by the Mahila Bank, or Women's Bank, in Ahmedabad, India, established in 1974 by the Self-Employed Women's Association (SEWA), a trade union of 10,000 poor women who are self-employed as vegetable vendors, junk dealers, handcart pullers, used-garment vendors, and such petty traders. The bank makes it possible for women to become shareholders for 10 rupees (U.S. \$1.32). Shareholders are eligible for loans ranging from 250 to 1,000 rupees (U.S. \$33-\$132). To qualify each shareholder needs two guarantors, usually other shareholders and borrowers. The loan is deposited in an account and withdrawn as necessary. When they receive the loan, women are issued a passbook and required to pay back a fixed amount of rupees every month. There is a one-half percent rebate if the payment is on time and a penalty if it is not.

By the end of 1976, 8,000 women members had received 3 million rupees (U.S. \$392,000) in credit. An analysis of 2,000 borrowers showed that 44 percent paid their installments on time, 43 percent missed three to six installments, and only 13 percent missed more than six. Women used the money to pay off debts or to buy capital inputs for their trade. For example, handcart pullers used loans to purchase carts that they had previously been renting for 50 rupees per month. The bank also provides an opportunity for women to save; by 1977, 719,000 rupees (U.S. \$94,908) had been deposited in savings accounts (Jain, 1975).

SEWA organized the Mahila Bank to provide credit to members who were finding it difficult or impossible to obtain loans from outside sources. National banks resisted servicing these women, in part because of the administrative problems in taking care of so many small loans and in part because of the constraints mentioned before that made these women unattractive borrowers.

Women-oriented Intermediaries

Women's cooperatives and banks perform an essential intermediary function between women clients and formal credit sources which tend to be inaccessible to women. Women's access to banks is often inhibited by their lack of history of creditworthiness, which leaves them with informal moneylenders as their only apparent recourse. Women's cooperatives and banks resolve the obstacles women encounter in formal institutions and reduce transaction costs for borrowers and lenders.

Women's cooperatives in Nicaragua provide a clear case for assessing the advantages of intermediary institutions. The Nicaraguan Foundation for Development (FUNDE) has encouraged women to form cooperatives through the extension of credit at 12 percent annual interest until each cooperative becomes self-sufficient (usually about two years). Membership began with market women; but it is diversifying to include women in commerce, small manufacture, and agriculture. The cooperatives are formed by the women themselves and have a business office, a credit manager, and an elected credit committee. The service is personal and flexible.

To be eligible for a loan, women apply to the credit manager. Their loan applications are reviewed by a credit committee of people who know the women personally and know this kind of small business. They are required to purchase at least one share, pay a service charge, and buy a passbook, for a total cost of 22 cordobas (U.S. \$3.14). After members have retained their shares for at least six weeks, they can borrow three times the amount deposited, up to 8,000 cordobas (U.S. \$1,120). (Information was not available on the interest received on the deposits; therefore comparison with official interest rates cannot be made.) Women may borrow for eight months or a year and pay 2 percent interest rate per month. Their loan is guaranteed by another cooperative member or a third party. A second loan cannot be taken out until the first is repaid. Women are using these loans chiefly to maintain and expand their businesses. Some women also use them for long-term investments in children's education and housing.

The intermediary institution not only serves as an alternative for credit seekers without other recourse, but provides a stepping-stone for direct contact with banks. When the Nicaraguan cooperatives no longer needed support from FUNDE, they turned immediately to the banks. With the experience gained through participation in the cooperative, women make stronger, more attractive credit investments from the bank's perspective. On the other hand, the bank's interaction with the women is often their first with poorer credit users. This interaction opens up the possibility of greater receptivity by banks to lending to marginal groups in the community. ¹

The Mahila Bank, discussed previously, is also a kind of intermediary organization coordinating transactions between SEWA members and national banks. It too addresses the absence of facilities for meeting the needs of numerous small borrowers and the reluctance

(1) The cooperative performed additional functions by coordinating day care centers, group businesses, and political forums. (See further Bruce, 1979.)

of national banks to absorb credit risks and high administrative costs. The bank has allocated eight staff members to address the needs of clients through assistance in making savings deposits and in taking out and repaying loans. The staff also assist in filling out loan applications, in submitting them, and in transferring the money to borrowers.

The Mahila Bank also provides the vehicle for eventual direct contact with banks. Formal banks are willing to serve inexperienced women borrowers because loans are based on the creditworthiness of the Textile Labor Association, of which SEWA is an offspring, and not on individual women's borrowing histories. Intermediary institutions thus perform the important functions of resolving the obstacles of inexperience and lack of creditworthiness faced by many women borrowers.

The intermediary role also reduces transaction costs for both lenders and borrowers. The women are provided with a supportive and unthreatening setting in which to carry out their business. The Mahila Bank also helps women to overcome problems of illiteracy and lack of collateral. As part of a larger women's organization, it is able to use existing information and administrative channels; and it provides other important support services, such as establishing women's creditworthiness with official lending institutions (from a case study by Jain, 1975).

Innovative Repayment

Flexible repayment schedules and frequent small installment plans increase repayment rates, thus offsetting the problem of high default rates common to many small loan programs. Flexibility in repayment schedules and innovative collection procedures are important elements in the success of many credit programs, even though the resulting administrative costs may be higher for small loans. More personalized services, where grace periods and repayment schedules are decided on a case-by-case basis (as in an IAF revolving credit fund), may often contribute to greater success.

Other incentive programs also prove effective in promoting repayment. The SEWA program provides a rebate if the loan is paid on time and a penalty if it is not; women in the FUNDE program can repay in daily installments. This possibility secures against spending money in other ways. It also works against default: if there is a good deal of freedom in repayment, failure to repay becomes less excusable, and frequent small installments expand the pressure to repay.

Frequent collection is also a means of encouraging savings. The Bhagini Nivedita Cooperative Bank in Bangladesh has established piggy deposits, where a member can make minimal daily contributions

to her deposit. The bank uses the services of college students, who act as agents of the bank and collect savings door to door. They earn 4 percent on whatever is collected by them per month. The scheme has allowed lower income groups to make small daily payments with ease (5,468 depositors).

Collateral Flexibility

Repayment rates without collateral can be reliable. One of the major obstacles women face in obtaining credit is a lack of traditional forms of collateral, such as land or other property. Credit programs that either waive collateral requirements or employ innovative strategies based on resources available to women have shown women to be reliable borrowers.

The repayment rate of women participating in the IRDP in Bangladesh, where no collateral is required, has been excellent. With two exceptions, all loans due have been fully repaid. Both the FUNDE project in Nicaragua, where loans are secured by another cooperative member or a third party, and the Mahila Bank program in India, where the signature of two guarantors is required, have had successful repayment rates.

Repayment records are also good in programs in Cameroon, where credit union members borrow against their savings (DeLancey, 1977); in Indonesia, where small credit associations require only the signature of the village headman (Germain et al., 1978); and in India, where the Bhagini Nivedita Cooperative Bank takes jewelry and ornaments as a means of providing loans to women (Aziz, 1977).

For credit to be truly accessible to women, a recommendation made by the World Bank (1975, 18-19) should be emphasized: The repayment capacity of the borrower should be determined by his (her) productive capacity rather than by collateral requirements.

Credit, Technical Assistance and Productivity

Programs delivering credit to increase the productivity of work women traditionally undertake are particularly successful. Their advantage seems to lie in the direct channeling of funds into existing and accepted women's enterprises, and with it, the likelihood that the investment, because it is appropriate, will bring the return necessary for repayment. The success of such programs is maximized when they operate within an established infrastructure and are accompanied by technical assistance (e.g., extension services, new technology).

A case in point is the credit system for women created by the integrated Rural Development Program (IRDP) in Bangladesh. The

system was designed as one component of a program that is intended to expand; it is set up parallel to an existing credit system for men and functions under the same organizational and administrative infrastructure.

Women organize in village-based groups and as members are eligible for credit. The loans are initially directed to the group and later distributed to members for their individual enterprises. Government staff provide technical assistance to women in record-keeping, accounting, and developing production plans. Up to now they have also been handling the financial transactions of bank deposits and loans. Approximately 600 groups have been formed under this pilot scheme, which has been functioning since 1975 with about 25,000 members. The accumulated capital is 1,100,000 taka (U.S. \$77,193). Small loans worth 1,400,000 taka (U.S. \$98,246) have been disbursed to 6,000 members. Loans range from 25 to 500 taka (U.S. \$1.75 to \$35.00) and are given for either a year or six months. The program also provides women with credit records that they can later use at banks.

The loan program has allowed women, largely engaged in subsistence agriculture in semi-feudal labor relations, to move into the market economy. It has enabled women to commercialize their activities in subsistence agriculture, agricultural processing, livestock raising, small-scale manufacturing, and businesses.

Most notable among these small investments has been the commercialization of a traditional non-market activity carried by women, the processing and resale of paddy. With a 300-taka investment (U.S. \$42.00) to purchase paddy, women are able to earn about 300 taka a month. Before receiving the loans, women performed this same labor in other households as domestic workers in return for in-kind payments. (Because this work was not carried in the market economy before the loan was granted, it is difficult to compare the before-and-after effects of credit on costs and returns).

The expansion and evolution of the program is expected to bring modifications in the lending system appropriate to the expressed needs of the women members. Areas being explored are ways to increase loan sizes, make more appropriate the timing of loans, promote investment in agriculture-based small industries, use innovative forms of collateral, and assist the village-based groups in dealing directly with bank (Integrated Rural Development Program, 1974 to present).

The IRDP case study shows that lending directly to a small farmer's wife can increase the productivity of her work. Given the sexual division of labor in rural Bangladesh, the results of the

program are increases in productivity and net family income that would not have occurred if credit had been available only to men. The women spend their earnings on food, clothes, shelter, education for children, and buying land. As yet there is no available evidence indicating whether or how women use these profits to expand their businesses.

Another credit program which successfully met women's needs is sponsored by the Federación de Cajas de Crédito in El Salvador as part of a small-scale business component financed by the World Bank. The program is designed to provide a revolving line of credit to increase women's incomes that are derived from existing small-scale enterprises such as stores, family-based services, clothing manufacturing and sales, handicrafts, tailoring, and shoe manufacture and repair. Small loans are made available to new borrowers for working capital, the purchase of tools or equipment, or construction and improvement of workshops.

Although not originally intended as a women's program, women entrepreneurs hold 85 percent of the current portfolio of 700 loans. This is in part because women are very active in the types of businesses that the program is designed to serve, and in part because outreach efforts have concentrated in the largest and poorest settlements, where there is a high percentage of woman-headed households and women working as entrepreneurs.

Nearly all recipients are part of organized groups, which provide excellent starting organizations for other activities, such as buying, selling, saving, and technical assistance. Groups throughout the area are developing their own organizations to qualify for loans (Blayney, 1978). The program has resulted in both direct and indirect benefits. Business incomes have increased from 15 to 200 percent of pre-loan incomes, operations have diversified, loan payment defaults have been very small, and modest employment gains have been realized in a short period of time.

The program has shown that there is a large demand for capital in the low-income settlements of San Salvador and that women entrepreneurs will use credit effectively when it is available. Women are willing and able to pay market rates of interest, invest the money productively, realize increases in income, and pay back loans. The experience of the program further demonstrates the possible success of programs designed to serve the needs of a defined set of women's economic activities. Credit directed to the economic activities of women, rather than to women per se, can be an effective strategy in mobilizing resources in developing countries.

Group Lending

Group lending can be an effective way of providing credit to women. Peer pressure and joint liability in the FUNDE and IRDP programs, discussed earlier, have resulted in high repayment rates. In the IRDP program loans are secured through project funds. Although no interest is charged, women pay a 5 percent service charge on the loan, which goes into the administrative system; and in the case of default by an individual member, the group is ineligible for a second loan until all the members have repaid the first.

With the exclusion of two very unusual cases, all loans that have fallen due have been fully repaid. The default rates of most marketing cooperatives funded through an Inter-American Foundation (IAF) program in Nicaragua have been held at less than 10 percent (IAF Report, 1979). Group lending also reduces administrative costs for banks and provides an efficient means of integrating training, technical assistance, and the introduction of new technologies to women (Dixon, 1973).

The relative advantage of group lending, however, depends on the nature and location of the program. In some cases group lending has not been successful--for examples, such as in West Africa where there is high competition among women who belong to different ethnic backgrounds.

DESIGNING CREDIT PROGRAMS FOR WOMEN

Strategies for improving Third World women's access to capital resources cannot be separated from the overall development of viable financial markets. Despite the substantial amounts of money that have been fed into many financial markets, the situation of these markets is deteriorating. Default rates are high, distribution of benefits is skewed, and indigenous savings have not been mobilized. Targeting credit to women without changing existing service practices will not solve these problems, nor will it promote the success of programs for women.

It is important to stress the design of policies directed to developing overall viable financial markets that provide opportunities for borrowing and saving and that encourage the participation of all groups. An active attempt to involve women in credit systems should be a central element of this process.

Priorities for Designing Programs

We suggest the following priorities for incorporating women's concerns into the design of credit programs.

1. Direct credit first to economic activities in which women are active and have experience; e.g., agricultural and off-farm activities, such as home gardening, grain processing, and small-scale manufacturing.
2. Make credit available for opening new employment opportunities for women in off-farm activities, such as agro-industry, poultry raising, and animal breeding, particularly in areas highly dependent on seasonal agricultural income.
3. Provide credit for the commercialization of home production (e.g., food processing, clothing production, child care), insuring that the transfer of household production to the market is complemented with other supportive measures, such as the introduction of appropriate technologies, skill training, and the organization of women's community groups.
4. Promote the establishment of women's cooperatives and banks as intermediary programs to mobilize capital for women's productive activities. This can be achieved through collective efforts at both the national and local levels by government bodies, cooperatives, women's organizations and associations, credit unions, and banks.
5. Establish woman-specific credit programs, particularly in cases where women's poverty is extreme and/or where male/female interactions are socially limited. These programs should be designed as an intermediary step toward the full participation of women with men in mixed credit and savings programs.
6. Facilitate group lending and savings as a means for women to pool resources for collateral, to share the risks and benefits of borrowing, to establish savings and to overcome obstacles they may face as individuals. Group lending also reduces administrative costs for banks and provides an efficient means of integrating training, technical assistance, and the introduction of new technologies to women.
7. Make credit available that waives collateral requirements or employs innovative strategies

based on resources available to women (e.g., third-party guarantors, jewelry, ornaments).

8. Incorporate the advantageous features of informal borrowing systems (in which women are traditionally active) into the design of formal credit programs serving women, when appropriate. Examples of such features include frequent repayment schedules, innovative collateral requirements, reduced amounts of paper work and administrative procedures, and the availability of women administrators where male/female interactions are socially restricted. In many cases these features will help reduce transaction costs.
9. Expand and/or adjust the size of loans made available so that they meet women's credit needs. In some cases, the relatively small amounts of capital that may be required by women are not always available because they are administratively costly for banks. Cost-effective measures to provide small-scale loans (such as lending larger amounts to groups or cooperatives, which in turn allocate smaller amounts to individual members) should be developed.
10. Coordinate credit programs with the introduction of training and appropriate technologies, the development of women's organizations, and other support mechanisms to enhance the probability that credit will yield increases in productivity and income and to promote women's confidence and ability to participate fully in community life.
11. Develop programs that minimize time, travel, and other transaction costs for women.
12. Publicize the availability of credit through information channels that reach women. Make the appropriate necessary changes in management and delivery systems of programs of credit.

Priorities for Research

Support further research in the following areas:

1. Country-specific analyses of laws and regulations on individual ownership and banking practices affecting women's access to modern credit

institutions. It is particularly important to establish the effects of these regulatory barriers across socioeconomic groups.

2. Studies of specific woman-operated agricultural and off-farm economic activities, to determine appropriate loan sizes, set interest and repayment schedules that fit the economic features of the potential borrowers' activities, and identify specific ways of waiving traditional collateral requirements.
3. Case studies of successful woman-specific credit programs and individual women entrepreneurs, to identify obstacles women face and ways these obstacles have been overcome at the individual and institutional levels; and studies of institutional credit programs that have been successful in providing credit to both men and women.
4. Case studies of women borrowers in particular types of economic activities who have defaulted on loan repayment.
5. Studies assessing transaction costs for women borrowers.
6. Related research necessary for the efficient targeting of credit programs, including the identification of areas with a high percentage of woman-headed households; information on household composition and household production; and analyses of the relation between increases in the provision of credit and increases in productive output.

EDUCATION FOR OUT-OF-SCHOOL YOUTH:
PROMOTING THE PARTICIPATION OF YOUNG WOMEN

by

Suzanne Kindervatter

Demanding family responsibilities, acute economic need, and disillusionment with education often cause young students to leave school early in their academic careers, typically in the primary and secondary grades. The situation facing these youths, 14 to 21 years of age, is uncommonly grim. In terms of competing for employment, they are left far behind their peers; out-of-school youth have neither the skills nor the job opportunities open to adolescents who have managed to complete a high school education. Yet the future for these unskilled and employed out-of-schoolers is not hopeless; neither is their only alternative a return to formal schooling. They can compete successfully in the job market, provided that, first, they receive training in marketable areas, and second, the vehicle for facilitating this training is created.

In an effort to educate and employ idle out-of-school-youth, the DSB Office of Education has designed a project to design, test, and evaluate training methods and materials for educating out-of-school youths in facets of small business management, entrepreneurial processes, and the creation of cooperatives. Working with local organizations in two yet unidentified developing countries, the DSB Office of Education will apply the results of the project to design and test training approaches and materials. Special efforts will be made at this point to evaluate the training process and its effect on the attitudes and employment of program participants.

In its last phase the project will assemble a package of the methods and materials that youths will need in order to start and manage small businesses. The package will also include material for teachers and background, conceptual information on the educational approach, and guidelines for using the training package.

The entire project will conclude with two regional workshops conducted by the staff and youth involved in the training. Also participating in the workshop will be nonformal education practitioners from the local communities, host country government officials, and USAID personnel. Ideally, the workshop will provide a forum for discussing project results, evaluating the project's most effective elements, and disseminating the knowledge gained for use in other settings.

Concern for adolescent females* in nonformal education programs for out-of-school-youth will ultimately increase women's productive contributions to development. The objective of this paper is to highlight facts concerning female participation in NFE programs. The paper has three sections: First, an overview of the educational backgrounds of rural adolescent females; second, a framework for creating nonformal education programs that help meet the needs of these adolescents and expand their roles in development. And finally, a set of guidelines designed to assist nonformal education program planners.

EDUCATIONAL BACKGROUND OF RURAL ADOLESCENT FEMALES

The specific situation of adolescent females from poor, rural families differ considerably according to culture, geographic setting, and other factors. But, whether in Africa, Asia, or Latin America, young women express similar aspirations: They want to have better lives than their mothers, they want to help their families and their communities, they want to send their future children to school (Huston, 1979). If women

*As defined in the Project Identification Document (PID), adolescence includes the ages 14-19. However, the ideas in this paper apply to young women in their early twenties as well.

were able to accomplish these objectives, they would make a significant contribution to AID's goal of "meeting basic human needs."

However, by the time they reach adolescence, most girls are already handicapped in realizing their goals--by limited schooling, lack of marketable skills, and narrow role socialization. Then, during adolescence, they or their parents make major decisions about employment and marriage which further determine whether their aspirations will be fulfilled.

In this pivotal adolescent period, nonformal education is one means that can help to minimize a young women's past constraints and maximize her future options. NFE can also serve the same function for young men, though in most cases their constraints are less severe and their options more varied than those of young women. One educator called adolescent girls

"the group that is the critical target for intervention, the swing group that can be up-graded relatively quickly" (Derryck, 1979).

Need for Programs That Include Females

This section highlights certain facts that underline the need for educational programs and highlight the potential impact of nonformal education. Several of the facts enumerated emphasize differences between female and male educational backgrounds. Presenting these differences does not imply a portrayal of female educational opportunity as only an equity issue i.e., an issue of equal access for men and women. Female education is also a critical development issue. Increasingly, research shows that levels of female education correlate with other social and economic indicators (Youssef and Hartley, 1979). For example, "The higher the illiteracy of women, the higher the birth-rate, the lower the contribution of women to the labor force and productivity of the nation, and the lower the per capita Gross National Product".

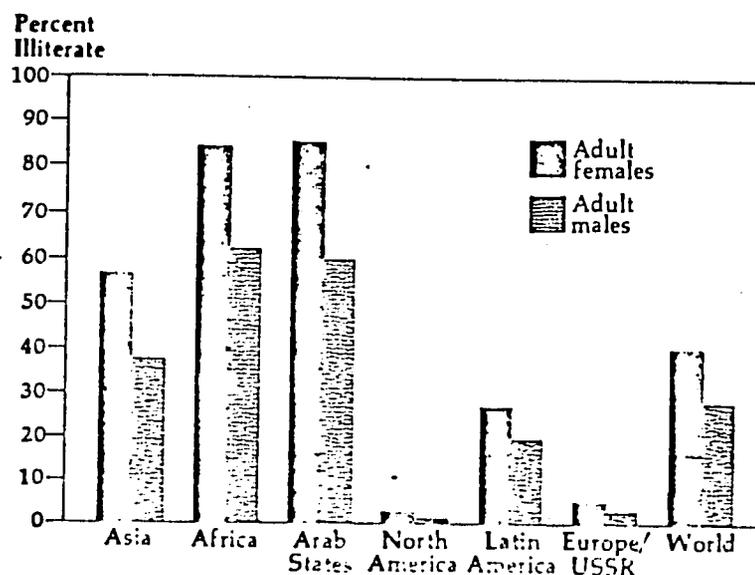
Female Illiteracy: Considerably more adolescent females than males do not know how to read and write. Of young women who become literate, many will relapse into illiteracy.

From 1960 to the early 1970s, though the illiterates in the world decreased from 39.3 percent to 34.2 percent their absolute number increased--from approximately 740 million to approximately 800 million. Among the 60 million additional illiterates there were five times more women than men. With this increase, the proportion of illiterates who are women grew significantly: from 58 percent in 1960 to about 65 percent in 1975 (Bataille).

As figure 1 shows, female illiteracy is over 80 percent in Africa and the Arab states, over 50 percent in Asia, and about 30 percent in Latin America. In each region the rate of female illiteracy is markedly higher than the rate of male illiteracy.

Figure 1

Female and Male Illiteracy Rates About 1970



Source: McGrath (1976) p. 16 (figures from Population Reference Bureau).

The highest rates of female illiteracy exist in rural areas of LDCs and in the 25 LDCs with per capita incomes of less than \$120. Countries with particularly high rates of rural female illiteracy about 1970 include Bangladesh--92.3 percent; Nicaragua--67 percent (high for Latin America); Morocco--98.7 percent and Liberia--97 percent (Unesco, 1977). The Central African Republic, Chad, and Mali are some of the very poor countries with high overall illiteracy rates: over 99 percent for women and over 95 percent for men (Unicef, 1975).

The comparative illiteracy rates for different female age groups are not available. However, some studies in Arab countries indicate that adolescent women tend to be more literate than their mothers (Youssef, 1976-77). Despite such improvements, however, cultural and social forces may hinder the retention of literacy skills. Compared to men, women lack informal learning situations beyond domestic duties and lack opportunities to read and write:

The difference between female 'literacy' and 'functional literacy' is a product not of limited female access to

formal education facilities, but rather women's relative lack of any 'literacy environment,' that is, opportunities and responsibilities in daily life geared to the uses of literacy. Thus, many girls who do become literate eventually lose their skills for lack of practice (McGrath, 1976).

Therefore, today a higher proportion of rural adolescent females may actually become literate, but the likelihood of their remaining literate is not very great.

Female Enrollment in Formal Education: Rural adolescent females are less likely to have entered school and more likely to drop out than their male counterparts.

Considerable variation in levels of female enrollment exist both between and within individual countries (for a lengthy discussion of variation and its causes, see Bowen and Anderson, 1978). However, some dominant patterns of female enrollment can be identified by examining the enrollment figures presented in Table 1 for major LDC regions of the world.

Table 1
Percentage of Eligible Age Groups Enrolled in School

Area and Sex Enrolled	[Year]								
	1965			1975			1985		
	6-11	12-17	18-23	6-11	12-17	18-23	6-11	12-17	18-23
<u>AFRICA</u>									
Male	48	29	4	58	38	8	66	48	12
Female	32	15	1	43	23	3	53	32	6
Differential	16	14	3	15	15	5	13	16	6
<u>ASIA</u>									
Male	68	35	7	70	38	10	75	42	11
Female	44	17	3	49	22	4	56	26	6
Differential	24	18	4	21	16	6	19	16	5
<u>LATIN AMERICA</u>									
Male	64	45	12	79	59	24	80	70	35
Female	64	40	8	81	54	18	88	65	26
Differential	0	5	4	-2	5	6	-8	5	9

Source: Timur (1977), p. 3.

* Not including the People's Republic of China, Democratic People's Republic of Korea, Socialist Republic of Vietnam, Hong Kong, Republic of Korea, and Japan.

In reviewing the data one should bear in mind that about 1975 only about 69 percent of all school-age children in developing countries attended some primary school. Of this number, only about 40 percent were girls (Unesco, 1977, World Bank, 1974).

The table shows that female enrollment rates have grown and will continue to grow steadily in the LDCs. However, it also reveals some inequities in female schooling:

- In each year, for each region, and at each age level, the percentage of female enrollments is less than the percentage of male enrollments--except in Latin America from ages 6 to 11.
- In Africa and Asia by 1985 only about half of all girls of elementary school-age will be enrolled, as compared to two-thirds to three-quarters of all eligible boys. Asia has a high male-female enrollment differential at the primary level, as do the Arab states. In these countries 72 percent of all males but only 46 percent of all females were enrolled in 1975 (UNESCO, 1978).
- Female secondary school enrollments in Africa, Asia, and the Arab states are considerably lower than primary school enrollments (Unesco, 1978, p. 102). By 1985 in Africa and Asia about one-third of all girls of secondary school age and one-half of all boys of that age will be enrolled.
- In Latin America more girls than boys of elementary school age are enrolled. However, the difference between elementary school and secondary-school enrollments is much greater for girls than for boys. In contrast to Africa and Asia, the greatest difference in enrollments, for both males and females, exists between secondary school and postsecondary education. In other words, the most significant attrition occurs at this level.
- Within each given year the male-female enrollment differentials increase at each higher level of schooling in Latin America.
- Male-female enrollment differentials are increasing for certain age groups: in Africa for ages 12 to 17 and 18 to 23 and in Latin America for ages 18 to 23.

As with literacy rates, the enrollment patterns described above are even less favorable for those who are poor and live in rural areas. Countries with a per capita income below \$120 have very low primary and secondary school enrollment rates for females. For

countries in the \$121 to \$250 range, female primary school enrollments are higher, but female secondary school enrollments remain low (World Bank, 1974, Annex 8).

Country-specific data substantiate the unfavorable female enrollment situation in low-income and largely rural countries. In Afghanistan, Bangladesh, Bhutan, Ethiopia, Malawi, New Hebrides, Upper Volta, and Yemen fewer than 10 percent of all girls attend primary school (Unicef, 1975). Other countries, including Zaire, Nepal and Iraq, have male-female enrollment differentials that are higher than those in their respective regions (Unesco, 1977, Table 3.2). Taking India as an example, rural female enrollments are lower than urban female enrollments (figures represent the female percentage of total primary and secondary school enrollments): primary enrollments--34.3 percent (rural) vs. 43.3 percent (urban); secondary enrollments--22 percent (rural) vs. 36.1 percent (urban) (Finn, 1978).

Discussion up to this point has focused on the low levels of school enrollment for females as compared to males, particularly in poor and rural areas. Besides lower enrollment rates, females have higher dropout rates:

"More than half of the countries that furnish Unesco with information consider the female drop-out problem to be one of the gravest difficulties confronting their national goals in primary education.

The higher drop-out rate for girls is particularly prevalent in those African and Asian societies in which gradual acceptance of primary education for girls has not been accompanied by any radical alteration in parental expectations for daughters. The potentially liberating effects of female education are diluted as girls who are encouraged to acquire basic skills in reading, writing, and arithmetic are simultaneously discouraged from putting their skills to any use that might be incompatible with early marriage or seclusion (McGrath, 1976).

Female Dropout: Dropout rates need to be determined through longitudinal studies based on cohort data, which are not usually included in national statistical surveys (a cohort analysis traces one group of students over time). However, the cohort studies available for some areas confirm the existence of higher dropout rates for girls than for boys. In Algeria, according to Unesco study conducted in 1969-70, 70 percent of the girls and 60 percent of the boys do not complete the primary school cycle (Brimer and Pauli, 1971). In India,

the primary school dropout rates are 74 percent for girls and 63 percent for boys (Finn, 1978, p. 20). Table 2 further reinforces the findings regarding the discrepancy between male and female dropout rates.

Table 2
Students Still Enrolled After Six Years
(Based on 1,000 Entrants)

Country	Males	Females
Cambodia	439	226
Benin	51	42
Libya	90	86
Rwanda	30	27
Costa Rica	67	72
Panama	73	76
Syria	80	68

Source: Bowen and Anderson (1978), p.23.

Studies have also shown that rural girls have the highest dropout rates of all groups (i.e., urban female, rural male, and urban male) and that girls in general have high rates of other forms of wastage, including absenteeism (Brimer and Pauli, 1971). But even girls who remain in school may be at a disadvantage. After primary school they are often tracked into home science programs, which limit their options for future economic and social roles.

The reasons for low female enrollments and high dropout rates fall into three major categories: economic necessity, inadequacies of schools, and tradition (Chabaud, 1970). In many countries girls must work at home and in the fields; they have insufficient time to attend school or to keep up with their schoolwork. Boys education tends to be given preference, partly because parents perceive a son's education as an economic asset but a daughter's education as a liability, in the present and in the future.

In poor families, therefore, the limited money available for school fees often goes to sons. Other parents do not send their daughters to school because the school is too far away, no female-only schools are available (in some Muslim societies), or the subjects taught do not seem useful. In addition, parents in many cultures see

no need to educate daughters who will marry early, or fear "opening their daughter's eyes." However, parental attitudes may be changing. Many of the rural women interviewed by Huston (1979) stated that boys and girls should have equal education.

What generalization based on this discussion can be made about rural adolescent females? Basically, in the poor areas of Africa, Asia, and the Middle East, the present-day female adolescent will have had a few years of primary school at the most. In Latin America she is likely to have completed primary school. These levels of educational attainment for rural adolescent females are considerably lower than the levels of their male counterparts.

Technical and Vocational Training for Females: Female adolescents have fewer opportunities than male for technical and vocational training, whether to upgrade existing work skills or to learn completely new skills.

In most LDCs vocational training for girls and women is synonymous with education in domestic science. There are few, if any, opportunities for girls and women to learn income-producing skills, even skills related to their major roles in agricultural production. A Unesco sixty-six-country survey in 1973 concluded that

Since the contribution of women to rural development is generally recognized...it is astonishing to see in the replies to the questionnaire...that the types of training envisaged for rural women are related alone to their image as wives and mothers and far less to their role in the process of production (Unesco, 1973).

In sub-Saharan Africa, females do about 80 percent of the agricultural work but make up only 15 percent of all participants in agricultural training. However, in home economics and nutrition females make up 95 to 100 percent of the participants (Derryck, 1979). According to another Unesco survey performed in forty-two countries, agricultural education reaches only fourteen girls for every eighty-six boys (Chabaud, 1970).

Figure 2 illustrates the low levels of female participation in technical and agricultural training and the high levels of their participation in service-related training. This discrepancy would probably be even greater if data for only the underdeveloped countries were presented.

For rural adolescent females a low level of opportunity in technical and agricultural training means that their potential economic productivity is severely limited. Most continue to farm in the same ways as their mothers while their male counterparts adopt new technologies. The economically active females who do not farm usually have jobs that are an extension of their domestic duties. Male-female differences in kinds of opportunities also have another. Since only females study domestic science, the girls' future husbands probably will not know about nutrition, health, or other areas important to childrearing.

In addition to lacking training for rural productivity, rural young women may not receive needed agricultural services, such as extension agent visits. In a study of 212 small farm households in western Kenya, 40 percent of which were managed by women, Staudt found "a persistent and pervasive bias in the delivery of agricultural services" that was unfavorable to women (Staudt, 1975-76).

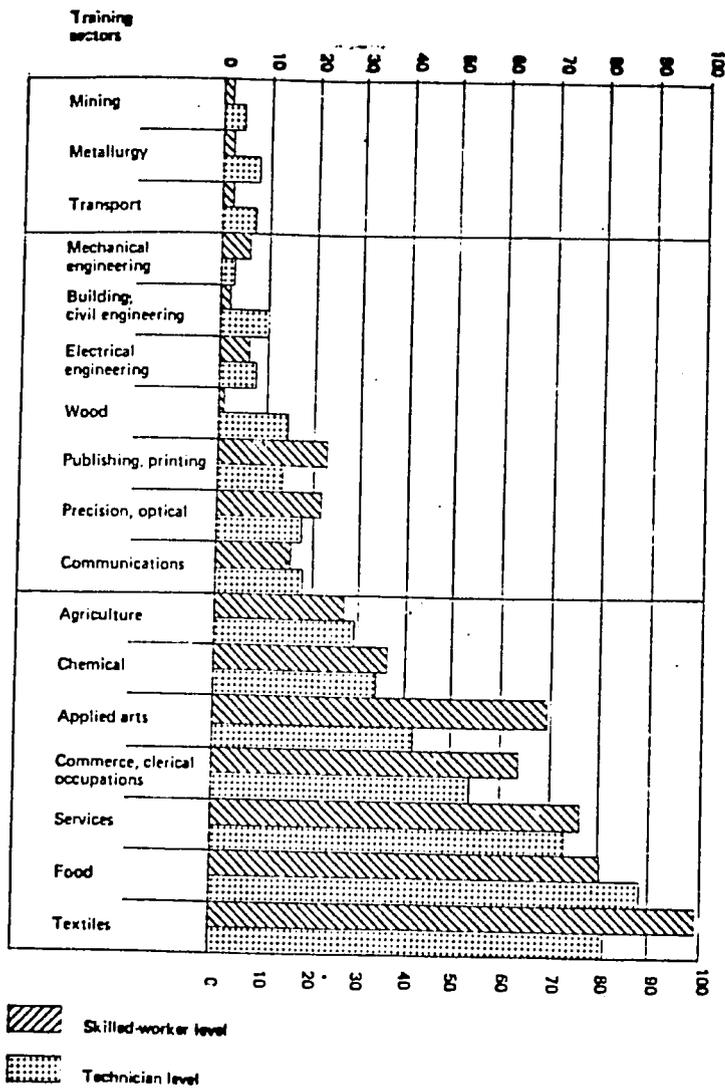
Thus rural adolescent females today are unlikely to have received either the training or the services that could enable them to increase their economic productivity and thus their incomes.

NFE Programs for Females: Nonformal education programs for rural adolescents, but particularly for females, are in short supply.

In 1973, the International Council for Educational Development conducted an extensive examination of NFE programs for LDC rural children and youths (Coombs with Prosser and Ahmed, 1973). The study found that most programs benefit adolescents still in school or those who have completed elementary school, and that "those who are most deprived in formal education are similarly most deprived of education through nonformal means". Those "most deprived" groups include preschool children; school-age children not in school; and adolescents who have not been to school or have dropped out. In each group girls were found to be particularly neglected:

The participation of girls in nonformal education programmes appears to be substantially less than that of boys on the basis of our survey. Programmes for girls and women are often a token scale and are seemingly based on the assumption that the place of rural women is solely in the home, with attention, therefore, to

Figure 2
 Percentages of Girls by Sector of Activity and Training Level
 (in 44 Developed and Underdeveloped Countries)



Source: Chabaud (1970), p. 720

such subjects as home economics, child care, cooking, and sewing.

The important economic and occupational roles played by girls and women in both traditional and modernizing rural societies, and their role in educating the next generation have been seriously overlooked, judging by the quality and extent of educational opportunities available for girls (Coombs with Prosser and Ahmed, 1973).

Thus, in nonformal education as well as in formal education and vocational training, the opportunities for rural adolescent females are seriously deficient. The lack of NFE for this group is particularly significant. NFE offers adolescent females a last chance to develop needed skills before assuming the time-consuming responsibilities of marriage and childrearing.

With NFE young women can learn or strengthen skills that they had little opportunity to develop previously. These skills enable them to fulfill their existing roles better and to assume important new roles --for instance, those in income generation and community development. Without NFE many options will be closed to these young women. Of those that marry, most will have dual work responsibilities, at home and in the fields or markets (except in some Muslim societies where women usually do not work outside their homes). They will not have the time or energy to devote to learning, and their options for new social and economic roles will be restricted. Women that do not marry or marry late are likely to find only low-paying, low-status jobs in the informal sector.

Implications of Education for Females

Fertility: A rural adolescent female's educational experience affects the number of children she will have, as well as the welfare of those children. Thus, lack of female educational opportunity contributes to the LDC cycle of poverty

While no causal relationship has been established for the effect of education on fertility in poor countries (Timur, 1977), reasons exist why female education helps to limit family size. First, education often delays marriage or increases the possibility of nonmarriage. Second, education stimulates women's involvement in extra-familial activities. Third, education exposes women to knowledge and practices conducive to adopting birth control (Youssef, 1976-77).

In Egypt and Turkey, for each level of education completed, women have fewer children. Thus, in Turkey, illiterate women average 4.2 children; those with five years of schooling, 3.8 children; those with secondary education, 2.0 children; and those with university degrees, 1.4 children (Youssef, 1976-77).

Educated mothers not only tend to have fewer children; they also tend to have more educated children. Research has shown that educated mothers are likely to have educated sons and daughters. In 1965, Unesco conducted an eight-six country study on the relationship between women's literacy and girls's schooling (Chabaud, 1970). Out of thirty-six countries with a women's literacy rate of at least 50 percent, thirty-five had a normal rate of school attendance for girls. However, out of fifty countries in which most women were illiterate, only twelve had a normal female school population (normal was defined as approximately one-third of the school population).

According to Derryck (1979). many other studies also demonstrate that "educational attainments of mothers and mothers' supervision of homework are critical variables to students' educational achievements and retention of literacy." For example, in a study of the retention rates of Tunisian boys Simmons (1976). found that the supervision of homework by mothers was a significant variable in the development of literacy skills.

A statement by the United Nations Economic Commission for Africa aptly summarizes how a mother's lack of education affects her family:

Lack of education makes it difficult for women to look after their families well, to keep them in good health, and to increase family resources through productive work in the fields, in small business, or in jobs. Uneducated women cannot help their children learn. They rarely understand the dangers of poor hygiene and poor diets. They are more likely to be constantly pregnant as childbearing is their most rewarding activity and no other options are available (United Nations Economic Commission for Africa, 1975).

The education of today's female adolescent, then, contributes both to her own welfare and to the welfare of the next generation.

Women Heads of Households: Rural adolescent females have not been prepared to help support their children. Since the number of women heads of household is increasing, this lack of preparation is especially serious today.

Most poor, uneducated LDC women work in home production or in the informal sector, as subsistence farmers, petty traders, or domestics. Censuses have often ignored these jobs and have classified these women as economically inactive. In addition, the census methods used in many LDCs have underestimated the unemployment and underemployment rates for these women (Youssef and Buvinic, 1979). If an adolescent female receives no job training, she will continue to earn either a low income in the informal sector or no income as one of the many unemployed.

Because poor families often cannot live on only the father's income, the lack of female earning power is an important problem. Because as the growing number of women who must assume full financial responsibility for their children increases, this lack becomes even more critical.

Women heads of household are defined as women who "because of marital dissolution, desertion, abandonment, absence of spouse, or male marginality are structurally placed in a situation in which they become economically responsible for themselves and their children" (Buvinic and Youssef with Von Elm, 1978).

Among the total number of potential heads of households, the proportions that are women are as follows: 22 percent for sub-Saharan Africa, 20 percent for Central America and the Caribbean 16 percent for North Africa and the Middle East 15 percent for South America and 16 percent for Asia (Buvinic and Youssef with Von Elm, 1978,). Table 2). The vast majority of these women can be found in poor rural areas.

A Mexican sociologist noted that poor women work out of economic necessity: "They have to work, because if they don't the children won't eat" (Huston, 1979). This realization supports the importance of educational opportunities for adolescent females that prepare them to earn an adequate income.

Rural/Urban Migration: More and more adolescent females are leaving rural areas for towns and cities. The kinds of educational opportunities available to young women help either to limit or to promote their rural exodus.

Though specific patterns vary in the various LDC regions, the flight of young females from rural areas is on the rise and becoming a stable trend among migration movements in the Third World. Economic factors have attracted and continue to attract large numbers of young women to the Latin American metropolitan centers. For instance, in 1970, 56 percent of all migrants to Bogota, Columbia, were women; and young women outnumbered young men in the 10 to 19 age group by a ratio of 10 to 60. African rural women are also drawn away from home toward

better jobs and lighter workloads in the African cities and towns. In Nigeria, Kenya, and Rwanda, in particular, rural-urban migration of adolescent females has increased. For cultural and socioeconomic reasons, differential female migration in parts of Asia (e.g., India) tends to be less than in Africa. But it is significant in some areas: from about 1965 to 1970, 150,000 females, compared to 145,000 males, migrated from Thai Villages to Bangkok (Youssef, Buvinic and Kudat 1979).

Many factors contribute to migration; but in general, youth, education, and urban contact increase an individual's propensity to migrate. Young women who have received some education often have expectations that they believe cannot be met in rural areas. They want more education, wage employment, and sometimes a degree of personal freedom. However, these young women also face frustration in the cities. Having no skills suited to the urban labor market, most of them work in the informal sector in low-pay, dead-end jobs, usually as domestics or laborers (the latter, particularly, in Asia); others become prostitutes. Once they have begun these jobs, the young women have little chance of finding better employment. Their opportunities for training, compared to men, are extremely limited.

In short, migrant women pose a special problem because they were not taught useful skills while living in rural areas and because they do not have the means of learning useful skills and thus entering the formal sector once they have moved to the city (Youssef, Buvinic and Kudat 1979).

Specially designed nonformal education may have some influence on the migration of adolescent females (as well as males). Depending on a country's policy on migration, education can encourage young women to stay in rural areas or can prepare them for urban jobs and living. If a country wishes to discourage rural-urban migration, it first should realize that expanding existing formal school programs will probably encourage the exodus. However, rural females may be less likely to migrate if educational opportunities are provided that enable them to earn better incomes and to improve their standard of living. On the other hand, if a government wants to promote migration or to steer migration toward a certain city, programs can train young women in skills carefully identified as marketable and can prepare them to adjust to city life.

NONFORMAL EDUCATION AND RURAL ADOLESCENT FEMALES

A general profile of the rural adolescent female's educational background and educational needs emerges from the preceding discussion. Though the specific situation varies between countries, and even

between different regions of one country, a rural young woman's opportunities for education usually have been and continue to be limited and limiting.

Because of their low enrollment rates and high dropout rates in formal education and their minimal participation in vocational training and nonformal education, adolescent females have not been prepared to assume adult roles. They may be unable to read and write, or may have forgotten how; and they typically have not learned how to raise healthy children, how to earn an adequate income, how to contribute to their communities. Those who attended school may even be encouraged by their education to leave their communities for towns or cities. However, once there, they will find themselves no better prepared for adult life in urban areas than in the countryside.

How can nonformal education help young women to meet some of their previously unmet educational needs and to play a more active role in development? An Indonesian educator has suggested that effective NFE, in the context of rural development, must affect women's will, capabilities, and opportunities (Tanumidjaja, 1973). Considering the limited and limiting educational histories of rural adolescent females, these three areas of necessary impact seem particularly appropriate. The three--will, capabilities and opportunities--are used here as a framework for identifying some important characteristics of NFE program design.

Strengthening Their Will

Will pertains to young women's desire to participate in an educational program. Adolescent females often are motivated to change (Huston, 1979). But certain supports may be needed to help them put their interest into action.

Parental and Community Support: Parental attitudes often restrict young women's participation in formal education. The same holds true for nonformal education, perhaps to an even greater degree. Parents may see no need for daughters of marriageable age to attend educational programs; in addition, they usually need their daughters to help at home. For rural adolescent females to enter NFE programs, then, their parents as well as they themselves must be convinced that the program will yield benefits, especially economic benefits. An effective way to gain parental support is personal contact by a respected community member who accepts the program. Parents will also more probably be supportive if they are informed specifically of the future economic benefits of their daughters' participation. Sometimes community support also needs to be built. This can be accomplished through meeting with community groups and officials and/or through mass media campaigns.

The education of parents and communities is necessary groundwork for developing effective NFE for rural adolescent females. In three experimental Unesco-sponsored projects (Upper Volta, Nepal, and Chile), the presence of parental and community support was identified as a key factor in success (Unesco, 1975).

Role Models: Certain programmatic variables may also influence the participation of young women. The teacher, or facilitator, is one such variable. For rural areas, the experience of formal education shows that female school enrollment tends to be higher when female teachers are available. A female teacher also serves as a role model who presents options different from those presented by young women's mothers and neighbors.

This role model phenomenon was identified in a nutrition project in Guatemala (Engle, 1979). In the project, children in two villages were tested to determine the effect of a high-protein high-calorie diet supplement on their mental development. The majority of the project staff were women, and girls in the village were observed pretending to carry out staff responsibilities. Such role playing opened options to them for new work and social roles. In nonformal education, women facilitators can serve a parallel function. Initially they may encourage young women to join a program. Then, during the program, the behavior of these facilitators as nontraditional role models can be a powerful source of learning for the participants. Besides the facilitator's behavior, attitudes supportive of the young women's abilities and potential are important. A combination of these characteristics could be obtained by training young women who would themselves serve as facilitators. When this is not possible or appropriate (e.g., for a technical skill), facilitators or trainers should be selected on the basis of their strengths as role models and their positive attitude toward expanded roles for young women.

Coeducation: Coeducational programs can reduce sex-role stereotyping if young women and men learn the same things, whether knowledge about nutrition or skills for motorcycle repair (Unesco, 1970a). However, coeducational programs per se may not enable young women to explore common problems, identify options, and develop new behavioral skills, such as leadership and initiation. (This idea is based on my experience in Thailand.) In many cultures women tend to be passive and different in the presence of men but very active among themselves. Therefore a coeducational program might include some time for women to meet on their own as a support group. Gradually, as their confidence and skills build, they may exercise new behaviors during the activities they share with young men. A study of women's groups as agents of change in Korea, the Philippines, and Columbia found that peer support strongly contributes to behavior change (Misch and Margolin, 1975).

Accessibility: Adolescent females, like their mothers, often have two jobs: caring for younger children in the family and working in the fields. Programs need to be structured with the recognition that young women in poor families spend most of their energy on existing activities and have little free time. NFE should be offered at a time of day or a time during the year when young women can attend. In addition, the program format should be conducive to female participation. For example, NFE might be offered through existing community organizations or groups or through traditional learning systems, such as in Ghana the apprenticing of young girls with market women.

Since each rural setting is different, not all the factors affecting the adolescent female's will to participate can be anticipated. Therefore consideration must be given to particular factors influencing young women's entry into the program, their continued involvement, and their equal participation with the young men in the program.

Increasing Their Capabilities

Capabilities refers to the skills acquired in an NFE program. Rural adolescent females need skills for their present and potential roles in three domains: the work force, the community, and the home and family. Education for participation in the work force and the community requires the most attention, since young women have had few opportunities to develop needed capabilities in these areas.

In each of the domains women need both to acquire relevant knowledge and to learn how-to skills. For example, they need to know and understand the potential benefits of new seeds and fertilizers as well as how to acquire them and use them in their own gardens.

Although the specific learning needs of rural adolescent females will vary, certain needs are likely to be shared by many of them. Literacy is a first priority. However, considering the immediacy of some other commonly shared learning needs (e.g., those related to income generation), literacy should be combined with, but not be a prerequisite to, the skill areas discussed in the next section.

Work Force and Community Participation Capabilities: Most rural adolescent females work as farmers (in subsistence agriculture or as laborers in cash crop production), as home producers, or as petty traders. Their incomes and their job skills tend to be minimal. NFE can enable young women to improve their present skills as a means to increase their productivity and their incomes or to develop new skills for better jobs. Training to improve present skills might include areas such as agriculture (e.g., use of fertilizer, production of a new crop), animal husbandry, marketing,

cooperatives (consumer, production, credit), food preservation and storage, tailoring, and bookkeeping. This training should be accompanied by new inputs, a demand for new products, and new outlets for marketing. Ideally, training will focus on readily marketable skills lined to employment possibilities and carried out in cooperation with potential employers.

Earlier this paper noted the increase in the number of young women who migrate from rural to urban areas. In some cases, NFE which enhances the present productivity of females, may help them decide not to migrate. Alternatively, NFE can also prepare females for migration--in areas where government policy supports it or where young women themselves are determined to migrate. Since parental opposition may pose an obstacle to such preparatory programs, the programs may need to be established in urban areas. To prevent young women from joining the ranks of the urban poor and unemployed, urban programs should provide training in marketable job skills and in skills for coping with urban living.

In addition to job-related skills, rural adolescent females need skills for community participation. In most settings their existing community roles are limited. NFE can help develop skills for participating in community decision-making bodies (committees and councils), initiating village development projects, and organizing other women in self-help activities.

Home-and-Family-Related Capabilities: Rural females may require knowledge and skills in areas such as nutrition, child care, first aid, family planning, and disease prevention. Whereas young women will already have learned something about these areas in female-only home science courses, both men and women can learn home-and-family-oriented skills in an integrated nonformal setting. Husbands who have studied these topics will understand the importance of new practices, and they may also share in home and child care responsibilities after marriage. Therefore, young women and men should both participate in home and family-oriented segments of NFE programs. In addition, NFE programs can enable young women to determine how to use home-and-family-related skills--such as food preservation or first aid--as a means to generate income.

The kinds of skills discussed in the preceding sections are meant to be representative but not definitive. To determine learning needs in a particular rural context, NFE program planners should look--at the problems and opportunities of a certain community; and listen--to the perceptions of the young women themselves.

Expanding Their Opportunities

Opportunity refers to the availability of work or self-employment for young women. Employment possibilities are limited, and rural adolescent females may be restricted in using their new capabilities. For example, young women may be unable to find jobs in the formal sector or, if they are self-employed, unable to afford new equipment and materials. In addition, lack of child care, health care, labor-saving devices, and women extension agents or paraprofessionals can further prevent them from fully using their skills.

Because employment possibilities and available services ultimately mediate the effectiveness of NFE in a particular setting, NFE programs should include training in opportunity building. To increase their chances of applying their learning, young women can be trained in finding and creating opportunities.

Finding Opportunities: This basically would involve (1) identifying existing job openings and services and (2) learning how to tap these opportunities. For instance, finding opportunities might require training in how to approach local government officials. To offset the dearth of employment opportunities, nonformal education programs could train women in identifying existing job openings and services and in learning how to gain access to them.

Creating Opportunities: In the total absence of employment, training could teach women how to create their own opportunities--alternatives, for example, in establishing community-based child care, organizing production and marketing cooperatives, coordinating savings clubs, and other such activities. But young women will not be able to create all the opportunities they may require. Therefore, they also need to learn how to function as a pressure group that can encourage local officials to provide needed resources. Market women in Dahomey are an example of an organized women's power base that has successfully obtained needed resources from the government (Dobert, 1970).

Finding and creating employment and services demands confidence, organizational ability, and leadership skills. By participating in the actual planning and implementing of an NFE program young women can develop some of these attributes--they can learn by doing. An out-of-school-youth educational program in Indonesia provides an example of this kind of learning (author's experience). In the program, participants assumed a major role in program development; subsequently they applied their new organizational skills outside the NFE program. Such a skill acquisition and transfer process should be expected to occur slowly. Rural young women, in particular, are usually not accustomed to taking organizational responsibility and must overcome previous role expectations and behaviors in order to do so.

To summarize, an effective NFE program cannot stop at strengthening the will of rural adolescent females to participate and at increasing their capabilities to fulfill actual and potential roles. An NFE program for young women must also deal with the problem of lack of available employment and services by enabling young women themselves to find and create the opportunities they require.

GUIDELINES FOR DESIGNING NFE PROGRAMS THAT INCLUDE FEMALES

These guidelines suggest ways to maximize the participation of females, both in an NFE program's activities and in the program's potential benefits. Because of their generality, the guidelines will not be applicable to young women in all contexts nor to all types of nonformal education. However, the guidelines provide a checklist of the kinds of factors necessary to consider in designing and implementing most programs.

1. Community and parental support: Parental attitudes may restrict young women's participation in an NFE program. Before the program begins, secure the agreement of parents for their daughter's involvement through the intercession of community leaders, personal contact, and/or media campaigns.
2. Role models: The presence of women facilitators may promote female enrollment and provide important role models. Select a number of women facilitators for the program who have favorable attitudes toward the abilities of adolescent females and are supportive of female participation in the work force and community.
3. Coeducation and Group Support: Young women can develop confidence and leadership skills by meeting to discuss and solve common problems. In coeducational programs, provide the opportunity for young women to meet on their own as a support group.
4. Accessibility: Rural adolescent females spend most of their time and energy on tasks at home and in the fields or markets. Offer NFE activities at a time and place convenient

for the young women. Consider basing NFE programs on traditional learning systems (such as apprenticeships) or on existing community groups or organizations.

5. Participation: Young women will be motivated to attend NFE programs if they perceive that the program will be useful to them. Involve them in defining the purpose of the program, e.g., what skills they would like to acquire.
6. Content/process skills: Rural adolescent females need skills in a variety of areas. Provide opportunities for them to develop capabilities related to their present and potential roles in the work force, the community, and the home and family. Capabilities acquired in each of these areas should include both knowledge and how-to abilities (content and process skills). Young women and men should learn home-and-family-oriented skills together.
7. Income skills: Young women's primary need is to improve their income-producing skills. In programs for upgrading existing skills and productivity, be certain that they have access to required materials and to marketing outlets after training. In programs for training in new job skills, make sure that the skills are marketable, through examining employment surveys and through making contact with possible employers.
8. Opportunities: Many communities lack the employment opportunities and services that enable young women to use their new income-producing skills. Train the young women in finding and creating their own jobs (wage or self-employment) and their required services (e.g., child care). Help them secure jobs for example as agricultural extension workers or health paraprofessionals.

9. Organization: These young women have usually had little opportunity to develop the organizational skills necessary for community participation and change. Involve them in the actual development and implementation of NFE programs as a means for them to build some of these skills.

This background paper for AID project development has documented the past and present inadequacies of education for rural adolescent females and has discussed how nonformal education programs offer one vehicle for meeting the needs of these young women. The guidelines serve as a summary of the paper's recommendations.

Providing nonformal education opportunities for rural adolescent females deserves priority attention from program developers and policy makers. As noted earlier in this paper, gains in levels of female education strongly relate to other social and economic gains (Youssef and Hartley, 1979). Upgrading female education, then, is not just an end in itself, but a necessary means to promote development. If today's rural adolescent females are to contribute to rather than inhibit development, they require educational programs now--before their participation is limited by the time-consuming responsibilities of family and work and before their options are restricted by the narrowness of traditional roles.

BEYOND SURVIVAL SKILLS: PROVIDING BASIC SERVICES
TO SATISFY THE NEEDS OF POOR WOMEN

by

Isabel Nieves

In the wake of "new directions" for development and the emphasis on "basic human needs," the issues of what basic services to provide, and how best to provide these so people can take full advantage of the new development efforts, acquire additional importance. The link between basic human needs and the delivery of basic services is a natural and logical one. Hence the interest in examining the concept of delivery of services.

This paper offers a fresh perspective on the issue of delivering services. It attempts to establish the validity of a link between women's roles and concerns in development and the renewed interest in the provision of basic services. It begins with the assumption that women constitute a specific category of population deserving attention from development planners and practitioners. By now it should be unnecessary to justify this position anew in every piece of writing on women and development.

There are two distinct and somewhat opposite views of how basic services and delivery methods ought to be handled. Although this paper was not written to tackle this difference of opinion head-on, it is important to mention it as part of the overall framework for women's concerns relating to basic services.

One position states that it is futile to examine means of delivery systems abstractly, without discussing what is being delivered. The alternative view is that before one can meaningfully deal with the services themselves, one has to have established successful comprehensive, cost-effective, and culturally appropriate means of delivery. Both opinions have a following in the development field and, certainly, within the Agency for International Development. Both positions are relevant when viewed in relation to the problem at hand, women's concerns in the provision of basic services. Yet because this paper will take a woman-centered rather than a service-centered approach to the topic, the discussion between the two groups will remain a background issue. However it will address the "what" question more extensively than the "how" question.

The main point of this paper is that women's basic needs go beyond the ones traditionally acknowledged and served, health nutrition and family planning, which are services that increase survival skills. Basic needs include all those resulting directly from women's productive activities. The paper goes on to argue that a recognition of this fact should lead both to a reevaluation of the kinds of services provided specifically for women and to the establishment of monitoring systems to insure that services aimed at given target groups are also reaching women in those groups.

This paper therefore will be of relevance to all offices within DSB whose activities include the provision of basic social services. It is especially hoped, however, that it will capture the attention of the offices that deal concretely with economic productivity and improvement and with the delivery of essential services for the enhancement of productivity.

In order to focus the discussion, the provision of water, housing, and child care were chosen as illustrative cases of how and why women's concerns in the delivery of basic services go beyond the traditional triad. They were chosen because they exemplify clearly that women's productive needs require the provision of additional services in fields not regularly included in discussions about delivery of services: for instance, credit, training for productivity, shelter and community facilities that respond to women's multiplicity of roles, agricultural extension and water control.

PROVIDING SERVICES: INCREASING AVAILABILITY AND IMPROVING
PEOPLE'S CAPACITY TO OBTAIN THEM

The satisfaction of basic human needs can be achieved through two contrasting--and, some would claim, complementary--strategies. The more straightforward approach involves delivering elementary services for the immediate satisfaction of basic needs: health services, adequate diets, shelter, sanitation. This approach, inadvertently perhaps, takes a welfare view of development: The poor are "served," but they remain passive and dependent recipients of the goods and services that will give them a chance at minimum survival. This approach is admittedly not successful in integrating the poorest of the poor into the process of development. It does not promote growth with equity.

The alternative or complementary strategy is one that seeks to improve the condition of the poor by helping them increase their productive capacity and their income-generating potential. Improving the access of the poor to productive resources and institutions means improving their capacity to obtain basic services and learn survival skills and providing opportunities for them to better their lives through their own efforts (Foreign Assistance Act of 1961, as amended in 1973). "While labor income is not directly a human need--abstractly considered--it is a means of fulfilling these needs" (Caton, 1978).

Implicit in this approach is the notion that improving people's condition without increasing their capacity to contribute to these improvements, will have only limited, short-term results. This welfare approach has permeated the manner in which the concerns among the urban and rural poor, and those of the poor in general, have been incorporated into programming (Chaney, Simmons, and Staudt, 1979).

Services identified as being for women--health and health education, nutrition, family planning, and home economics--are all oriented to their domestic functions and the role they play in the satisfaction of their families' basic needs. The objective has been to provide them with the basic services that will increase their survival chances and improve their survival skills. Women's productive role and economic activities, and the needs resulting from them, have been ignored and unserved.

The second strategy to promote the satisfaction of basic needs--the one that emphasizes increased capability on the part of recipients--has a direct bearing on what become important or critical services for the poor. It implies a shift of emphasis towards services that

help increase productivity rather than those that directly improve survival skills. It requires that human resources be fully used in development efforts, and it requires increased participation of the poor in these efforts.

This strategy, therefore, stresses the need to improve the productive capacity of women² on two counts: women constitute a significant proportion of the most needy among the poor, and women as a human resource have not up to now been fully utilized in development. Finally, current thinking about what constitutes basic services for poor women in developing countries must give priority to social and support services that will respond to the needs arising from women's productive role. Three examples of this new dimension in service provision for women are discussed in the following sections.

WATER: INCREASING FOOD PRODUCTION AND EASING HOUSEHOLD WORK

The presence or absence of water services has an impressive impact upon the lives of people: their health, their work, their time. The effect is greatest on those who, because of prevalent behavioral expectations, are primarily responsible for obtaining, handling, and discarding water needed for the household. These are the women (de Souza, n.d.; Hewitt de Alcantara, 1979; United Nations Development Programme, 1980).

Water, as part of a land-and-water unit, is the most critical productive resource in increasing and diversifying food production (Agency for International Development, 1978; United Nations Development Programme, 1980). AID recognizes that the timely introduction of water resources for agriculture has a considerable potential effect on productivity and employment, which are two specific mandates in rural and agricultural development policy. Multiple cropping is made possible by the increased and reliable availability of water (Agency for International Development, 1978). An important additional consideration is that small-scale multiple cropping, especially in the form of home vegetable gardens, is also made possible by the increased availability of water. And food production, especially for family consumption, is a primary responsibility of rural woman.

The delivery of water services, whether for sanitation, consumption, or irrigation--basic as it is, and well recognized as the need for it has become--is still an unmet need for most of the world's population (Obeng, 1980). And whereas the lack of water affects the health of children most acutely, it is the women who feel this lack most directly in all aspects of their daily lives, because they have to spend a disproportionate amount of time getting water to meet minimum household needs.

Rural Water Delivery

Current AID policies for financing rural water projects are grounded in considerations relating to basic human needs, especially the health effect that safe and abundant water is thought to have on a population (Burton, 1979). Yet the funding of potable water projects should be justified by effects other than health, partly because it is difficult to precisely separate and attribute changes in health status to water intervention (Dworkin and Pillsbury with Thatsanaseb and Satchakul, 1980). The economic impact of rural water projects is probably a stronger justification and one that does not contradict the current emphasis on basic human needs. Specifically, the positive impact of increased water accessibility on the lives of women--both urban and rural women, but more dramatically on rural women should be an important policy consideration in the allocation of funds for shelter and rural infrastructure projects.

Women's Time And Productivity: According to a recent evaluation, modern technology has, in the last analysis, done relatively little to ease the domestic burden of rural women..." (Hewitt de Alcantara, 1979). This goes for water technology as well. However, the main obstacle in the delivery of water seem to be, not technology, but inadequacies in qualified human resources and in management and organization techniques, including a failure to capture community interest (Agency for International Development, 1978; Burton, 1979). Yet it is hard to believe that water and the introduction of water delivery systems would fail to capture the attention of the women in the community.

Water for home consumption seldom fails to be mentioned as a felt need when community needs assessments include the views of women. An experiment carried out in rural El Salvador showed that when women were purposely excluded from informal needs assessment surveys, water was not mentioned as one of the three most pressing community needs; when women were included, lack of water came up immediately (INCAP y Ministerio de Salud Pública, 1978). In Zaire rural women who were interviewed about their needs and problems mentioned that their problems were basically one: too much work. They put in sixteen hours a day to carry out all the required household tasks, including making several trips to obtain water and carrying it back on their heads and backs, along with firewood. In Ghana women expressed an urgent need for water as their first priority, but in this case the water was needed for irrigation (Klingshirn, 1976).

There are other accounts--mostly, impressionistic--of the time and energy drain that carrying water means for women and of the constraints this burden puts on their availability for other more productive activities (Huston, 1979). These accounts, however, are of limited value when trying to assess quantitatively the effect that better

water services could have upon a woman's productive capacity in the home and in the fields.

Household Production: For this is the crux of the matter: delivering water to the home or nearby would reduce the time women have to dedicate, day in, day out, to household-related work; and a reduction in this burden would allow women more free time to invest in productive, income-generating activities. Higher household income could then help a family to obtain the resources necessary for their other basic needs. Likewise, providing women with water with which to irrigate their plots and household gardens (as opposed to financing irrigation projects for cash-crop cultivation) would also allow them to diversify and increase their agricultural productivity.

Precisely how much free time better water services would mean is being answered through various time-use studies that measure and qualify women's work in the home (for a review of these studies see (Birdsall, 1980; Buvinić and Youssef, 1980; Safilios-Rothschild, 1980). A rural water project in Ghana, jointly sponsored by the government of that country and CIDA, has concentrated mostly in drilling water holes half a mile apart to increase the availability of water for households. Each well is to serve an average of 300 people, and it is expected to reduce women's 16-hour work day by 3 to 5 hours (Klingshirn, 1967; p. 20) a remarkable 33 percent, if we take the higher figure. An AID-funded project in urban Botswana, by introducing a standpipe for every twenty houses, virtually eliminated the long-distance hauling of water that women and children were responsible for (Foundation for Cooperative Housing International Program, n.d.).

Raising Productivity: The changes in women's lives brought about by the introduction of potable water services--alone or in conjunction with other technologies to ease household work--could have significant repercussions on the income-generating capacity of their households, and particularly on that of the women themselves. And raising productivity, as we argued before, can be a successful strategy to insure the satisfaction of a household's basic human needs. Increased productivity through increased agricultural output, which in turn depends on the availability of water for irrigation, is ultimately a concern for women's productivity as well.

Women Headed Households: There is evidence from at least two different areas of the developing world that the provision of water services to rural areas has had another positive, if indirect, impact upon women. In Yemen a UNDP/UNICEF/WHO Rural Water Supply project was reported to be directly related to a reduction in the rate of outmigration (United Nations Development Program, 1980). Migration in the Middle East is mainly a male phenomenon; and the women left behind

often suffer from shortages in farm labor, inflated prices, lack of land, and an inability (despite the remittances of the absent men) to keep up with the rising cost of living (Hammam, 1980; Youssef, Buvinić and Kudat, 1979).

In Thailand, droughts and the lack of irrigation facilities in the northeastern part of the country forced the men to migrate to Bangkok in search of wage labor to sustain their families until the following planting season. Women became de facto heads of households at the worse possible time. In the view of the villagers, seasonal migration became less of a necessity when an AID-funded rural water project made agriculture and animal husbandry economically viable activities all year (Dworkin and Pillsbury with Thatsanatheb and Satchakul, 1980).

Women no longer faced the prospect of having to assume full economic responsibility for the household in the face of great odds. There is no evidence, however, on whether women were able to participate in and profit from activities that better water supply made possible.

Designing Water Delivery for Women

Recent analyses of the socioeconomic impact of water delivery projects in several parts of the developing world provide some concrete recommendations for insuring that the needs of women are better met:

Participation: When water for domestic use is introduced into a community, its availability follows patterns conceived and imposed by external authorities. When these projects fail and the physical facilities deteriorate, it is in part due to the fact that women do not make use of the new services because they do not fit their daily work pattern (Boulding, 1978; White, Bradley, and White, 1972). In planning the ways water is to be introduced, piped, and supplied, attention should be given to those who will be the main users of the pumps, taps, and stanpipes. Community women should be consulted during the planning phase of water projects (United Nations Development Program, 1980).

Convenience--Defined variously as distance, perceived water quality, cost, and abundance, it is paramount to the women who are the immediate users of potable water projects. Efforts to introduce potable water systems and to upgrade existing ones should strive to meet the standards of perceived convenience at the same time they consider the objectives of water purity and cost effectiveness. If the new system is not felt to be more convenient than the previous one, the likelihood that it will be accepted is low (Dworkin and Pillsbury with Thatsanatheb and Satchakul, 1980).

Equity of resource distribution: Although always present in project guidelines, distribution equity is often an objective that remains unfulfilled (Dworkin and Pillsbury with Thatsanatheb and Satchakul, 1980). When this happens it is the poorest of the poor who are left mostly unserved, and women constitute a significant proportion of this category. The urban poor who are bypassed by water projects often end by paying more to private and informal distribution systems than they would have to pay for the public service (PADCO, 1980).

Coverage: Whether for irrigation and increased agricultural productivity or for sanitation and household consumption, the introduction of new water systems or the expansion of existing ones to extend population coverage should be made with a concern for, and explicit work plans to reach, groups that have been missed in the past: small subsistence farmers, women farmers, farms headed and managed by women, and women-headed households. Guaranteeing women equal access to water sources and irrigation facilities will come only from a recognition of the vital role they play in agriculture (World Conference of the United Nations Decade for Women, 1980). --that is, from a recognition of their productive role.

Water and Productive Roles of Women

Substantive changes in women's daily work patterns are made possible through the introduction of potable water systems; these are changes that affect women's productive capacity directly. The provision of water for irrigation of crops for local consumption will likewise have direct repercussions on the agricultural productivity of women in charge of growing subsistence foodstuffs. In either case water remains a basic service, essential for the economic improvement of the household and the community. Raising women's productivity, or indirectly providing supporting systems that allow women to engage in productive activities, are important enough policy considerations to merit inclusion in rural, agricultural, housing, and urban development guidelines.

CHILDCARE: AS BASIC AS CONSUMPTION AND HEALTH NEEDS

When it comes to considering women, development thinking and consequently funding have been plagued with a consistent bias in favor of domestic duties: maternal health, family planning, nutrition education, home economics. Satisfying the needs of women has meant mostly providing services so they can better fulfill their domestic roles and control their reproductive functions. Attempts to define strategies for the delivery of services to the poor of the developing world

have been dominated by this unidimensional view of women. When poor women have been taught anything, they have been taught how to be better mothers and better house managers. When they have been offered goals and services, these have been family planning, maternal and child health, and food supplements.

Women's Productive Roles and Child Care

Policy makers have begun to recognize the multiplicity of roles that women play and refer to women's productive activities and responsibilities in their statements (Agency for International Development, 1978). Such a recognition should lead directly to an appreciation of women's needs in areas of service delivery that have up to now gone unmet. Yet a domestic orientation persists in programming for women as a specific target group.

The most obvious illustration of how this type of thinking has colored development programming and resource allocations is child care --or, rather, the lack of child care services. Child care services are, in the last analysis, a substitute for women's essential domestic function. Recognition of child care services as basic also requires that women's economic pursuits and the needs that arise from them be recognized as central--not only to women's life and socio-economic status but ultimately to the development process itself. Child care is just as essential to the goals of development as the more traditionally recognized services, because it constitutes a strategy to free women's resources for more productive work.

The Increasing Need for Child Care

Several recent studies have documented the rising need of working women throughout the developing world for child care alternatives (OEF, 1979; Engle, 1980). As informal child care systems relying kinfolk become scarce as a result of the breakdown of the traditional welfare function of the extended family, these systems also become overloaded. Women have to seek other alternatives and resort to a variety of strategies in order to satisfy all their child care needs.

For some women the situation becomes downright desperate when the available alternatives do not keep pace with their increased involvement in paid productive activities, including agriculture and their increased needs for income. Older children, particularly older girls, assume major child care responsibilities for children only a few years their juniors. In extreme cases children are left alone; in two reported instances, between 6 and 8 percent of the children between 0 and 4 were reported as having been left alone at least once (Engle, 1980).

Child care needs appear to be more acute among women in urban areas. In Guatemala a survey of 578 rural and 269 urban women found that 33 percent of nonworking rural women and 41 percent of nonworking urban women gave lack of alternatives for child care as the basic reason for not working. Another reason given was that husbands discouraged or forbade them from seeking work because they feared the children would suffer from decreased maternal care and attention (Engle, 1980).

Mothers of young children who are in households with single heads, and mothers who are themselves heads of households have particularly severe child care needs (Engle, 1980). Whereas other women may resort to paying inflated prices to private and/or informal child care systems, the poverty of women heads of households may make this unfeasible strategy for extended periods of time.

A very recent study in Bogota, which surveyed 200 poor women with young children of whom 24 percent were single heads of households, concluded that the children of these single mothers were more likely to be left alone than were children of women with spouses (Engle, 1980). As women become full-time (as opposed to part-time) salaried employees, it can be expected that their needs for adequate, reliable, convenient, and moderately priced child care alternatives will increase.

Agricultural Work and Child Care

The notion that child care and agricultural work are basically compatible activities has been, for the most part, an unexamined assumption. Farm women, it has been thought, either leave their children in the care of other adult household members or carry their children with them to the fields. Consequently they have no need for child-care services. Researchers concerned with the relationship between women's productive and reproductive roles in the context of rapid economic and sociocultural changes have begun to challenge the validity of this assumption (Engle, 1980).

A ground-breaking article by Nerlove (1974) demonstrates conclusively the incompatibility of prolonged breast-feeding with agricultural activities, particularly during seasons that require intensive labor inputs. More recently a group of researchers in Bangladesh found that the frequency of breast-feeding decreases noticeably during the harvest months (Huffman et al., 1980). As more data are gathered it may be possible to demonstrate that the need to be productive--that is, to engage in economic activities in general more than the need to "work" in classic economic terms, is a contributing factor to the recent changes in infant feeding practices in the urban areas of developing countries.

The issue of incompatibility encompasses more than infant feeding during the early months of life. Child care in general, and the quality of that care, may be compromised during times of peak agricultural activity. This incompatibility has been documented in Malaysia and in highland Peru, where women are forced, for lack of alternatives, to take their children to the fields during peak agricultural periods, and leave them unattended, exposed to many dangers, at the edge of cultivated plots. Otherwise they have to carry the infants on their backs while they move up and down the furrows, bending over to weed the potato crops (Engle, 1980).

The question that logically arises is whether physical proximity is a sufficient criterion by which to judge compatibility of work and child care. It appears that the concept of compatibility itself requires some sharpening and qualifying to include factors such as the work efficiency of a woman who is forced to carry a 15-pound burden while she engages in physical activity, or when she is forced to divide her attention constantly between the task at hand and the children at her side (Engle, 1980). Ultimately, then, the question reverts to one of productivity for the women and adequate, safe, and reliable mother substitutes for the youngsters.

Designing Child Care Servicing for Women

A review of various models of service delivery projects that cater to the needs of children in Latin America has prompted the following conclusion:

Some of the programs aimed at enhancing the physical and mental development of the child appear to be relatively unresponsive to the needs of women, particularly working women i.e., child care, and do not offer much opportunity for community decision making and control. On the other hand, the nutritional and educational components of some of the programs designed to serve the needs of the working mothers are quite weak (Engle, 1980).

The recommendation follows that the potential for offering child care services, at least during the periods of peak agricultural activity, that many child nutrition and health care projects have been made possible through supplemental funding (Engle, 1980).

Another logical integration that has not occurred as often as it could is the integration of income-generating activities for women and the provision of child care services (Engle, 1980). These two components reinforce each other and together could make for greater project outputs.

More concrete recommendations include the creation of day care facilities conveniently located in space and time for the women they intend to serve. For instance, the centralization of child care centers will be practical only where settlement patterns are sufficiently concentrated. In dispersed rural areas centralization would only tend to increase women's travel time from home to child care center to place of work.

Whenever possible the staff that is to provide the services should be known to the women whose children they will care for, rather than being strangers who, despite professional qualifications, may not inspire trust. Additionally, child care services should be flexible and modify their capacity and schedules in response to seasonal working patterns (Engle, 1980).

More generally speaking, any project that purposes to integrate women into development activities as full participants should consider components to both ease their household workload and provide child care services in order to make participation viable. A strategy of this kind could help advance the objectives of women in development concerns, as well as the aims of wider development efforts; freeing a significant portion of the potential human resource pool from unnecessary laborious and not always productive activities, and removing a considerable constraint, in order to increase productive capability in the population as a whole. New approaches need to be developed in order to enhance both the mobilization of women's resources and their productive capacity (World Conference of the United Nations Decade for Women, 1980. Child care--whether cooperative and community initiated, whether alone or in conjunction with other services in a women's support center--is a central component of these new approaches.

SHELTER: MORE THAN BRICKS AND WATER

The current view of shelter as a basic human need in the Agency for International Development is an expanded concept that encompasses more than just the notion of a roof over one's head. It includes the provision housing; basic support services, among which water is essential; physical facilities for community services, like schools and markets; financing services and credit facilities to allow participants to obtain legal titles to land and purchase basic structures; and, more recently, the funding of training, income-generation and employment

activities for the beneficiaries of housing programs and services, as well as community upgrading projects (Office of Housing AID, 1979; PADCO, 1980).³

This comprehensive effort is based on the fact that low-income groups in urban areas have multiple and interrelated needs whose satisfaction requires coordinated programming in a number of sectors, (Office of Housing AID, 1979; PADCO, 1980). The integrated provision of services in several areas may also be a successful strategy for attaining growth with equity. (Agency for International Development, 1978).

AID's approach to housing and shelter uniquely exemplifies the development strategy that attempts to increase the economic capacity of the poor to improve their own capabilities to satisfy basic human needs. Shelter programs also uniquely combine the provision of basic human and productive services: a roof over one's head and the capacity not only to pay for that roof but to improve it, maintain it, and obtain legal rights to the land on which it is erected.

The Costa Rican Urban Employment and Community Improvement Program, for example, provides funds for participants' purchase of legal titles to the land on which they established squatter settlements, for the creation of a revolving fund to improve community facilities, and for vocational skills training and subsequent placement. Similar projects have also been started in Panama, Kenya, and Morocco (Office of Housing Agency for International Development, 1979).

Shelter: Women's Needs

A minimal degree of economic success or minimum amount of resources is required to participate in most shelter projects and some degree of assurance that one will be able to repay a loan. For example, poor women among the urban poor are disadvantaged in productive resources and the sources of income (Schumacher, Sebstad, and Buvinic, 1980; Youssef, Nieves and Sebstad, 1980; Youssef, Self and Nieves, 1980b) and therefore their access to shelter and related services may be compromised. This concern is recognized as valid among those involved in urban development within AID, valid enough to require special attention (Conger, 1979; Office of Housing AID, 1979). Women migrants, women heads of household, and women among the unemployed have been singled out as target groups that deserve special treatment in shelter projects (FCHIP, n.d.; Conger, 1979; Buvinic et al., 1979).

Women Headed Households:

A review of several project documents on shelter efforts being financed by the World Bank in Zambia, El Salvador, and the Philippines

indicates that there are differences between man and woman-headed households with respect to participation in housing and shelter projects, dropout rates, and the overall impact of the projects. There is no reason to believe that these groups would behave differently in AID-funded shelter projects.

Women who are de facto heads of household make up a considerable proportion of the applicants to shelter projects. Forty percent of participating families in the El Salvador are headed by women, and almost all of them have young dependents. In the first six months of the project's income-generating component, women constituted 85 percent of all credit applicants (Buvinic et al., 1979; Conger, 1979). In Zambia woman-headed households make up almost 9 percent of applicants; over a thousand applicants were women in 1976 (Buvinic et al., 1979). In Botswana an AID-funded urban shelter project has had to respond to the "significant" numbers of single mothers who are unemployed at any one time and most of whom have little or no cash income (FCHIP, n.d.).

Economic Stability: Other project data seems to corroborate the findings that the economic condition of women applicants to housing projects is less stable than that of the men who apply. They report lower earnings and higher participation in the informal economic sector. Almost all male applicants in the World Bank Lusaka project are employed in the formal sector; only 25 percent of the female applicants had found jobs in that better paying, more secure sector. The average income of male heads in the Santa Ana, El Salvador, project is more than twice as high as that of female heads; and in Colombia, whereas 3.5 percent of all households have family incomes of less than 500 pesos, 9.3 percent of woman-headed households fall below that line (Buvinic et al., 1979). It is reasonable to expect, therefore, that successful female applicants to shelter projects spend a higher proportion of household income on housing and a lower proportion on other goods and services than successful male applicants.

Time and Resources: In self-help projects, women applicants take longer to build or complete housing partially as a result of lack of time, lack of building skills, and lack of resources to hire labor for building. In the Santa Ana project already mentioned, women preferred the more complete, although more costly, housing option over the options that required labor time and material inputs. Lack of time was an important constraint to Lusaka women, who, after being relocated to the site where their unfinished houses were built, had to travel greater distances to the marketplaces where they did business (Buvinic et al., 1979). There may other situations, on the other hand, where self-help projects may have advantages for women. The experiences of the AID-funded Botswana project indicate that "when a Botswana women is able to help build the new house, her traditional

role of house-builder is maintained: (FCHIP, n.d.), implying that she is not alienated from her productive role and is able to maintain a degree of self-reliance and independence that characterized her life in the rural areas.

Credit: Other project evidence suggests that women applicants have more difficulties obtaining loans and/or repaying them than successful male applicants to shelter projects. Another finding is that women heads of household have either very high or very low rates of attrition in urban projects, and that the circumstances leading to these outcomes appear to be project-specific.

" In comparison to similar men, women heads of household experience more severely time and human resource constraints when performing in urban projects because they have to divide their time between household and market activities and because their households, on the average, have one less adult household member" (Buvinic et al, 1979

Designing Shelter Services for Women

For poor women in developing countries housing should go beyond the satisfaction of an immediate need for shelter, to women's productive roles as well.

Easing the Household Burden: Adequate shelter should serve to ease a woman's household burden, either by permitting her to fulfill her obligation efficiently in a minimum amount of time, or by providing her with the necessary conditions to transfer some of those obligations to the community or to the market sector--for example, child care and the production of certain staple foods. If either or both of these functions are performed well, a woman can afford to invest more time in productive activities.

Income Opportunities: Shelter projects can themselves provide clients with income-earning opportunities, as indeed they have (Conger, 1979). But they should also permit women to continue their home-based productive activities or to engage in income-generating activities in the community or nearby (Conger, 1979). In very general terms, then, shelter projects and transportation services jointly can make significant contribution to reducing the double burden of poor women in urban and, to a lesser degree, rural areas. "For women in particular...it is especially important that shelter offer the maximum potential as a productive investment" (Conger, 1979).

Two components of shelter programs that may help women become successful participants are credit and legal services (Conger, 1979).

Credit: Access to credit that responds to women's income constraints, work and saving patterns, and the possible lack of property to serve as collateral can make all the difference in women's capacity to obtain shelter. Several actions can be taken in order to make credit more responsive to women:

Facilitate group lending as a means for women to pool resources for collateral, to share the risks and benefits of borrowing, and to overcome obstacles they may face as individuals. Group lending also reduces the administrative cost of the project and provides an efficient means of integrating training, technical assistance, and the introduction of new technologies to women.

Make credit available that waives collateral requirements or employs innovative strategies based on resources available to women (e.g., third-party guarantors, jewelry, ornaments). One of the major obstacles women face in obtaining credit is lack of traditional forms of collateral such as land or other property.

Develop programs that encourage women and women's groups to save through mechanisms that provide opportunities to save along with providing credit.

Incorporate the advantageous features of informal borrowing systems (in which women traditionally are active) into the design of formal credit programs serving women, when it is appropriate. Examples of such features include frequent repayment schedules; innovative collateral requirements; reduced amounts of paperwork and administrative procedures; and women administrators in cases where male/female interactions are socially restricted (Schumacher, Sebstad, and Buvinic, 1980).

Legal Services: It may be crucial for women's participation in shelter programs to have legal services available to them for several reasons:

Women's legal rights with respect to land ownership, property holding, and legal transactions may openly discriminate against them.

Women's legal status may be defined by their marital status. In cases where status is ambiguous or unresolved as a result of de facto separation, their legal status may need to be clarified before they can become project participants.

Protective legislation affecting women is often protectionist in character and intent and based on outdated propositions regarding women's basic weakness and inherent morality (Youssef, Nieves, and Sebstad, 1980). Women may require legal counseling to make them aware of their rights as well as their legal limitations and how to circumvent them.

Women in de facto marital unions are likely to be poorly protected by the law.

Women in the informal sector of the economy may be ineligible by law to certain benefits and protective measures,

Zoning laws make it illegal for women to pursue traditional and customary entrepreneurial activities at the compound or on the site of the project. In the Botswana project mentioned above, for example, women were prohibited by law from generating income by growing vegetables and setting up vending stalls on site (Conger, 1979).

Access and Participation: Additional recommendations made by Conger (1979) include reducing the cost of shelter programs, since lack of income is a key limiting factor in women's access to shelter and related services. In planning the actual physical layout, as well as the services and facilities a shelter project is to have, attention should be paid to design details that may reduce women's household work and to public utilities that can promote the formation of informal support systems in the new community or strengthen them in improved communities. Women should be allowed to participate and contribute ideas in the planning stages of the project in order to guarantee that their needs are met in its final outcome.

A FUNCTIONAL CLASSIFICATION OF WOMEN'S PRODUCTIVE ACTIVITIES AND SERVICE REQUIREMENTS

A review of recent empirical findings in order to specify their policy implications is of limited usefulness to develop practitioners unless the findings can be put into practice. In the course of the previous discussion the reader was able to pick out certain persistent themes, that could inductively lead to the formulation of general guidelines for programming; for instance, the relationship between woman-headed households and poverty. It might prove useful, therefore, to build a functional system categorizing women by productive activity and showing the types of services they would probably require to increase their productive capacity. The substance of such a functional

classification system would be population-specific; the framework, however, would be somewhat more universal. Such functional framework is developed below.

The Framework

The specific concerns of women for basic services will vary according to at least the following set of variables:

1. Their place of residence
2. Their migrant status
3. Whether they work in the agricultural, industrial or service sectors
4. The types of economic activities they perform
5. The type of household
6. The age structure

Place of Residence: The density of population and the concentration of people determine, more than the types of basic services women require, the means by which those services will be provided. The introduction of potable water services is a case in point. How the pipes will be set down and how far apart outlets will be placed will be largely determined by the settlement patterns of the population to be served as well as by the work patterns and preferences of the women who will be most likely to use the service.

Likewise, the system of delivery of child care will be largely determined by where women live, where their jobs are, and their means of transportation. Transportation is itself a basic support system having a direct impact on women's productive capacity and their opportunities to increase it. Women's double-burden--their house and their outside work responsibilities--can be made easier and their workdays shortened by the provision of modestly priced and convenient transportation services (Conger, 1979).

Mobility is an attribute that is critical to women, because socio-cultural constraints have traditionally restricted it. Cheap, safe and efficient transportation can be doubly useful to women: it will save them time, and it will allow them to circumvent culturally determined proscriptions. How transportation systems are to be laid out largely depends on rural/urban distinctions, population density, and settlement patterns. An additional consideration is whether women will be taking produce, children, and/or tools with them.

Migrant Status: The ways in which migration affects women, both those who uproot themselves and those who are left behind, have been summarized elsewhere (Youssef, Buvinic, and Kudat, 1979). The need to become productive in the city is more urgent for women who migrate alone and with their children than for those who are accompanied by kin or a spouse. Support services, social services, and shelter will make all the difference to these women in establishing a foothold in the city and enabling their children to survive. The particular housing and shelter concerns of migrant women were discussed in a previous section.

For those who stay behind when other household members--particularly men--migrate, their productive obligations and the services they require to fulfill them will probably shift as well. Agricultural extension services, if not already available to the women who remain in rural areas, will become essential.

Economic Sector: Work in the agricultural sector will require access to key productive resources⁵ and the provision of basic services, both technological and social, to support these activities, e.g., water and agricultural extension (Chaney, Simmons, and Staudt, 1979). Educational services of a vocational type will be required by poor women who are breaking into or already working in the industrial sector (Youssef, Self, and Nieves, 1980). Finally, women in the service sector, most of whom either find or create jobs for themselves in the informal sub-sector (Youssef, Nieves, and Sebstad, 1980), will need educational services that stress administrative, management and organizational skills. Marketing services will be a permanent need of these women.

Economic Activity: The intersection of two sets of circumstances, (1) the types of economic activities women in a specific population perform and (2) the places they perform them in, will determine, at the discrete project level, the kinds of services they are most likely to require. The level of role incompatibility between the various roles women play will create needs for child care services, specific forms of training and nonformal education, legal counseling, and transportation.

Several factors will make a difference in how compatible a woman's productive work is with child care and housework:
Whether she works:

At home or away from the home environment

In paid or unpaid occupations (e.g., if she is self-employed or a family worker)

In the traditional or the modern economic sector as part of the informal or the formal labor force

For example, women whose main economic production is the cottage-based manufacture of crafts or work in other cottage industries constitute a population whose utmost service need is accessibility to marketing outlets, as well as cooperation with other women and consolidation of production.

Type of Household: Woman-headed households--cohabiting groups where the male head is absent--place the brunt of financial responsibility for survival on the shoulders of women who are more often than not ill-equipped to assume it. The households are poor, they are appearing more and more frequently in economically depressed urban areas, and female heads are forced into the informal labor sector in order to support their dependents (Buvinic and Youssef, 1978). This situation points to needs for:

Vocational and on-the-job training, with the provision of adequate support services to free women's time;

Better opportunities for female heads of household to become successful applicants in housing projects;

Legislative protection for women who, though heads of household, are not legally recognized as such;

Protective labor legislation for women who work in the informal labor sector (for example, women who work as domestics are not eligible in many countries for social security benefits, although some countries are slowly extending coverage to include them and other informal workers (Youssef, Nieves, and Sebstad, 1980).

Further, the type of household a woman lives in will also provide different alternatives for child care. Women members of extended families can count on other women in the household to perform part of this task, although, as we saw above, this is becoming less of a possibility.

Age Structure: The stages in the life cycle of low-income women appear to be correlated with the range and types of their economic options and with their economic behavior (Buvinic, Youssef and Sebstad, 1979). Age can be used as an indicator of life stage. In conjunction with the variables described above, this one will further specify groups of female populations, their economic involvement, and their needs.

A pertinent illustration is the upcoming program for Out-Of-School Youth that the Office of Education has developed (Kinsley, personal communication, 1980). Young women and men who have had some schooling

but have stopped attending school need to become economically active, but they lack the necessary skills and qualifications. Recognizing the particular predicament of this age group has led also to the acknowledgement that the educational services they require are age-specific, yet different from those of youth that remain in the formal school system.

Cross-tabulating this minimum number of population variables will generate a grid or matrix of several female population groups defined by prevalent productive activity and the service needs derived from the activity. There will be other project-specific or population-specific circumstances that will dictate the addition or deletion of variables to the framework.

A. Typology of Classifications

The multiple intersection of at least those variables described above generates a basic functional classification of women, which will in turn lead to the identification of the social and support services they will be most likely to require. At worst an exercise of this kind will be no more than an educated guess. At best it will provide the means for

Circumscribing the target populations

Identifying the needs of women with respect to productivity-related resources and services

Establishing tentative priorities among these needs

Deciding upon the modes of delivery of services and the kind of vehicles that would be employed to provide the services

Poverty is a common feature of all groups in this classification; an emphasis on productive activities and other parameters of poverty, especially the type of household (Buvinic and Youssef, with Von Elm, 1978) and family formations (Safilios-Rothschild, 1980,) is another.

Several major types of women have already been cited in the course of the previous discussions. They can be summarized as follows:

Project Case Examples

Current AID-funded projects provide cases showing how the variables are made concrete when applied to specific populations, and how the needs of the resulting target group are then identified. In Gaborone, Botswana, single migrant women with children, who are either engaged in a myriad of economic activities in the service sector of that city or are unemployed and looking for work, and who are solely economically responsible for their dependents, have been identified as a priority group in a comprehensive self-help shelter project. They are being provided with housing and potable water, vocational training, legal services, and credit (FCHIP, n.d.). A cereals production project in Senegal has determined that rural women engaged in cash-crop and subsistence agriculture, and some degree of trading and marketing activities, are a significant portion of the population it must reach. These women are being provided with agricultural extension services, cooperative and management skills, and marketing facilities (Youssef, Self, and Nieves, 1980). No mention is made in project documents, however, of other support services, such as transportation and child care, that could be relevant to such a population.

A final note of caution with regard to women's concerns in the provision of basic services is in order. In keeping with the theme of providing social and support services that could have a positive effect on all of women's productivity, it is essential to recognize that we have been dealing with only one of two critical factors. An analytical approach requires abstraction and separate treatment of the subject matter. In this case, the matter of services was abstracted from the greater issue of resources and services. It is hoped that readers will be able to supplement this discussion of the problem with his or her own knowledge and experience.

NOTES

¹This paper was developed as a result of discussions with several staff in the Offices of Education, Housing, Urban Development, Science and Technology, Rural and Agricultural Development and Population, of the Development Support Bureau, and two staff members in the Bureau for Program and Policy Coordination. However, the opinions expressed here are those of the author and should not be attributed to the Agency for International Development

²This is a well-known fact in development circles, and an often quoted one, which has lost, because of increasing familiarity, much of its intended impact. A regional example may help convey that lost sense of urgency: in Central America only Costa Rica has succeeded in providing four out of ten rural households with piped water for domestic use. This still means that the women and children in 60 percent of the houses in rural areas have to spend considerable time and energy obtaining and transporting water. The situation in the other countries of the region is worse according to 1970 figures: less than 1 in 100 rural women in Guatemala have now been relieved of the onerous task of hauling water every day; in El Salvador, Honduras and Nicaragua the figures are up to between 5 and 6 percent, but that is hardly adequate (Hewitt de Alcantara, 1979: 36).

³An innovative concept, the Integrated Improvement Program for the Urban Poor (IIPUP), will fund comprehensive and highly integrated projects which will have, most likely, a shelter centerpiece, in addition to providing facilities, activities and services in the fields of health, education, employment, community needs like child care, and legal assistance and financial and legal counselling (PADCO, 1980:iii, 22-23).

⁴The framework derived from these variables will obviously not include guidelines for the provision of basic services in the nonproductive areas of women's lives. Classification of that type abound in the public health fields.

⁵Access to productive resources--technology, credit, land, and the like--although quite central to the issue of productivity, have been dealt with elsewhere (Schumacher, Sebstad, and Buvinic, 1980). and in other sections of the overall document of which this paper is a part. Since the central theme of this paper is services rather than resources, the question of access to resources will not be discussed further.

A REVIEW OF THE "RURAL DEVELOPMENT, WOMEN'S ROLES
AND FERTILITY" STATE-OF-THE-ART PAPER

by

Nadia H. Youssef

What is the impact of rural development projects on the status of women, and consequently how is such an impact (if any) reflected in rural fertility behavior? While we know something about links between fertility and certain status indicators, such as education, employment, and marital interaction, we do not know very much about such links in rural settings. Most important, we do not know how those links operate once interventionist programs, such as rural development projects, begin to take place.

The Rural Development and Fertility Project, sponsored by the Office of Rural Development, DSB/AID, was designed to investigate these linkages. The focus of the project is not rural population policy as such, but the demographic impact of rural development programs that are targeted primarily toward objectives other than fertility reduction.

AID rural development priorities are illustrative of such programmatic activities: increased participation of the rural poor; expansion of off-farm employment opportunities; development of rural financial markets; extension of social services to the rural poor; development of rural marketing systems; and area development.

The underlying principle implicit in such an approach is that fertility reduction in rural areas is an intermediate step instrumental in achieving the primary goals of rural development policy: increased income per person, improved agricultural productivity, and reduced

mortality and morbidity.

Seven background papers, entitled "The State-of-the Art Papers on Rural Development and Fertility," were commissioned for this project.* The papers address these questions by examining the extensive literature on the relationship between fertility and each one of the following topics, in the context of different types of rural development activities:

- Women's status
- The cost and value of children
- Income and wealth
- The land tenure system
- Educational status
- Health and nutrition status
- Rural-urban migration

The seven papers review existing knowledge on the effects of rural development on fertility in Africa, Asia, Latin America, the Middle East, and North Africa. Particular emphasis is on the extent to which specific types of externally introduced rural development activities produce changes in women's familial, economic, and other roles.

The conceptual framework of the papers singles out several factors that alone or in combination, influence the relationship between rural development and fertility. An attempt is made to assess the relevance and significance of these factors in different cultural or country contexts. The factors are economic; demographic; cultural; those pertaining to social psychology; those concerned with power, either political or conjugal; those having to do with stratification; and those concerned with family planning.

WOMEN'S STATUS AND FERTILITY

The relationship between the status of women and fertility is neither direct nor simple. The unresolved problems in the interpretation of the status-fertility relationship are compounded by the scarcity of systematic and meaningful research at the micro level in rural settings. The interaction between status and reproductive behavior has obviously been more easily studied in the urban context.

* The State-of-the-Art Papers on Rural Development and Fertility were developed under contract #931-1170 with RD/DSB/AID by the Research Triangle Institute and the South-East Consortium of International Development. In all, 23 professionals collaborated on the seven State-of-the-Art Papers. Over 1,500 references were reviewed, mostly from U.S. sources.

The State-of-the-Art Paper entitled "Rural Development, Women's Roles, and Fertility in Developing Societies" examine two central questions:

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

In a certain sense, a State-of-the-Art Paper of this sort can only attempt to extract and extrapolate from research findings in the demographic, sociological, and anthropological literature the following sets of information:

Rural fertility data in the aggregate, possible intra-rural variations in fertility, and how rural fertility patterns compare with urban ones.

Reproductive behavior among specific categories of rural women, differentiated by the so-called status variables; for example, work status, employment situation, life-cycle stages.

Use of the more refined urban findings, and of findings about the influence of variables such as education, employment, and decision-making power on fertility, to predict the effects that specific components within rural development projects might have on reproductive behavior.

This paper reviews the findings reported in "Rural Development, Women's Roles, and Fertility in Developing Societies." The paper addresses itself chiefly to two topics regarding the relationship between status and fertility.

First, it identifies some of the gaps in "The Impact of Rural Development on the Status of Women and its Consequences for Fertility" paper. These gaps are:

- a. Discussion of what constitutes high or low status for women, particularly in rural social settings;
- b. Comparative data on woman's status and fertility in the Middle Eastern countries;
- c. Discussion of the demand for family planning services in rural settings. (Though there is considerable

ambivalence regarding the adequacy of methods to measure demand for contraceptive services, the demand for family planning still reflects one behavioral aspect of women's desire or lack of desire to curb fertility.)

Second, the paper proposes the addition of two dimensions to the ones identified in the conceptual framework, dimensions that can aid in understanding the dynamics between status variables and reproductive behavior among rural women. These are socioeconomic differences in rural society and the sexual division of labor within the rural household. Both have been mentioned in scattered fashion in recent comparative studies, as bearing directly on the status of rural women. In the discussion of this second dimension, findings in the literature will be used to make some propositional statements regarding the relationship of status and fertility.

Definitions of Status

The analysis of the relationship between female status and fertility, whether in the urban or the rural context, is meaningless unless the concept status is clearly defined. Current studies on the comparative status of women in developing countries raise a question that is central to the subject of methodology and data collection: Are the empirical dimensions selected to measure status actually indicators of female position and status?

Such a question confronts two related problems: the definitional issue of what constitutes high or low status for women in a given social setting and the validity of available data used to reach conclusions about the comparative status of women. We must address the following questions:

1. What do we still need to know to evaluate the status of women and the progress of women's participation in society?
2. How can we combine different categories of available information about different social settings to generate new insights into the status and position of women?

Status variables: Some social scientists and historians have become aware of the enormosity of the problem of devising a direct multidimensional measurement of female status and of identifying which dimensions represent indicators of women's status in different parts of the world. The most recent measures proposed by Martin Whyte touch upon distinct aspect of the core concept status, particularly as it refers to rural women. ¹ Of the several measures proposed by Whyte, the following are considered to be

central, although they by no means reflect the entire range of the aspects of status or power:

- Property control
- The power of women in the kinship context
- The value placed on the lives of women
- The value placed on the labor of women
- Domestic authority
- Control over women's marital and sexual lives
- Female solidarity
- Male/female joint participation

These and other indicators of women's status should be derived empirically for the particular rural situation in such a way that the indicator reflects meaningfully the behavior of individuals in that setting.

Variables in rural and urban settings: It is important to consider whether distinct aspects of the core concept status may differ in rural and urban society. The major complaint articulated has been that the measures used to study the status of non-Western women have been transposed from the western experience. It might be equally true that within the non-Western setting, the valued activities of women and the way these become translated into the development of higher status for women differ in urban and in rural social settings.

The four aspects of women's status most frequently linked to fertility are education, certain types of employment, work status, and women's power or influence in decision making. Although there are some indications that each of these variables affects the others as well as fertility, research to date has failed to provide clear and consistent explanation of the relationships; it has not, in all cases, confirmed causality; and it has not attempted to demonstrate whether different sets of explanatory variables are needed to interpret the differences between rural and urban settings.

The work-fertility relationship is a good case in point. Under certain circumstances in urban settings, there is a negative relationship between work and fertility. In rural settings, agricultural work is positively associated with fertility.

Work and Fertility: Some studies, in fact, have shown that the fertility of working women in rural areas is higher than the fertility of nonworking women in urban areas. This appears to be true in developed and developing countries. In northern Italy, the greatest differences in fertility occurred between women doing

permanent agricultural work (fertility rate, 135.0) and women doing permanent nonagricultural work (fertility rate, 75.0), with housewives in between (fertility rate, 117.6) (Pinelli, 1971).

In Japan, rural women in agricultural work, who averaged 3.5 children (compared to 2.8 for nonworking women), had a higher fertility than rural nonworking women, because larger families created a need for more household income. In Thailand, rural agricultural female workers registered a higher number of children-ever-borne to 1000 ever-married women (4.5) than did urban housewives (3.8) or Bangkok housewives (3.7). In Thailand, rural women who were agricultural workers also had a higher fertility rate (4.5) than rural women who were not agricultural workers (4.3) (Goldstein, 1972).

There are several reasons for a positive relationship between work and fertility in developing countries. First, the income effect (desire to have more children as income rises) could be strong at low levels of income, as is suggested by an analysis of Egyptian data (Bindary et al., 1973). Second, poverty forces women into the labor market because their families need additional income; they work because they have to, not necessarily because they want to, and therefore their work may not affect their fertility decisions (Lee Hyo Chai and Cho Hyung, 1976). Third, the opportunity costs of children in some circumstances are low. Large families and extended families make it easier to find substitutes for the mothers' time in childrearing. The jobs set aside for women in developing countries are often compatible with child care--or at least are less incompatible than are jobs in formal, modern work settings. ²

Rural Fertility in Middle Eastern Countries

Fertility data for Middle Eastern countries are slightly less scarce for this region than they are for other developing areas. A cursory review of rural fertility studies in some Middle Eastern societies points to rather unusual findings not reported in the series under discussion. These findings are of particular importance to this subject because of their implications for the hypothesized effect of rural development projects upon women's status and fertility behavior.

Child/woman ratio: The average child/woman ratio in rural sections of the Middle East is higher than the corresponding mean for all other regions except Latin America (Africa, 702; Asia, 741; Latin America, 847; the Middle East, 830); (Boulding et al., 1976).

Urban-rural fertility: Fertility differences between urban and rural settings are low; in fact, they occasionally appear in reverse (Findley and Orr, 1978); (Rizk, 1977; Schultz, 1972).

Structural factors: The low urban-rural fertility differences are attributed to the prevalence of certain structural factors, particularly strong in Muslim societies, and their impact upon women: high levels of patriarchalism, familism, male supremacy, and female seclusion (Findley and Orr, 1978). The notion that these constraints are characteristic of Muslim social structure may lead one to question whether rural development projects directed at women in that region are expected to have the desired negative effects on rural fertility, particularly where the influence of cultural factors upon women's status outweighs the influence of development projects.

Literacy and education: Female literacy and education have been found to have a positive effect on rural fertility in Egypt (Schultz, 1972), in areas of Iraq (Kohli, 1977), and in some regions in Iran (Darabi, 1976). Darabi suggests that the positive influence of female education on fertility in this particular setting may be due to the fact that education does not have a negative effect on the desire for children, because most of the rural women who are educated come from relatively high-income groups.

Rural poverty and fertility: The lowest fertility levels are found to be associated with rural poverty. It is the wives of the poorest farmers who have the least number of children (Schultz, 1972). Contributing factors are poor health and environment, leading to subfecundity and greater pregnancy wastage. In addition, at very low income levels parents simply cannot afford to have many children; children's future earnings are not sufficient to outweigh the current lack of available resources (Schultz, 1972).

Intra-rural variations: Although urban-rural differentials are often not significant in the Middle East, there are instances of intra-rural variations in reproductive behavior. Iraq is a case in point (Kohli, 1977). A comparison of fertility behavior in the rural sectors of the Duhok and Al-Muthanna provinces shows child/woman ratios to vary between 337 and 154 for children aged 0-4 and 295-158 for children aged 0-9. These variations are associated with substantial differences in the sex ratios of the rural population and in marital patterns. In the rural areas of Duhok women marry earlier (19.6 years vs. 22.1 years) and fewer women remain single (.021 vs. .095) than in the rural areas of Al-Muthanna. The sex ratios in the two regions are unbalanced: 1,239 males in Duhok, compared to 867 in Al-Muthanna, per 1,000 women.

Migration and Fertility: Even lower rural fertility is expected in some countries, given the current trends among Middle Eastern males to migrate to the cities and to the oil-rich countries. It is plausible that male out-migration will be the catalyst for channeling women away from their traditional marital and maternal

roles toward non-familial alternatives.

Family Planning in Rural Areas: Concepts and Findings

In the conceptual framework of "The Impact of Rural Development on the Status of Women and Its Implications for Fertility," the authors provide a general statement on the policies of governments by region, the reasons behind these policies, and the number of countries within regions having organized family planning programs. Family planning services are seen as an intervening variable between development, women's roles, and fertility. However, there is no systematic development of this issue, either in the conceptual or in the regional papers, regarding:

- a. The availability and accessibility of such services to rural women;
- b. The empirically derived reactions of such women in the area of demand for contraceptive usage;
- c. Individually and culturally related variables that may have an effect on the acceptance or rejection of family planning; and
- d. Evidence of the impact of family planning on fertility on either the individual or the aggregate level.

The demographic literature presents some findings on the family planning experience in rural areas and comparative urban-rural differences in acceptance rates. Inclusion of these data in the regional papers would provide authors with a new set of data to support some of their arguments. In very brief form, some of these findings indicate the following:

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

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

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

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

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

In Latin America's major cities 15 percent or more of women use two or more contraceptives, as compared to less than 5 percent 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 and Mertens, 1968).

In Pakistan, in a family planning program that in 1968-69 established target rates of 15 percent to 20 percent, the actual percentage of users was 10 percent nationwide and 4 percent among rural women (Sirageldin, Norris and Hardee, 1976).

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

4. There is some debate about whether the low acceptance 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 desires for large families still persisted (Belcher et al., 1978).

In Ghana high infant and child mortality rates were 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, and 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 than urban women (up to two hours or more 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 now 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 in regard to fertility, is 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 program 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 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.

SOCIO ECONOMIC DIFFERENCES AND THE STATUS OF RURAL WOMEN: CONSEQUENCES FOR FERTILITY

The overriding tendency among social scientists has been to treat rural society as a homogeneous social group. This is no less true in attempts to interpret fertility decisions and behavior. The failure of social scientists to acknowledge social differentiation factors, particularly those which stem from private ownership of land, results in an inadequate assessment of differences in status among women from different socioeconomic levels in rural economies.

Assuming that female autonomy and social power (as indicators of status) are a function of access to strategic resources within the domestic and social sphere, differing access to means of production (i.e., land and capital) are expected to reveal significant behavioral differences for each class within rural society for both men and women (Deere, 1978; Stoler, 1977). The implications for female status are considerable.

Land Ownership

Female family members of farmers who own land are the ones who seem to benefit most from the availability of the landless who work for wages (Boserup, 1970). For a large percentage of these upper-stratum women, agricultural work becomes defined as inappropriate work for women. The result is that they are able to devote themselves largely to work within the home and to leave work in the fields to male family members and hired labor.

Land ownership seems to bring about significant cleavage between strata in terms of the degree of sex role specialization among the poor and landless, few economic activities appear defined as inappropriate for women. Sex role differentiation is blurred. Among landless farmers, female family workers may participate equally in all kinds of agricultural activities (except plowing), use most tools and implements, and have control equal to men's over the disposition of both produce and the proceeds from its sale (Deere, 1978; Young, 1977). It is these women who supply the bulk of female wage labor.

Among the upper rural strata, by contrast, there appears to be a high degree of segregation of work roles. Restrictions are imposed on women's use of implements and tools, on their participation in decisions related to agricultural production, and on their responsibility for and/or control over marketing or any other kind of commercialization of commodities they have aided in producing (Deere, 1978; Young, 1977). One of the few activities outside agriculture that women from this strata are likely to pursue is trade, where they can attain a considerable degree of autonomy.

Social Class and Fertility

How do stratification factors interact with aspects of women's status to influence fertility behavior?

First of all, there is evidence of the negative effect of poverty on fertility (independent of women's status and work roles) for Indonesia (Central Java), the Philippines, and Egypt (Concepcion, 1974; Hull, 1977; Schutz, 1972). The negative effect of poverty on fertility (independent of women's status and work roles) is in part due to other factors associated with poor women that depress reproduction, such as high frequency of marital disruption, secondary sterility, sub-fecundity, miscarriages, stillbirths, and postpartum abstinence.

Second, there are strong suggestions in the literature about the structural links between social differentiation in rural societies and the position women occupy in the community. These interact in a very dynamic way to affect reproductive behavior. Several propositions and hypotheses, based on a variety of comparative work, can be postulated. ³

Women of the landless and the wage labor class, will have a lower fertility than women of the upper and middle rural classes.

The propositional statement rests on the notion that women from the landless and/or wage labor classes may be forced by necessity to curtail their fertility. Very poor women seem to be less economically dependent on and subordinate to their menfolk than women from better-off households (Boserup, 1970; Deere, 1978; Young, 1977). These poorer women tend not to be secluded in the home; they are more valued in the community as workers and mothers, experience less sex role specialization in labor allocation, are assigned to and actively involved in non-domestic activities, and have some economic independence. Although there is considerable debate about whether all these attributes reflect higher status for women, it is nevertheless obvious that the economic role and responsibilities these women are called upon to assume will build in constraints on the bearing of many children.

Women from the middle and upper peasantry will display a higher fertility than women from the landless peasantry or the wage labor class.

This notion is based upon several empirical findings. One is the positive relationship between class and fertility (Hull, 1977). The second is the previously discussed emergence of private ownership of land and the consequent creation of a landless or wage labor class and the influence of this development upon the role and position of rural women from the upper and middle strata. These effects can be summarized as follows:

Restriction of women's roles in the economic productivity process, by strictly defining what are "appropriate" activities for women;

Exacerbation of women's economic dependency on and subordination to their menfolk (through parental control of marriage, the dowry system, etc.);

Fostering of a highly sex-segregated division of labor, which relegates women to home

activities and encourages seclusion and veiling practices;

Loss of women's control over the proceeds of their productive work and over vital input into the household;

Reinforcement of an ideology in which women become valued solely because of their reproductive capacities.

Control of Productive Process

Women who have lost access to and control over the productive process will have higher fertility rates than women who have not experienced that kind of loss

This statement rests on findings that the shift from communal ownership of land, with usufruct rights, to private ownership has had drastic effects on women. As land passes into private ownership, women are squeezed out of independent access to land and to the means of production.

The result in terms of women's power and status seems disastrous. The marginalization of women as a result of this process is associated with high fertility. Incentives for numerous children are expected to be rooted in woman's search to gain power in the domestic arena once she has lost her productive resource base in the economic sphere.

CONSEQUENCES OF THE SEXUAL DIVISION OF LABOR WITHIN THE RURAL HOUSEHOLD

A new dimension of the fertility issue is related to the possible influence upon reproductive behavior of the division of labor between the sexes within rural households. The focus of interest here is the ways in which tasks are divided between the sexes in home and market production; to understand how such allocations influence, or are influenced by, the status and position of women in rural society; and to discover what effect these interactions may have on fertility. Specifically, one may address the following key issues:

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- * A distinction is made between the landless peasantry, part of whom become a wage labor class, and women who have lost traditional access to land, as has happened in parts of Africa.

Under what conditions does a specific patterning in the sexual division of labor within the household generate a resource base for women?

Under what conditions do resource bases for women become translated into power in other spheres and into the development of higher status for women?

How do specific paterings in the sex-based division of labor interact with components of women's status to influence reproductive behavior?

It is only recently that the literature on women's activities has included studies of women's non-wage-earning economic activities in rural settings: their participation in agricultural activities, in marketing, in home production of goods, and in small-scale petty trade (Deere, 1978). Macro-level information may acknowledge women's economic role in labor-intensive activities such as plowing, planting, and harvesting--all of which are performed outside the household--but in order to assess the contribution of women (and children) to household income or resources, economic activities must be defined more broadly to include such activities as:

Agricultural and pastoral labor, fishing, hunting, poultry-raising, house building, tool making, spinning and weaving, other arts and crafts, marketing, shopping, transportation, fuel collecting, water carrying, food preparation and processing, and washing (Nag, 1976).

Such activities have not been regarded as productive and therefore in most cases have not been included in census data or labor force statistics. If women who perform these tasks have been included in the data at all, they are most likely to have been classified under the general rubric of unpaid family workers, which is very poorly measured.

One of the more consistent findings in the demographic literature has been that women's employment in agricultural (rather than non-agricultural) activities and in work at or near the home (rather than work outside the home) has a neutral if not a positive effect on fertility. One may extend these ideas to make a finer division within rural economic activities--one that goes beyond the broad distinctions between agricultural and nonagricultural work and between work away from home and work in and around the home.

Conceivably, a close analysis of the sexual division of labor within rural households will give us a better idea of the total work that women perform than do the current definitions of work that exclude

house-based activities. Because of the strong interdependency in rural households between 'productive labor' and 'non-market' home production in generating income, it is conceivable that a framework that considers the relationship between the sexual division of labor and reproductive behavior may help to better explain rural differentials in fertility.

Because the majority of women in the developing world still live in rural areas where wage-earning opportunities for either sex are relatively restricted, exploration of the possible influence that these other economic activities may exert upon fertility behavior seems especially important (Mason, 1971).

One may start, then, with the initial inquiry into the link between the sexual division of labor within the rural household and aspects of the relative status of women.

Resource Base and Women's Status

Under what conditions does the sexual division of labor "generate a resource base for women that can be translated into power in other spheres" (Dixon, 1978)?

Do women derive power, status, and privileges from the system of labor allocation within the household? Are they denied power, status, and privileges by the system of exclusion? What type of productive roles might be linked to female power variables by virtue of their valuation, the income derived (directly or indirectly) from them, or the level of skills involved. 4

As to the more critical issue of the relationship between labor allocation to the sexes within the domestic unit and fertility behavior, two arguments can be made. Both raise important questions regarding causality. Do women's productive undertakings determine the degree to which they can be committed to having children, or is the reverse true?

Fertility and Division of Labor

The first argument proposes that fertility is a woman's individual response to her valuing of children as substitutes for the work allocated to her by the intra-familial division of labor (Youssef, 1978). The second argument proposes that fertility levels are a response to differential demands for female labor in the rural sector. Such demands, rooted in political and economic forces, exert an independent influence upon the structuring of the sexual division of labor and upon the importance bestowed on women's reproductive role (Young, 1977).

Fertility as a Response to Women's Work

The demographic literature stresses the compatibility of work and family roles and the household-based maximum utilization principle as major determinants of reproductive behavior. High fertility among rural women is seen to be a result of the perceived economic value of children to the household and of the nature of the work opportunities available to rural women, most of which appear to be compatible with family responsibilities.

Elsewhere it is proposed that fertility behavior can also be seen as a conscious response reflecting the value women place on children as substitutes for the workload assigned to them by the intrafamilial labor allocation process. Certain patternings in the sex-based division of labor are thus expected to be associated with a high preference for children, because numerous children are perceived to lessen the burden of women's tasks in household enterprises, domestic chores, and productive activities.

This approach to fertility is somewhat different from the traditional "economic value of children" approach in three ways. Basically it:

- a. stresses a link with woman's workload (both home and productive activities);
- b. draws upon a maximization-of-utility model based on the mother (woman) as the basic unit of analysis (as opposed to the household) (Leibenstein, 1977); and
- c. allows for the specification of differing interests in children among household members (Birdsall, 1975), since it grounds fertility behavior in the woman's rational calculation of perceived benefits (Leibenstein, 1977).

The bulk of conventional economic or socioeconomic research in fertility has assumed that husband and wife have the same desire or lack of desire for a child. This assumption is grounded in the principle that it is the household that maximizes its utility. The introduction of psychological variables into the equation assumes that differences can arise between husband and wife with regard to interest in children (Birdsall, 1975).

Leibenstein's theory of selective rationality in the analysis of fertility-related behavior proposes the need to focus on the individual (not the household) as the basic decision-making unit and to assume that differing interests prevail within a household

regarding decisions related to fertility. Family size may be determined by "a lack of calculation of considerations; or by extremely gross calculations, or by a lack of caring of the connection between current behavior and future consequences" (Leibenstein, 1977).

In an attempt to establish a relationship between the sexual division of labor and fertility, the following questions need to be answered:

Under what conditions does the intrafamilial division of labor between the sexes generate conditions favorable to women's motivation for large families?

Under what conditions does it generate conditions favorable to women's motivation for small families?

Demand for Labor and Fertility Behavior

The second argument postulates a much more complex relationship between woman's productive and reproductive roles. Young (1977) identifies differing labor demands, created by political and economic forces, as the mechanisms of the division of labor between the sexes, how a woman's status and position in the community are defined, and the emphasis given to women's reproductive function.

Merchant capital and commercial capital are differentiated in terms of the effects of each on the limitation and/or expansion of women's access to economic roles, which in turn affect the extent to which women specialize in childrearing. Merchant capital is associated with an increased demand for labor, a reallocation of labor resources, the entry of many more women into the productive process, and, eventually, an increase in fertility at the household level to meet the need for an absolute increase in available workers.

Commercial capital restructures local economies away from self-provisioning, fosters differentiation of the local community, creates private ownership of land, and brings about the emergence of a wage labor class. It can have one or two effects on fertility, depending on whether labor is redundant or scarce.

For families dependent on a wage, the amount of the wage, as well as the possibility of augmenting it by selling familial labor power, provides the boundary conditions for family size. The cost of raising children rises substantially under commercial capital, and restrictions on family size become imperative. Women have to take on outside work in addition to their heavy household burdens when men's

wages are insufficient for household needs. The effect may be to reduce the number of children, although dependence on child labor is still great.

FOOTNOTES

(1) For attempts to develop indicators of the status of women, see Mukherjee (1974), for Indian society; Sanday (1973), for tribal and agrarian societies; Dixon (1976) and Safilios-Rothschild (1970) for industrialized societies.

(2) DaVanzo and Lee (1978) demonstrate through their careful work in Malaysia that agricultural tasks involving female labor may not be as compatible with child care as has always been assumed.

(3) The relationship of land availability, land tenure, land distribution, and inheritance to fertility have been discussed at the macro level by Stokes et al. (1979). These give support to the hypotheses presented below.

(4) The link between the sexual division of labor and female power is well stated by Young (1977):

"I wanted to analyze the sexual division of labor, meaning by this a system of allocation of agents to positions within the labor process on the basis of sex and a system of exclusion of certain categories of agents from certain positions within the social organization on the basis of sex, and lastly a system of reinforcement of the social construction of gender" (emphasis added).

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