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LEARNING ABOUT RURAL WOMEN

**Sondra
Zeidenstein**

guest editor



A Special Issue

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Learning about Rural Women

This special issue of *Studies in Family Planning* is one of a series of issues dedicated to a single subject or program. Our intention is to provide an examination in depth of selected key topics beyond the range of a single article.

This special issue focuses on ways in which the roles and status of rural women in different societies can be better understood. There is a vital need to understand rural women, not as a set of statistics, but as individuals performing crucial roles in society and therefore playing fundamentally important parts in the development process.

A variety of ways to learn about rural women are described. Some approaches adopt standard sociological and demographic methodologies, while others employ anthropological techniques. All attempt to begin from the point of view of the individual woman, to understand how she sees herself in the society around her and how she adapts to changes brought about by development efforts and other social forces.

For those concerned with improving family planning programs, this special issue is intended to provide a fresh viewpoint—a perspective on the reproductive and child-rearing function as viewed by individual women, in the context of their daily lives. A broadening of our understanding of rural women, and particularly a deepening of our appreciation of the ways women perceive their roles, can significantly help to improve program design and management of family planning and other development efforts. Indeed, the material in this special issue is intentionally wide-ranging, directed to other sectors of the development field in addition to family planning. Most development actions have a direct or indirect impact on rural women. We must understand rural women better, in order to plan successful policies and programs and to avoid unintended negative effects. The methods described in this special issue will, I hope, aid in deepening our understanding.

GEORGE F. BROWN
Director, International Programs
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Introduction

Sondra Zeidenstein

In this special issue of *Studies in Family Planning*, we suggest why knowledge about rural women is essential for all aspects of policy, planning, and implementation directed toward goals of rural development (see Part One), and how learning about rural women can proceed rapidly (see Part Two).

Learning about rural women is essential because of the nature of their responsibility. A basic feature of traditional rural society is that the family is the unit through which people seek to fulfill their needs and improve their condition. An equally basic feature is that family responsibilities are usually divided along sex lines among adult males and females. Each sex has responsibility for carrying out certain aspects of the work necessary for family survival, a division of responsibilities that has typically been referred to as "complementary." Although this description is familiar and seems to ring true, it does not explain the situation fully enough to be useful in interpreting many phenomena of rural life. Based on evidence from many sources,¹ it seems more accurate to say that, for members of each sex, responsibility to the family usually includes production or provision and control or management of the resources needed to carry out their work.

What is the work of rural women? The specific tasks vary because rural settings and, within them, rural cultures differ markedly from one another. But it is well documented that in most cases the work of rural women includes childbearing and rearing, household provisioning and management (cooking, cleaning, washing clothes, household repair and manufacture, fuel gathering, provision of water),

and aspects of agricultural production and processing, livestock raising, artisan production, trade, and income generation. These varied tasks are not perceived by women as falling into separate categories of familial and nonfamilial, domestic and economic, nonproductive and productive, but as intrinsically related. For women, childbearing and rearing are, among other things, matters of maximizing family opportunity for survival and security through decisions involving numbers of children (Gulati), their education (Okonjo), health care (Hull), and the kinds of work they will do.

Some of the means by which women provide the resource base for carrying out their family responsibilities are the subsistence production of resources for household consumption, participation in income-generating work, and traditional, largely female-run systems of maternal and child health care. As the economy and direction of opportunity have become monetized (for various reasons in different rural areas), women are less able to meet their responsibilities through subsistence production alone (Okeyo). Reports of efforts to provide various services to rural women in many countries indicate that women everywhere are looking for opportunities to increase income and that they are spending their income on basic family needs: food, repair or improvement, clothing, and children's education.

As is the case with men, women's access to and control over resources affect the degree, mode, and quality of performance in carrying out their responsibilities. And as with men, shifts in the larger economy, planned or unplanned, affect women's access to and control over resources and consequently their behavior. Planners are aware that policy directed toward achieving rural development goals depends for its success on the response of rural people. But planners have not recognized that women's need for

¹All the papers in this issue support this analysis (see Okeyo, Okonjo, and Gulati, in particular), as do much of the new data emerging from studies of rural women in the context of rural development.

and use of resources is as basic an element of rural dynamics as men's, or that the mode and degree of access to and control over resources differs significantly between men and women. By considering only the behavior of males or assuming that it somehow accounts for female behavior, planners have only half the information base needed for determining policy. For example, poverty is a key policy issue, yet rarely does one hear of policy addressed to the fact that poverty and its consequences for all aspects of rural development result from women's unemployment or women's alienation from the land as well as men's.

Rural development policies, whether in agriculture, land tenure, employment, population, health, or any other area, that do not recognize and support the resource needs of each sex (i.e., the genuine complementarity of the rural family) will not have their intended effect and will have unintended negative side effects. There are many relevant examples of this issue. Rural employment is an important and obvious one. There has been little awareness of the fact that women's earnings are an indispensable source of income to poorer families, who make up the majority of most rural populations, or that women's earnings are usually spent on their families' most basic needs. Because the employment of rural women in such countries as India and Bangladesh, for example, has not been accurately recorded in the past, it has been difficult to measure the extent to which women's unemployment has been increasing. The loss of women's earnings has consequences for family and national economies in the form of low savings, high dependency ratios, scarce family resources (contributing not only to malnutrition, poor health care, and low literacy, but also to increasing alienation from the land), and a decline in the value of women that shows up in the changing ratio of male and female deaths. In many countries women's employment is still not a policy issue. However, as a result of important developments in research about women, this issue is now being seriously considered as part of India's Sixth Five Year Plan (see Mazumdar).

Food production is another major issue. Misconceptions about food production: (who is engaged in it or aspects of it; who owns the land; what technology is being used; who makes decisions and on what basis) and the resulting misdirected programs to increase food production (inappropriate extension activities, development institutions, credit arrangements) have been and continue to be well documented. The failure of policies intended to increase

food production is related to failure to understand the nature and rationale of women's involvement in food production. Much is being learned about the nature of women's work, but an ignorance of the rationale of her involvement persists as new efforts are under way to increase food production and influence its distribution. At this critical point we must ask: What will happen to the goals of rural development if policy support is for large mechanized farms that leave women out completely; if women are not given adequate support to commercialize small farms; or the aspects of farming that are their responsibility; if the only jobs for rural women are as laborers or on marginal farms; or if investments in land, training, and credit are directed only to cash crops, to the exclusion of subsistence crops? There is no doubt that the answers to these questions will be related not only to food production, but also to migration, poverty, and fertility.

Fertility is another major issue. Women's resource needs and their means of meeting them have as much to do with desired family size as those of men or "the family." Both a woman's point of view about preferred family size and her willingness to act on this preference are influenced by her access to valued resources, her control over them throughout her lifetime vis-a-vis males, and the economically based social pressures to fulfill an accepted role. For example, a woman's preference for a large family may be related to competition for her husband's favor in a polygamous marriage, to the need for children to do her subsistence work while she earns money, or to dependence on males for all contact with the outside world. Desire for a small family may be related to her perception, as a wage laborer, of the absolute finiteness of the resource base (Gulati). It is critically important for planners to understand women's perspective on their situation, not just the perspectives of men or "the family," if they are to have a more competent understanding of population dynamics and the likely impact of various policies.

If we look at the institutions that implement programs involving women, we find the same lack of understanding. Institutions can succeed only if what they offer bears some relation to the needs and desires of the groups they serve. The shortcomings of institutions seeking to reach rural women are significantly attributable to their failure to take into account, in the context of a given culture, women's coequal role in the rural family and the way they seek to carry it out. For example, family planning programs in many rural areas attract only a small number of eligible women and experience high dropout rates among women who are willing to try contracep-

tives. This is true despite the fact that pilot approaches in those areas indicate that a much larger number are interested in contracepting. Some problems are related to the difficulty of channeling resources to rural areas through large, centralized institutions. Many problems are related to the difference between the perspective of the program and the perspective of the users. Yet there are few attempts to understand what kinds of contraception and modes of delivery women find usable in their circumstances, perhaps because there is little recognition that women evaluate such resources in light of the socioeconomic framework mentioned above. Studies of women's attitudes toward menstrual bleeding or abstinence make more sense when seen as aspects of this larger framework than as determining factors operating in isolation. An example of the criteria by which highly motivated women evaluate available services can be found in the article by Gulati.

Similarly, health clinics in many rural areas are underused even though it is known that women have a strong concern for the health of their children. Again in analyzing this problem, very little attention is paid to what rural women need from a health care system in terms of distance, costs, access without dependence on one's husband, and retention of control over knowledge. An analysis of health care systems in these terms can be found in the article by Hull.

Another kind of institution directly involving rural women is the women's group or women's component of rural development activities. Typically its program has included information and services related to literacy, nutrition, child welfare, home economics, labor-saving technology, and, more recently, income-generating projects. In the past these groups have had low rates of success in attracting the women they were intended to reach or in changing behavior, probably because what they had to offer was of low priority for rural women. Articles by Okonjo and Okeyo describe women's groups that emerged organically out of the needs of women—for example, the provision of resources for which women are responsible in a household economy—and suggest that the priorities of these groups have a very different focus from those of conventional programs directed toward women.

One would guess that a new emphasis on income-generating projects will succeed only with a better understanding of the complexity of rural women's behavior, including the pressures they are under within the family, the direct and indirect means they use to produce resources, and the constraints on their efforts from larger economic forces. The articles by Mazumdar and by Abdullah and

Zeidenstein analyze some of these issues in concrete terms.

Concepts of rural development have thus far failed to include the centrality of women's behavior in predicting and explaining rural phenomena, and planners have therefore not seen the need to understand the frameworks governing that behavior in order to formulate and carry out policy more effectively. Thus, although research about rural women is under way in many areas, there are strong indications that recognition of that research is not taking place. One indication is that although the information emerging from rural areas worldwide is being disseminated, it is not being read by or at least not incorporated in the thinking of most rural planners. With few exceptions, it has not entered the mainstream of policy formulation. More likely it is tolerated as a fad or minimized in such handy but misleading formulations as "beyond family planning" or even "integration of women in development." Typically, research on rural women is collected by a group isolated from the larger institution and relegated to a chapter of a report or an item on an agenda without informing the thinking of the rest of the report, meeting, or institution.

Another indication is that the study of rural women does not generate the same kind of support or carry the same status as, for example, migration, household economics, nutrition, value of children, and cropping patterns, even though an understanding of rural women's role is a prerequisite to understanding each of these areas of study and most others. The role of rural women is, appropriately, a matrix issue, affecting what needs to be learned and the interpretation of data on other issues. The result of not understanding the role of rural women is that knowledge accumulated on these issues has been partial, as has development policy based on that knowledge. Having measured only what men do, our interventions seek to influence only men's behavior.

If there were recognition of women's coequal responsibility in the rural household and the consequence of that role for rural dynamics, information would be sought, incorporated in the knowledge base for rural planning, and operationalized in rural programs. Such conceptualization is implicit if not explicit in all the articles and most of the research notes in this issue, as it is in much of the new research about rural women.

Learning about rural women is not mysterious or exotic; it requires as sober an approach as any

other topic, although it plays a more central role than most in explaining rural life. A great deal of information is available, much of it collected and analyzed since 1975 by and with the support of an interested few, committed by an intuition of its central relevance to rural development and then convinced empirically by the data. Much more is now being gathered.

Unfortunately, the study of rural women labors under several handicaps that have created a research gap. One handicap that it shares with other areas of rural studies is the relative lack of attention paid to rural phenomena and the consequent lag in the refinement of social sciences, which evolved in urban, industrial circumstances, to enable them to analyze rural social and economic behavior. A matter of special frustration is the inadequacy of the concepts, terminologies, and methodologies—the tools of research—of these social sciences for looking at and describing rural women. For even as the social sciences evolved to examine rural phenomena, they did not appropriately conceptualize the role of women.² The frustration is increased by the pressure from some directions for hard data about rural women as a basis for giving them serious attention even though the instruments available for collecting hard data are so flawed. The research gap has been aggravated by the persistence, in the absence of more accurate data, of urban, normative, male perceptions of rural women, which conceal the relevance of rural development issues to women's roles and hamper the collection of necessary data through conventional systems.³ And research has been hindered by the protective invisibility of most rural women and the scarcity of women researchers, for under these circumstances it is difficult to ascertain women's points of view about their situation.

There is a need to close the research gap rapidly so that rural dynamics can be better understood. To do so requires the range of efforts and modes of learning illustrated in Part II of this issue. Scholars are working to correct comprehensive frameworks, such as Marxism, and the biases of such social sci-

ences as economics and anthropology. Researchers are introducing in conventional frameworks of statistics or sample surveys new analytic approaches and new modules to collect more accurate information about rural women. They are developing methodologies to elicit new kinds of information and are training interviewers in understanding new contexts for asking questions. They are recognizing that the lack of fundamental knowledge of the reality of women's lives puts all attempts to study rural women and men at a great disadvantage in regard to knowing what questions to ask, how to ask them, and how to interpret answers. Therefore they are stressing the continuing interaction of qualitative and quantitative, micro and macro studies to reduce the chances of misinterpretation of data or inappropriate conclusions and policy recommendations. For example, one can learn that rural women withhold water from babies with diarrhea, conclude that folk medicine is harmful and women ignorant, and recommend that health systems be developed to replace women's traditional health care networks. Or one can look, as Hull has in Indonesia, at the framework in which women operate a traditional health care system and recommend policy that will be much more acceptable and practicable. Perhaps the greatest lack has been the voices of rural women themselves expressing their own point of view, which would expand enormously our understanding of rural life. The in-depth and open-ended interview is seen by many researchers as a very important tool in ending their long silence.

Another source of information about rural women basic to evolving an accurate framework for understanding critical aspects of their behavior is the institutions and projects that have already made contact with them—the family planning clinic, the rural health center, the functional literacy or agricultural extension project. These institutions are in a unique position to record the behavior of women in response to new resources, always an indication of what they consider to be priorities. Extension workers could provide many of the answers researchers are looking for if they are asked the right questions and if their mode of knowing and explaining is valued. In fact, without access to a record of what such workers cannot help but know, but may not communicate in routine reports, one cannot understand how programs and institutions need to be modified to better serve the needs of rural women.

²The persistence of the terms *productive* and *nonproductive* to describe women's market-value and use-value work has been especially insidious.

³It is astonishing that the fact of women's participation in agriculture—one of the most obvious phenomena of rural life—has had to be proved in almost every country and then the nature of this participation analyzed and its value measured.



Part I

Looking at Rural Women

Women, Doctors, and Family Health Care: Some Lessons from Rural Java

Valerie J. Hull

The following article describes traditional health care systems of rural Indonesian women. It distinguishes the central from the peripheral aspects of systems that women have developed to meet their own needs and contrasts them with modern health care systems. It suggests what can be done to keep the valuable features of each approach.

During the past two years the Population Institute of Gadjah Mada University has been conducting a longitudinal study of factors determining birth spacing patterns in the subdistrict of Ngaglik, about 15 kilometers north of Yogyakarta in central Java.¹ Over 500 women have been followed through pregnancy, childbirth, and the postpartum period, with interviews conducted twice monthly—once to obtain anthropometric data for mother and infant, and once to obtain data on attitudes and behavior related to such birth-interval determinants as lactation, amenorrhea, and abstinence.

Through these frequent interview sessions, the research uncovered a great deal about the main concerns of women in Ngaglik. Our focus was not specifically on maternal and child health, yet intensive interviews with pregnant women and new mothers presented a unique opportunity to learn about these matters. For example, a question on illnesses experi-

enced during the month preceding each interview, asked primarily to check the possible influence of illness on the anthropometric measures being collected, yielded rich insights into women's perceptions of illness and methods of treatment. A valuable supplement to our interview data was a system of field notes kept by each interviewer. Conversations with village women encountered on the way to and from interview sessions or while attending village functions were noted on cards, which have been labeled and subsequently filed according to topic. The large proportion of these notes dealing with health-related topics indicates the importance of these matters in the women's lives. Open-ended interviews were also conducted with the community's traditional midwives, as well as with trained midwives and local clinic personnel, in order to discover more about their roles in the provision of health care.

In this article we present some of what we learned about traditional beliefs and practices in maternal and child health care among women in Ngaglik, and review some of the important changes occurring as modern medical care is introduced. We learned about positive and negative practices in both traditional and modern medicine and considered specific ways that this knowledge could be used to improve health care programs. Perhaps more impor-

¹The research was carried out in two villages (with a total population of 15,799), which included areas of well-irrigated rice land as well as poorer quality land suitable only for dry-cropping. Most adults are engaged in agriculture; however, there were also large numbers of traders and artisans, as well as some civil servants who commute daily into the city of Yogyakarta. Although the majority of the population is nominally Muslim, only a small proportion strictly adheres to Islamic teachings.

The women selected for prospective interviews in the Ngaglik study included all those giving birth between January 1976 and March 1977. These women were young, 50 percent of them between the peak childbearing ages of 20 to 29. About a third have had no schooling, and just under 30 percent have had only a few years of primary school. Average monthly household income was estimated at approximately Rp. 10,000, or about US\$25, and

about half of all households owned no irrigated rice land, itself an important indicator of economic and social status. The majority of women regularly engage in economic activities in addition to household tasks, primarily farming, farm laboring, and petty trading.

A community health center combined with a maternal and child health center serves the approximately 40,000 people of the subdistrict of Ngaglik. Staffed by paramedical personnel supported by weekly visits from a doctor, the center is attended by an average of 20 to 25 patients a day. Women in our study lived anywhere from a few meters to seven kilometers from this main health center, and also had access to one of several doctors and trained midwives with private practices in the area. For a full description of the Ngaglik Study, including some preliminary findings as of January 1977, see Hull (1978).

tantly, we examined some of the underlying principles of the two approaches to health care. We found that, contrary to the common image of peasant fatalism in the face of disease, women played a resourceful, active role in family health care. In contrast to this traditional self-reliance, modern health care seemed to promote dependency, for medical professionals were providing services but not relaying knowledge.

What Women Are Doing: Traditional Health Care

Our examination of traditional health care turned up many customs that are positive either in concept (e.g., the value placed on child spacing) or in practice (e.g., breastfeeding). We present a few of the beliefs and practices dealing with childbirth, infant care, and family planning that we felt were beneficial. We follow this with a discussion of practices that could be considered harmful.

Wisdom in Tradition

Childbirth. A woman giving birth in Ngaglik will probably deliver in her own home, attended by family members and a *dukun bayi*, an older woman who performs the role of traditional midwife as a secondary occupation.² During labor, the midwife guides the woman's breathing, helps her control contractions, and gives moral support. The woman is usually advised to keep ambulatory during early labor, and to get up and bathe as soon as she is able to after the birth. Support from the *dukun bayi* continues for 35 days following birth, in the form of frequent visits to give advice and to massage both mother and infant. Overall, the atmosphere surrounding childbirth and the supportive role of the traditional midwife bring to mind much of what is currently being advocated in the West by proponents of natural childbirth and home delivery (Arms, 1975).

Some specific techniques of labor and delivery may also serve as examples of traditional wisdom. For example, contrary to modern medical practice, the umbilical cord is not cut until the placenta, the spiritual "younger sibling" of the infant, has been expelled. Although usually based on the belief that the disconnected placenta can migrate up into the

woman's body, this practice in fact ensures that the baby will receive blood from the placenta for as long as the umbilical cord pulsates, helping to prevent anemia in the newborn infant.

Breastfeeding. Breastfeeding is still virtually universal in Ngaglik, and infants are breastfed well into their second year, often longer. The breastfeeding mother receives support and advice from the *dukun bayi* and from experienced female relatives and friends, a factor shown to be of critical importance in the establishment and maintenance of successful lactation (Raphael, 1976). The attitude of the women themselves is positive; the importance of mother's milk for infant health is widely acknowledged, and milk is even thought to have curative powers for certain infections. Although women were not completely free of such problems as nipple soreness and variable milk supply, such difficulties were usually surmounted by the women themselves, again with advice from elders and peers. Significantly, fewer than 10 percent of the sample women reported having experienced inadequate milk supply, though this is one of the most common fears and frequent complaints among urban, educated women in Indonesia, as it is in the West. As with childbirth, many of the breastfeeding practices of rural Javanese women are now being taught as "wisdom" in developed countries.

Infant Health Care. A widely read Indonesian journal, which devoted a special issue to health, includes the following statement: "It is not the usual practice for the mother herself to either prevent or treat her child's illnesses; she will probably bring the child to a traditional healer" (Ryanto and Marsis, 1974, p. 58; translation mine). In contrast to this and similar notions of passivity or reliance on traditional healers, mothers in Ngaglik reported a wide range of home remedies used to prevent and treat illnesses in their children, and indeed all family members. These consist of such cures as *jamu*, or herbal medicines, which are either consumed as teas or used as compresses or salves; various oils; massage; and the application of mother's milk, saliva, or urine. Some cures are fairly simple, others involve the combination of as many as a dozen or more ingredients. *Jamu* are by far the most popular, and there is a specific mixture for almost every common ailment. Treatment is sometimes "indirect" (for example, the breastfeeding mother drinks the *jamu* specific to her child's ailment, in the expectation that it will be transmitted through her milk. Women either know of these remedies themselves or seek advice from

²Over 90 percent of our respondents delivered at home, and all but a few with the assistance of a *dukun bayi* (Amin Yitno and Tri Handayani, 1978).

family members. Only rarely did Ngaglik women consult traditional healers, usually after their own efforts had not produced the desired results, or for some unusual symptom.

The wisdom in infant health care lies not in the actual remedies, but in the principle of self-help health care. Mothers are in fact following basic medical procedure: identifying symptoms, selecting the appropriate cure that has been shown to be effective previously, and applying the remedy. In the case of Ngaglik women, at least, the image of women fatalistic in the face of illness, or dependent on mystical traditional healers, is a myth.

Family Planning. A strong traditional value is placed on child spacing—three years being considered the ideal interval—surely an example of the wisdom of tradition. Wide birth intervals have been achieved traditionally through the effects of both lactational amenorrhea and postpartum abstinence. Some women believe that intercourse can contaminate breastmilk; however, it is important to note that child spacing is not merely a result of this taboo. Women feel that pregnancies should be spaced for economic reasons, children's health, and to facilitate child care. Long periods of postpartum abstinence have been supported by the high value Javanese culture and traditional religion place on all forms of abstinence and self-control (C. Geertz, 1960; Singarimbun and Manning, 1974).

Some Harmful Practices

The preceding examples represent only a few of the beliefs and practices we felt showed beneficial aspects. At the same time, descriptions of the positive efforts of women in health care can sometimes tend to overemphasize, even romanticize, the wisdom of traditional ways, in complete disregard of the harmful or extremely dangerous practices that are also part of tradition. In our conversations with women we learned about several practices related to childbearing and rearing that would be considered harmful, and collected information on the reasoning behind them.

Childbirth. Our earlier description of childbirth focused on positive aspects of the delivery situation and the advice of the midwife; however, certain techniques used are potentially very dangerous. While the belief that the placenta can go up into the woman's body results in a delayed cutting of the umbilical cord—a positive effect—it can also prompt the midwife to insert her hand to extract a placenta that

is unusually long in being expelled, a dangerous practice that can lead to serious infection. In addition, the umbilical cord is traditionally cut with a bamboo blade, and while some midwives claim to use a freshly cut blade for each birth, others use old blades that have been stored without regard to cleanliness. This practice introduces the risk of neonatal tetanus from a cord cut under septic conditions.

Breastfeeding. Certain breastfeeding practices can also have adverse consequences. Colostrum, the early milk that contains important antibodies and nutrients, is believed to be "dirty" and to cause illness in the infant. It is thus discarded, often in the same place as the child's placenta, which is ceremonially buried shortly after birth. Over half the women studied reported that they expelled and discarded this important early infant food.

Supplementary Food. Another custom related to breastfeeding is the practice of early supplementation with solid foods, often begun within the first weeks of life. A child's appetite is a constant concern for many mothers, and early supplemental feeding is supposed to aid the baby in becoming accustomed to solid food, which in turn will help to avoid later feeding problems. Most infants, however, do not require nourishment other than breastmilk until the age of 4 to 6 months, and giving this unnecessary food to very young infants exposes them to an earlier risk of infection through contaminated food. The incidence of diarrhea, a serious health problem in Indonesia, was found to be higher among Ngaglik infants receiving supplementary food in the first few months of life than among totally breastfed babies.

Pregnancy. Pregnant women perceive little need for routine antenatal checks, as long as no unusual symptoms arise. Dukun bawi are not called upon until labor actually begins, except to officiate at any ritual ceremonies that might be conducted during pregnancy, and this ritual care occurred only among some primiparae. Ethnographic accounts tend to portray gestation as a protected, fearful period, with dietary and behavioral restrictions, such as staying behind closed doors and windows after sundown; yet most Ngaglik women were more matter-of-fact, carrying on activities as usual until late in pregnancy. The symptoms of "morning sickness," unusual behavior, and food cravings were more likely to be found among younger, educated women. For most women experiencing a normal pregnancy, the lack of antenatal checks may not entail undue risks; yet it cannot be denied that maternal mortality,

fetal mortality, and the incidence of low-birth-weight babies could be reduced by the identification during pregnancy of conditions that would cause these problems.

It is important that harmful traditional practices not be viewed merely as irrational behavior, but rather as having a basis within the woman's perceptions of relative risk and of causality. A clear understanding of these underlying factors is necessary to any meaningful attempt to try to change this behavior.

In Between: Some Harmless Practices

Obviously not all practices can be classified as either intrinsically helpful or harmful. Many may have no actual physical effect, although they are helpful psychologically to those who believe in them. Particularly during childbirth, such customs as the recitation of mantras by the dukun bayi or the positioning of the mother to face in a certain direction during labor add to the woman's psychological preparedness for delivery. Saving the dried umbilical stub as one of the child's "protectors"—an indicator of the perceived high risks to the infant and child—is another harmless practice, as are such home remedies as bathing eye infections with mother's milk or scoring the skin with the edge of a coin (*kerok*), a very common treatment for symptoms that the Javanese describe as *masuk angin* (entrance of wind into the body). Based on our study, we would also include as harmless some of the dietary taboos during pregnancy, for they generally involved foods that would not be eaten normally or those with little nutritional value, such as cucumber. This is not to imply that diets were adequate, for poverty prevented women from eating many protein-rich foods.³ In the case of Ngaglik women, an assumption that insufficient nutrition during pregnancy is caused by superstitious taboos would ignore the more basic underlying patterns and their causes.⁴

³Our survey showed that, over all observation months for pregnant women, over half (55 percent) of the women from the lower income group reported that they ate no meat at all the preceding month, and 60 percent did not eat eggs. Corresponding figures for pregnant women in the upper income group were 20 and 24 percent.

⁴We should point out that in collecting information on dietary taboos we asked specifically whether there was anything the woman normally ate but (a) avoided or (b) limited her intake of during the interview month because she was pregnant. Had we simply asked "What foods are taboo during pregnancy?" we would undoubtedly have obtained many more examples of restrictions—for example, pineapple is a well-known taboo item. However, women would rarely eat pineapple normally (it is an expensive fruit), so this taboo does not result in changed behavior due to pregnancy, the variable we were investigating.

Traditions of Unknown Effect

Finally, a number of health care practices are of unknown efficacy—probably the most important being the many kinds of jamu, or herbal medicines, that enjoy enormous popularity among all classes of Javanese. The large majority of women take jamu during pregnancy (usually around 85 percent in any given interview month) and during lactation (95 percent), to improve breastmilk quality and quantity. Some take mixtures purported to "bring on late periods," implicitly abortifacients. As mentioned above, jamu are also an important home remedy for many infant illnesses. We need to know more about the possible value or harm of these mixtures. Among the few studies already done, some effective pharmacological agents have been identified. The patterns of taking jamu also deserve attention, since many are consumed regularly as preventive medicine, an important concept in health care that might provide a basis for generalization to other activities, such as vitamin A campaigns.

It would also be useful to gain a more complete understanding of other commonly used remedies, including techniques of massage in general and a specific type of massage performed by traditional midwives to retroflex the uterus and prevent conception.

Diversity in Tradition

Most accounts of traditional practices tend to generalize about beliefs and customs, giving the impression that these are found uniformly across the whole society. In fact, peasant societies are rarely as homogeneous in either behavior or attitudes as some ethnographers would have us believe. There are always contrasts across generations and by sex and social class. Importantly, there is also individual variation in custom and belief: not everyone follows societal norms in the same way or to the same degree.

This flexibility in custom is both a cause and an effect of social change. Despite the conservative connotation of the word "tradition," societal customs do not remain static. In Java, as elsewhere, existing traditions incorporate a history of change. Elements of an indigenous Javanese culture were overlaid by Hindu, then Muslim influences. Years of Dutch colonialism also had an impact in many areas of social and economic life, and today elements of westernization are evident in even the most isolated village.

Present traditions are changing in both form and content. New products and ideas entering the village are often combined with time-honored ways of doing things. Some dukun bayi today, for example,

may use a razor blade to replace the *welut*, or bamboo knife, that was used to cut the umbilical cord.

A very significant change in tradition has been an apparent decline in the practice of prolonged postpartum abstinence, a phenomenon associated with wider changes in the marital relationship and attitudes toward sex. Because the traditional wisdom of child spacing through abstinence is not always replaced by reliance on modern forms of birth control, birth intervals tend to be shorter among young educated women (Hull, 1975; Hull et al., 1976).

Self-Reliance in Traditional Health Care

Writing on maternal and child health care in developing countries, Williams and Jelliffe (1972, pp. 84-85) made the following observation on the lives of women in preliterate societies: "Traditional preparation for motherhood is often more appropriate in preliterate villages than in a sophisticated urban context . . . the preliterate mother normally takes marriage, pregnancy, lactation, hard work, child care (and often child mortality) in her stride." Without idealizing the situation of village women—for indeed their choices are limited, and part of their present self-reliance has been forced upon them by their conditions of life—many observers have admired the self-reliance of the Javanese woman, her autonomy within the family, and her economic independence (H. Geertz, 1961; Mintz, 1961; Smith, 1961). Traditional health care among women in Ngaglik is an important aspect of this self-reliance. Specialized traditional healers do exist, but they are generally consulted only after one or more of the wide array of home remedies have been tried. Health, including childbirth, infant care, nutrition, and contraception, is a matter to be met and dealt with at home, with the advice and support of family members. Although specific practices are not always effective and some customs are varied and changing, the one important principle underlying women's traditional approach to health care is their attempt to deal with their environment within the very real limitations imposed by poverty and lack of medical knowledge. Can modern health care build on the kind of self-reliance we found among Ngaglik women?

What Doctors Are Doing: Modern Health Care

Recent national development plans place strong emphasis on rural outreach in health, with the first-year

plan (PELITA I) establishing over 2,500 rural health centers, and another 900 planned under PELITA II (Subyakto, 1974, p. 51). There are inoculation programs in the village to immunize young children against smallpox and tuberculosis. The government is also actively training *dukun bayi* in modern delivery techniques and in family planning motivation. The national family planning program is working toward a goal of "institutionalizing the small family norm and contraceptive practice" in every Indonesian village. The program relies on 7,000 family planning fieldworkers who make house-to-house visits and supervise thousands of acceptors' clubs in Java and Bali, and works through local officials and acceptors' clubs in the outer islands.

The problems of providing health services are formidable in a country of 140 million people but with only 6,000 doctors and 14,000 paramedics, most of whom are concentrated in the cities. Despite the goal of rural outreach, the approach has been largely passive and based mainly on the subdistrict health center, or PUSKESMAS, which serves an average of 40,000 people. These health centers have been vastly underutilized (Sulianti, 1974), a fact frequently attributed to social traditions:

It is clear that . . . societal traditions interfere with modern medicine. The preference for consulting *dukuns* results in patients either not coming to a health center, or coming too late . . . Before [a patient is] brought to a hospital there must also be lengthy consultation among members of the extended family, which further postpones going to the health center (Hashem, 1974, p. 69; translation mine).

Underutilization and Mixed Blessings

Many women in Ngaglik were in fact reluctant to attend the rural health center, although not necessarily because of a "preference for consulting *dukuns*." Modern health services, not surprisingly, are built largely on Western models. Patients coming to a clinic sit on hard benches (whereas most villagers are accustomed to sitting on the floor), waiting their turn to be called by health personnel whose middle-class origins are evident in their dress, bearing, and speech patterns. A mother bringing her child to the health center is unlikely to be given an explanation of her child's ailment or its treatment, yet may be told that she was wrong to try to treat the child herself. Clinics are usually open only in the mornings, the busiest time for women. Services are free only to those who present a letter from their village administrator attesting to their inability to pay. Obtaining such a "poverty certificate" is far too humiliating for

most people. Even transportation costs to the clinic are often beyond the means of village families. Perhaps mainly for these reasons, the clinic approach to health services is not effectively reaching Javanese villagers.

Unfortunately, some of the existing outreach efforts in health care have met only limited success. In Ngaglik, for example, most of the dukun bayi do not want to attend the government training course, some of their comments being, "I'm illiterate, I'd be embarrassed in front of everybody"; or "The clinic where the course is held is too far away" (Amin Yitno and Tri Handayani, 1978). Some of those who did receive training were visited by the instructor after completion of the course, and their equipment kits taken away from them. The instructor claimed that the kits were not being cared for properly. This action resulted in ill feeling and ended the dukuns' willingness to learn modern practices and to cooperate with the trained midwife.

Despite the low overall rates of clinic attendance and the limited success of such efforts as the midwife courses, modern medicine has had an observable impact. The inoculation campaign in Ngaglik has achieved fairly wide coverage, most mothers readily taking advantage of the free injections offered in their village. Trained medical practitioners assisted in nearly 10 percent of the deliveries experienced by women in our study. And people are beginning to add simple patent medicines and injections to the various remedies attempted.

Modern medicine has undoubtedly benefited some villagers: pneumonia victims have been saved by penicillin; women with prolonged labor have been helped by trained midwives or doctors; some tuberculosis cases are under treatment. The blessings of modern medicine, however, are mixed. The introduction of benefits must be weighed against questionable and even harmful effects, some of which we now discuss.

Bottlefeeding. "Are you going to give us powdered milk?" was a frequent query when we began our monthly weighing sessions of mothers and infants. The World Food Program's powdered milk supplies have been distributed through the maternal and child health clinics in Indonesia, a fact widely known in the villages. The milk is given primarily as an incentive to get patients to come to the clinic, and women are generally not given full information about either the dangers of bottlefeeding or the benefits and techniques of breastfeeding.

In the city, modern medical practitioners often give incorrect advice about and little support for

breastfeeding, so that women who want to begin or continue breastfeeding sometimes fail. This would have potentially tragic consequences in rural areas such as Ngaglik, where the constraints of poverty preclude safe and high-quality infant feeding substitutes. Still, there are early signs that bottlefeeding is becoming known, and infant formula is clearly seen as a high-status food. In the early months of interviewing, when all of the infants were under a year old, anywhere from 10 to 15 percent had their breastfeeding supplemented with bottles of infant formula or skim milk.

Hospital Care. "I kept hearing my baby cry in the nursery, but they wouldn't bring her to me" was the complaint of a young woman who gave birth to her first child at the local clinic. Although rooming-in is practiced in some maternity clinics, separation of mother and infant is the more frequent arrangement. This practice can interfere with initiation of lactation, an unfortunate result that has been reported in Indonesian cities (Poernomo, 1978).

"When my baby went into the hospital with diarrhea, they told me I couldn't breastfeed him." This restriction, which contradicts sound medical practice, was imposed on one of our research assistants. Mothers are also forbidden to stay at a sick child's bedside. In Indonesia, as elsewhere, hospital regulations are frequently based more on staff convenience than patient welfare.

Prescription Drugs. "I'm taking little yellow pills and large brown pills." Women in Ngaglik who were taking modern medicines seldom knew the name of the medication or its purpose. Pharmacies do not write the names of drugs on prescription orders, and doctors do not explain to patients what is being prescribed. One woman was given a potent fertility drug and told it was "to make her body healthier." There is inappropriate use of antibiotics: in the city, especially, it is not unusual for a child with a mild cold to be given tetracycline or other antibiotics. People sometimes purchase only partial dosages of prescriptions when they cannot afford the full order, and patients are given prescriptions for expensive medication when cheaper substitutes are available. These near-universal problems associated with prescription drug use are obvious in the cities, but are also beginning to appear in rural areas.

The Magic Injection. "I took my child to the clinic, but they only gave him medicine, no *suntik* [injection]. Next time I'll take him to Dr. S., he always gives a *suntik*." Injections are very popular, in

part stemming from the yaws campaign of the 1950s in which penicillin injections produced dramatic and widespread results. This popularity often leads medical practitioners to give injections (usually of vitamin B complex) where not medically indicated. "I paid 300 rupiahs for my injection at the clinic, but my neighbor paid only 200 rupiahs. Why was I charged more?" Many people do not understand that the contents of injections vary, for the cure to them is in the suntik itself.

Expropriation of Health

Modern forms of treatment can alleviate many of the illnesses suffered by Ngaglik women and their children. As noted by Illich (1975) and others, this new knowledge is becoming the exclusive province of modern medical practitioners. Women now know that, even if they themselves cannot afford the services, doctors and clinic workers can work minor miracles with their suntik and other forms of technologically advanced care. These modern treatments are the new magic and are in fact stimulating irrational belief to an extent seldom found in traditional medicine. Unlike herbs and most other home remedies, which are used according to sound principles of applying appropriate known cures for specific symptoms, a suntik may be sought for everything from eye disease to malnutrition. The doctor, in many ways, is the new mystical healer: someone with special powers whose orders are followed on faith. Even the traditional healer is more likely to offer an explanation for the cause of an illness than is the modern doctor.

The almost blind faith that characterizes the patient-doctor relationship in many developed countries is now becoming evident among educated, urban Indonesians. Urban women increasingly rely on the services of modern medical practitioners, not only for illness but also for advice on such matters as infant feeding and other aspects of child care. Unlike most women in Ngaglik, the daughters of the urban elite have not been trained since childhood for their motherhood role. Once married, they often live away from parents and members of the extended family who were formerly available to advise as the need arose. The medical professional—usually a male—is called upon to fulfill the roles once held by these family members. This is usually seen as a sign of progress, a valid assumption only to the extent to which modern medical care is more technically effective than traditional care. In other cases, however, reliance on modern medical advice may result in decreased chances of success (as is the case with

discouragement of breastfeeding) or even in new forms of danger (such as the overuse of drugs).

What Women and Doctors Can Learn from Each Other

Building on Self-Reliance

The custom of self-treatment, the idea that health is a family matter, and the consulting of dukuns are all seen as barriers to implementing modern health services. Because traditional cures are often ineffective or harmful, the implication usually drawn is that we should make health care the sole responsibility of those with the necessary knowledge—the medical professionals.

We have found, however, that there is much that is positive in the traditional approach to health care. Such practices as home delivery and breastfeeding and the principle of self-help health care are now being advocated even in countries with a high degree of modern technology and availability of health professionals. In Java, where modern health services are severely limited, the growing reliance on professionals seems distinctly inappropriate. Modern health programs can achieve a wider and more lasting impact by providing knowledge in addition to services: teaching people how to prevent illness, to make home care more effective, and to recognize those problems for which professional help must be sought. This kind of approach led to the training program for traditional midwives, but it can be taken much further—to everyone in the community: "Some doctors talk about self-care as if it were dangerous. . . . But in truth, *most common health problems could be handled earlier and better by people in their own homes*" (Werner, 1977, w2; emphasis in the original).

A shift in priority from providing health services to teaching is not a revolutionary idea (the word "doctor" comes from the Latin *docere*, "to teach"), yet it is sometimes overlooked in discussions about building health care infrastructure, importing modern drugs, and offering curative services based on sophisticated technology.

Health education was in fact the basis of an active hygiene and public health program in Indonesia in the 1920s and 1930s, and the philosophy behind that program has much to recommend it today:

Doing things to people is often easy, but it is expensive and of temporary benefit. Showing people how to

do things for themselves may take a little time, but it is relatively inexpensive and its results are lasting. Moreover the people are strengthened by the latter process and weakened by the former [Turner in Hydrick, 1937, p. 6].

The resurrection of this approach may come in the form of current plans for the expansion of a village health worker (*kader*) program, which will help provide health training at the village level. Several schemes already function in various parts of Indonesia, and the government is considering making the training of volunteer village health workers a part of the Third Development Plan. Current programs vary (e.g., some *kader* are salaried, some are volunteers), but they all represent a first step toward grass-roots-level health workers on a large scale, and as such the first stage in bringing health education to the people. One major scheme, for example, proposes to train family planning fieldworkers in basic health and nutrition so that they can train village mothers. Writing of this proposed program, Rohde and Northrup (1978, p. 154) have described what will be, in effect, the recruitment of millions of Indonesian mothers as health workers:

Rather than viewing the mother as a target of health propaganda, as an unthinking recipient of directives from medical professionals, this approach makes her a fully integrated basic health worker, whose task it is to carry out certain health interventions and to initiate where necessary the referral process that will carry her and her child to the appropriate level of competence within the system. This is real integration where it counts.

The ultimate impact of such efforts will depend largely on the approach used in communicating knowledge. The approach of the *dukun bayi*, as opposed to that of many trained midwives, is of a fellow villager, not unlike her patient in social status, who takes time and shows sympathy for the woman she is helping. With the expansion of the *kader* program, Indonesian health services have an opportunity to establish direct communication with women, the coordinators of family health care. If village health workers can maintain a status as sympathetic fellow villagers, they will be a key element in the spread of knowledgeable self-help health care.

Building on Current Practices: Ideas for Local Programs

Two years' experience with women in Ngaglik not only convinced us that self-help health care should receive priority, but also yielded specific ideas for

the design and implementation of local MCH programs. The following points illustrate how a few ideas drawn from our discussions of traditional and modern health care might be translated into policy suggestions.

Antenatal Care. In addition to the usual barriers to clinic attendance—cost, time, distance, status differentials—women in Ngaglik perceived little need for regular visits to a clinic during pregnancy. A health program might achieve better results and more efficient use of its resources if it determined its priorities in line with the community's perceived needs. Thus, rather than establishing a complete system of clinic-based antenatal care, a more modest antenatal program could be planned, which could eventually be developed into a more regular program as women begin to demand it.

The system might involve only a single visit for every woman who thinks she is pregnant. The visit would be used to confirm the pregnancy and to screen for high-risk women (primiparae and those with small stature, severe anemia, or a history of previous birth difficulties), who would then receive periodic monitoring by village-level health workers. Inadequate nutrition is a major problem for pregnant rural women. Thus on the same visit a nutritional assessment could be made, and women given simple messages for basic nutrition using cheap, locally available foods. ("Eat an extra handful of rice a day," which has been estimated to provide an additional 25,000 calories during pregnancy, is one example.) Tetanus injections to prevent neonatal tetanus in the child could be administered on this same visit. Women would also be instructed about such danger signs as swelling or vaginal bleeding, for which they would report back to the clinic.

Childbirth. Modern medical practitioners can learn a great deal from the approach of the *dukun bayi*. She is a trusted village resident who gives the needed attention and moral support during delivery and at frequent home visits following birth. Clinic and hospital services might well improve attendance if their routines were flexible enough to allow for much of what is good in home delivery, including attendance by relatives and rooming-in of infant with mother.

At the same time, modern medicine has much to teach traditional midwives in more hygienic and efficient delivery techniques. The current *dukun bayi* training program might be more effective if some of the following strategies were tried:

- Locating the course in a modest (nonelite) village home rather than at the clinic, with lessons on hygiene and aspects of delivery technique being geared to the village home environment. Sympathetic trainers, perhaps a dukun bayi who had successfully completed a previous course, could instruct under the guidance of clinic personnel.

- Incorporating beneficial traditional practices, such as delaying the cutting of the umbilical cord. Traditional midwives may be more receptive to a training course that includes or at least acknowledges these familiar practices.

- Retaining a neutral attitude toward such harmless practices as the recitation of mantras.

- Providing sensitive and clear explanations of why some current practices are harmful, and of what safe practices may be substituted.

- Establishing continued two-way communication between instructor and dukun bayi; there are undoubtedly many ideas to be learned from her.

Breastfeeding. The importance of breastfeeding is recognized by the national health department and is being encouraged with a campaign that uses the approach: "Continue the tradition of breastfeeding your baby." However, individual medical practitioners must be re-educated so that they are able to give women the necessary support and knowledge to successfully establish and maintain lactation. Women also have the right to complete and accurate information on alternative feeding methods, information free of the influence of commercial concerns.

Based on the pattern we observed in Ngaglik, the negative practice of discarding colostrum might be amenable to change through a well-designed information campaign. This custom is not found among all women, and even for those who did discard colostrum nearly 20 percent could not state a reason, but were only following what they heard was the "right" practice. A large minority of women do feed colostrum, and they could stand as graphic examples that this practice does not result in harm.

There is a need for research into the ubiquitous herbal mixtures taken by lactating mothers. Their main effect may be psychological; they may indeed include a galactagogue; or their primary benefit may lie in the extra daily fluid intake for the lactating woman. It is apparent that, whatever the mechanism, women report the desired results. A practice this widespread and reportedly effective cannot be ignored by modern health care programs.

Infant Health Care. It is in the field of infant health, an area of constant concern to Ngaglik women, that training the mother in basic preventive and curative health care may have the greatest impact. Women can learn to recognize early signs of illness, give basic curative treatments in the home, provide adequate nutrition, monitor child development, and improve the home environment to prevent illness.

Child weighing programs and health cards (recording children's monthly weights and periodic inoculations) are simple but valuable ways for the mother to follow her child's development. Ngaglik women responded enthusiastically to the regular child weighing during our research. It gave them an objective and readily understandable measure of their children's progress: continued weight gain was a good sign, faltering weight a cause for concern. Comments such as "My child gained 800 grams this month!" or "My child has had a bad cold—I'm sure her weight gain won't be as good this time as it was last month" were often heard at weighing sessions. The monthly gathering of women at these sessions would provide a valuable opportunity to provide health care training, as well as direct intervention by village health workers.

Family Planning. Family planning fieldworkers in Ngaglik have already shown the kind of flexibility required of those who work in this type of program in rural areas. By talking with women, they realized that a number of couples eligible for accepting contraception were in fact abstaining from sexual relations for extended periods, and thus could not be motivated to accept modern contraceptives. However, their superiors—who did not have this same knowledge of women's behavior—continued to ask for higher proportions of new acceptors. Fieldworkers solved the problem by providing couples with condoms, "just in case" they resumed sexual relations, and registering them as condom acceptors.

With the apparent decline in the practice of abstinence among young educated women, fieldworkers will have increasing responsibilities for providing accurate information and services to these women. Their role should also be to convey what they learn from women to the program administrators, so that policy can be responsive to needs.

Fieldworkers have also expressed to us their desire to provide services other than family planning. They are frequently asked for advice or medicine for sick children, and some have begun supplying simple medicines on their own. The 7,000 family planning fieldworkers currently making house-to-house

visits to all women in the reproductive ages are a valuable potential resource for the provision of basic health training.

Conclusion

Women in Ngaglik have always been active participants in family health care, using whatever limited resources are available to them. Most modern health care programs, perceiving traditional patterns as obstacles to development, work to remove health care from the responsibility of the woman and her family and to place it in the hands of professionals. The emphasis is thus on providing health care *services*.

An alternative approach is to provide women with the *knowledge* to more effectively meet their own and their family's health care needs, with professional services providing appropriate support. Our two-year research project among Ngaglik women showed us many ways in which modern programs can benefit from an understanding of traditional health care: by building on the basic approach of self-reliance, by incorporating specific traditional practices that are beneficial, and by sympathetic treatment of those traditional practices that are ineffective or potentially harmful. We became aware of the complexities of studying traditional health care, yet convinced that careful and sensitive study of what women are currently doing is essential to the design and implementation of effective modern programs.

References

- Amin Yitno and Tri Handayani. 1978. "Hasil penelitian dukun bayi" (Results from a study of traditional midwives). Seminar No. 83. Yogyakarta: Population Institute, Gadjah Mada University.
- Arms, Suzanne. 1975. *Immaculate Deception: A New Look at Women and Childbirth in America*. Boston: Houghton Mifflin.
- Geertz, Clifford. 1960. *The Religion of Java*. Glencoe, Ill.: The Free Press.
- Geertz, Hildred. 1961. *The Javanese Family: A Study of Kinship and Socialization*. Glencoe, Ill.: The Free Press.
- Hashem, O. 1974. "Peranan dokter dalam peningkatan masyarakat: Pengalaman seorang dokter di daerah" (The role of the doctor in improving community health: Experiences of a country doctor). *Prisma* 3, no. 5: 64-74.
- Hull, Valerie J. 1975. "Fertility, socioeconomic status, and the position of women in a Javanese village." Unpublished Ph.D. thesis, Department of Demography, Australian National University, Canberra.
- . 1978. "A study of birth interval dynamics in rural Java." In *Nutrition and Human Reproduction*. Ed. W. Henry Mosley. New York: Plenum.
- , Kodiran, and Irawati Singarimbun. 1976. "Family formation in the university community." Report Series No. 9. Yogyakarta: Population Institute, Gadjah Mada University.
- Hydrick, J. L. 1937. *Intensive Rural Hygiene Work and Public Education of the Public Health Service of Netherlands India*. Batavia—Centrum, Java. (Includes quotation from a letter by Dr. C. L. Turner, chairman of the Health Section of the World Federation of Education Associations.)
- Ilich, Ivan. 1975. *Medical Nemesis: The Expropriation of Health*. London: Calder & Boyars.
- Mintz, Jeanne. 1961. *Indonesia: A Profile*. Princeton, N.J.: Van Nostrand.
- Poernomo, S. S. 1978. "Dicari: Rumah bersalin pendukung ASI" (Wanted: A maternity hospital which supports breastfeeding). *Femina*, no. 137: 161.
- Raphael, Dana. 1976. *The Tender Gift: Breastfeeding*. New York: Schocken Books.
- Rohde, Jon R., and Robert S. Northrup. 1978. "Mother as the basic health worker: Training her and her trainers." In *The Changing Roles and Education of Health Care Personnel Worldwide in View of the Increase of Basic Health Services*. Ed. Ronald W. McNeur. Philadelphia: Society for Health and Human Values.
- Ryanto, H., and I. V. Marsis. 1974. "Masalah kesehatan di Kampung-kampung kota besar" (The problem of health in city kampung [slums]). *Prisma* 3, no. 5: 56-63.
- Singarimbun, Masri, and Chris Manning. 1974. *Fertility and Family Planning in Mojolama*. Monograph Series No. 1. Yogyakarta: Population Institute, Gadjah Mada University.
- Smith, Datus C. 1961. *The Land and People of Indonesia*. Philadelphia: J. B. Lippincott.
- Subyakto. 1974. "Pusat kesehatan masyarakat: Konsep dan pembinaannya" (The rural health center: Concept and practice). *Prisma* 3, no. 5: 51-55.
- Sulianti Saroso. 1974. "Politik kesehatan nasional" (The politics of national health). *Prisma* 3, no. 5: 9-14.
- Werner, David. 1977. *Where There Is No Doctor: A Village Health Care Handbook*. Palo Alto, Calif.: The Hesperian Foundation.

Williams, Cicely D., and Derrick B. Jelliffe. 1972. *Mother and Child Health. Delivering the Services*. London: Oxford University Press.

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Rural Women's Credit Systems: A Nigerian Example

Kamene Okonjo

The following article looks in detail at a rotating credit system used by rural women of Nigeria. This system, which women use to ensure the availability of cash to meet their family's financial needs, has analogues throughout the world. This close study of behavior—in this instance, about how women form groups to save and why—reveals rural women's roles in the family and the economic priorities created by these roles. This kind of information, rarely recorded or attended to, is an indispensable base for learning about how women are affected by and affect development policy. Further, understanding the mode of operation of this credit system and its value to the women who organized it provides guidance for the design of projects that work and are meaningful to women.

It has become increasingly recognized in the last ten years or so that growth in the developing countries is not so much a problem of lack of resources for investment as it is a problem of mobilizing these resources—both human and material—and apportioning them rationally. Attention has thus been focused on the rural areas of developing countries, for the widespread poverty of their populations constitutes the critical problem of development. Since it has become evident that centralized decision making, with its limited knowledge of local conditions, can play only a minor role in stimulating development in small rural communities, the conduct of micro-studies becomes very necessary. Through such studies, constraints on small communities pursuing self-reliance will become more widely known.

In an effort to reappraise the role of African women in traditional life and to evaluate their role in development, this study examines the contribution clubs devised to assist members in small-scale capital formation in two rural communities of Nigeria.¹ The

uses to which such pooled monetary contributions are put, as well as their social significance, are also discussed. The particular financial institutions selected for study are generally known as *Esusu* in most parts of Nigeria and as *Otu-Utu* or *Otu-Ofu* in the two rural communities studied. Although associations organized solely for men or as mixed associations of men and women (with men in the majority) exist in both communities, the present study concentrates on women-dominated clubs. Such associations exist widely, not only in Nigeria and West Africa, but also in such countries as China, India, Indonesia, Malaysia, South Africa, and Vietnam (Ardenner, 1964, p. 51).

The Communities

The towns of Obamkpa and Ogwashi-uku are Igbo towns situated on the western side of the Niger River, in the Bendel State of Nigeria. In 1972 the two towns had a combined population of around 23,000 inhabitants, with over 20,000 of these living in Ogwashi-uku, while just over 2,000 lived in the rural community of Obamkpa, situated in an inland valley lacking all modern amenities. Ogwashi-uku had a few scattered standpipes for water in some of its nine villages and no electricity. As the district headquarters of Asaba Division, it contained the district office

Material on the contribution clubs was gathered during my fieldwork in the towns of Ogwashi-uku and Obamkpa in 1972. More recent fieldwork, conducted in 1976, has revealed many changes that have been reflected here. One such change is the conversion of the national currency from pounds, shillings, and pence to naira and kobo. Meeting days are also now mostly on Sundays, while weekdays and Saturdays are reserved for economic pursuits.

and a few other government offices, an old post office, but no banks. The nearest banks were 15 to 20 miles away.

Since 1972 the situation in Ogwashi-uku has changed dramatically. It now has more standpipes for water, electricity under the rural electrification scheme, more offices, shops, and schools, and at least one bank. Traditional life still predominates in both towns, although signs of social change are everywhere more evident in Ogwashi-uku. Small-scale, nonmechanized farming is the main occupation in both towns. What is not consumed locally is sold, and considerable trade exists at intervillage, interstate, and even interregional levels. This is especially true for Ogwashi-uku, which has a large and successful market and several adequate roads linking it with other towns. In both towns farming is an occupation mainly for men, with the participation of women being confined mainly to growing such "women's crops" as cassava, cocoyams, okra, peppers, and pumpkins. Among the Igbos on the western banks of the Niger, in marked contrast to those on the eastern side, weeding and hoeing are not considered jobs for women, and men either hoe and weed the farms themselves or hire laborers.

Women, on the other hand, have their own occupational activities—mainly cloth and mat weaving and processing cassava meal and palm oil. They also engage in petty trading, which ranges from selling foodstuffs and retailing local factory-manufactured and imported goods to running beer and palm-wine parlors and setting up locally as seamstresses. But whatever work women engage in, they are expected to share the burden of meeting the family's expenses and to provide for a great part of the family's daily food and other needs. This requires access to capital or credit, sometimes at very short notice, and the western Igbo woman is expected to obtain this capital or credit herself.

Of course, a woman's husband may provide her with working capital in the form of money, but such cases are the exception. The picture, more often, is that of a woman who struggles on her own, from the moment of her marriage, to meet her needs and those of her family. She may continue to practice a trade while living with her parents, or may start a small business with some accumulated capital or with money received from her parents. Usually this initial capital is quite small, and she has to devise other means of ensuring a "source pool" upon which she can fall back in a time of financial need. One such agency or institution to which she resorts and that enables her to accumulate capital, albeit on a small scale, is the contribution club.

Nature and Organization of Contribution Clubs

The contribution club is a traditional association whose aim is to assist its members in small-scale capital formation. Fixed payments are required at short, regular intervals, usually on a four-day, weekly, or fortnightly basis. The money thus collected is then pooled and given to members, one at a time, on a rotating basis.

Contribution clubs fulfill for the community some of the functions of a bank or an insurance society, for through such an association not only can small-scale capital formation take place and savings accumulate, but loans can be made or goods bought on credit. They also offer an easy and comparatively ready access to money in the event of a personal crisis or misfortune. The club's success depends very much on the existence of safeguards for ensuring that each member continues to pay her subscription until every member has received her "take-out" (see Ardener, 1953, p. 129).

Most women whom we interviewed in both towns—about 95 percent of the 200—belonged to at least one contribution club. Many belonged to two or more. The 5 percent who did not belong were mainly from the age group 15–18 of unmarried or young married girls, as well as a few old women. It is highly unusual for an adult woman in these communities not to belong to any contribution association, since such inaction on her part could be interpreted as laziness, irresponsibility, or even as antisocial behavior—any of which opinions could injure her good name.

The contribution club is formed through the initiative of a woman who talks to and organizes other women. If the initiator is a woman of sufficient social standing, her invitation to other women to join as members will meet with a positive response. If the initiator is not a woman of sufficient social standing, she often persuades another woman of such standing to assume the role of initiator. A sum is agreed upon and members contribute this amount regularly.

Usually the sum agreed upon will not place an undue strain on the contributor. In any case the choice to join or not to join is still the woman's. We discovered that most of the contribution clubs charged 20 kobo, or 35 cents; a few charged 50 kobo, or one naira, while one or two charged more than one naira. Many women felt that it is better to contribute a small sum at close intervals than to contribute a large amount at longer intervals. Contributing on a weekly or fortnightly basis enables the women

to use the small profits they make from their sale of cassava meal, palm oil, or woven mats before these are spent in other ways.

Members are usually given their loans according to an order agreed upon at the founding of the club. The arrangement may depend on the order in which members joined the association, with the founder at the head of the line. But this order may be disrupted in cases of proven emergency. A member who suddenly finds herself in dire financial straits will be allowed to receive her take-out before those ahead of her.

The club's founder becomes the *Nne-Otu* (mother of the association) or, more often, the *Lze-Otu* (queen or president of the association) and is addressed as such when the members meet. A contribution club always has an inner executive made up of its officers, but the president makes the final ruling on major issues. She is looked up to by the members, and the club's prestige depends greatly on her effectiveness as a leader. She must be firm but kind and must be acknowledged by all as a person of very high integrity. Such a person can always find a following, and it is not uncommon for a woman of this stature to found more than one contribution association. We discovered a few such women in both towns. One woman, the first wife in a polygamous household of five wives, had initiated four contribution associations, one of which was made up solely of her cowives and other lineage wives.

In contrast, a thief, liar, or bad debtor cannot successfully found a credit association regardless of how genuine her intentions are. Other women will assume that she needs money and will default as soon as she has collected her take-out. A "lazy" woman who has no visible means of income will usually also fail in her attempt to gain a following.

But screening in a contribution association is a two-way game. The founder and/or initiator of a club will also carefully screen applicants. Potential members with dubious character or those whose credit worthiness is not beyond reproach will not be admitted, for fear that they will default in their payments. In fact, recent investigations reveal that all would-be members are now required to have a surety who will be answerable to the association for their conduct.

Male Roles in Contribution Clubs

Although we searched very hard, we did not encounter more than three wholly female contribution

associations. Women who said they initiated or belonged to wholly female associations actually meant that their associations were female dominated. One association with 60 members, for example, had 46 males, while another with 340 members estimated its male membership at 80. This observation is true of most of the other associations, which generally have a female-to-male membership ratio of about 4 to 1. Questioned on why they could not run all-female clubs, officers of these associations said that they needed male musicians to beat the drums, blow the trumpet, and generally provide the music at meetings. In addition, eight of the initiators interviewed believed that the presence of males also helped to maintain law and order ("the eyes of a man drive away thieves").

Some clubs even had a male president in addition to the female president. The male, in some cases, had simply been offered honorary membership because his name would lend prestige to the association. The male and female presidents joined to run the meetings and, in all cases, seemed to work harmoniously together.

Benefits of the Clubs

A member of a contribution association is entitled to a take-out even before she has paid her full share of contributions—in other words, she is given the credit on trust. Most of the contribution clubs investigated charged a compulsory "safe money" of a few kobo per share, in addition to the regular share contribution. Any donations or monies accruing to the association from other sources are also paid into the association's "safe," from which such contingencies as musical instruments for the association's use are met and from which short-term, low-interest loans of small sums are made to needy members.

Most of the associations charged 20 kobo per month on a loan of 2 naira for members and 50 kobo for sponsored nonmembers—terms that are very reasonable by village money-lending standards (see Ardener, 1953, p. 135). Borrowers could defer paying back their loans for the length of the association's contributory cycle, provided they paid the interest accruing on the loans regularly. All loans, however, were called in shortly before the expiration of a cycle, to enable the association's accounts to be "straightened out" before it embarked on another contributory cycle.

Apart from loans, which were repayable, most

contribution associations would also make an out-right grant from the "safe" to any member who had suffered a substantial financial loss or a bereavement requiring an unexpected expenditure. In the latter case, members also kept an all-night vigil at the house of the bereaved to demonstrate their fellowship.

It is interesting to note that the women of these communities did not patronize such alternative savings and credit institutions as banks and post offices. At the time of this fieldwork, the only alternative facility for saving was the post office. We found that many women, especially in the more rural town of Obamkpa, thought the post office's sole function was the dispatch and delivery of mails. But even where all the savings and credit functions of the post office were understood, it still had limitations. Minimum contributions were higher, one could not borrow more than the account was worth, and paperwork and a delay of several weeks awaited those seeking to make emergency withdrawals.

These limitations have all acted to discourage people from patronizing the post office for purposes of saving. The women we interviewed were almost all illiterate, so that the paperwork involved must also have frightened potential savers. The contribution association also has an edge over the post office as a status-conferring instrument in the community. When a woman uses the post office for saving, few people know how much she has managed to save, and therefore her economic standing in the community cannot be evaluated on that basis. In contrast, a woman who belongs to many contribution associations or holds multiple shares in a few, especially where the take-out is high, and is known never to default on her contributions, is highly respected in her community.

Uses of Take-Out Money

Although it was difficult to find a woman who said she joined a contribution club with the aim of generating capital for consumption, sometimes a woman found herself using the money for non-profit-yielding purposes. She may spend part of it on food, on clothes for the family, or in paying hospital bills. But even such an expenditure is an investment in the well-being of the people who benefit from it and as such perhaps should not be considered non-profit-yielding.

Since education is the gateway in Nigeria to a fi-

nancially more secure and successful life, most of the women wished to secure it for their children. About 80 percent of the women interviewed invested or proposed to invest at least part of their take-out toward their children's education. Mothers joined contribution clubs in order to be able to pay their children's school fees or provide them with school uniforms and textbooks. Although the education of one's children is an area in which Igbo parents are expected to cooperate, with the father providing the fees and the mother providing the other needs, it is not uncommon to find the mother being left to carry the whole burden. This is more often so in a polygamous household where the multiplicity of wives and the many children make it difficult for the husband to fulfill his financial obligations to his family. A woman may, however, be forced into this role if she has a sick husband, or indeed a lazy or irresponsible one.

A good education usually ensures a steady job for the children who benefit from it. Accordingly, in rural Igbo communities where at least 75 percent of the population still lives at or below subsistence level, mothers look to their children to provide for them when they finish their schooling and settle down to jobs with regular salaries. This thought of a rosier future for a woman's children and for herself makes such an investment a matter of unequalled importance. Mothers will join several contribution associations despite the hardship involved, jump their place in line, borrow from the association's safe, or pledge their complete take-outs in order to pay their children's way through school. Employment opportunities are becoming increasingly rare throughout Nigeria, especially for the not so well educated, with the result that mothers who can no longer provide for their children's education are forced to use their take-outs to "buy" jobs for them.

Another area in which women invested take-outs was trade. The women studied, unlike their counterparts in the eastern part of the country, handle most of the petty trading in their local markets. They buy in bulk from Onitsha, which is only 20 miles away, and retail such factory-made goods as soaps and canned foods or such food items as rice, beans, and dried and iced fish, sometimes competing for the meager profits in such retail trading with male Igbo traders from the east. The difficulty with such retail trade is that the initial capital investment is small, and accruing profits are correspondingly small. There is also no reserve on which women can fall back if business goes bad. These reasons and the fact that a woman is very often forced to take from what she sells to feed her family all contribute to the

risks involved in such deficit financing and the difficulty in making profits.

Sometimes a woman arranges to collect her take-out from two or more contribution associations at the same time. She is then better able to embark on the retailing of factory-manufactured prints and other textile materials. Such enterprises require much more capital to set up, but they also bring in more gain so that less is used for immediate consumption by the family. Trading, however, is not an end in itself but only a means to an end. A woman might invest accumulated profits in her children's education, in building herself a house, in making household repairs, or in meeting her family's food and other expenses.

We discovered a new area of priority in Ogwashi-uku, which has a big local market. A call by the *Omu* (the town's female ruler) for the women to help improve the appearance and the general hygiene of the marketplace has led many women to spend a good part of their take-outs to erect concrete market stalls, with corrugated iron roofs in place of the usual thatched ones. This is a worthwhile investment for the women since much of their time away from home is spent in their market stalls.

Many women invested their take-outs in the cloth-weaving cooperative, the only cooperative venture in Ogwashi-uku at the time of our fieldwork. On the payment of a stipulated sum, a member was entitled to cheaper materials, with which she was able to carry out her weaving craft. As a member of the cooperative, she was entitled to free instruction and supervision organized from time to time by the industry's senior staff. Membership also guaranteed her a sure and quick market for her finished products, for the cooperative undertook the marketing of such goods.

Another area of investment was the establishment of drinking bars. This enterprise was undertaken mostly by prostitutes, although a few married women also opened bars. They were set up either in front of the women's homes or within a convenient distance of government offices or industrial establishments to ensure the patronage of the workers.

We did not encounter any instance in which women used their take-outs to purchase land for either building or farming. At the time of the fieldwork, land had not become an economic commodity in either town, and any indigent who wanted to build or farm was free to do so. Acquiring land for building purposes was, however, not the ambition of any of the women we met. A husband would always provide his wife with enough land to put up a

house if she wanted to. None of the women invested significantly in agriculture. Some successful women may have subsidized their husbands in the purchase of yam seeds for planting; however, this was not evident either from the women's answers or from participant observation. On the women, however, fell the duty of marketing the agricultural surplus for their husbands, for which they were sometimes, though rarely, compensated.

Conclusion

The major constraint on development in the two Igbo communities studied lies in the poverty of the rural population. Development requires massive financial investments. The contribution clubs have proved to be a system through which women can invest in their children's education, in trade ventures, and in their family's well-being. Our study of the women participating in such associations illustrates the positive role women can play in the development process and in bettering their own lives, and suggests ways in which women, with additional capital, could make productive investments in the fight against rural poverty.

References

- Afigbo, A. E. 1974. "Women in Nigerian history." Unpublished manuscript, Nsukka, Nigeria.
- Ardener, Shirley. 1953. "The social and economic significance of the contribution club among a section of the southern Ibo." In *WASIR Proceedings*. Ibadan: West African Institute of Social and Economic Research.
- . 1964. "A comparative study of rotating credit associations." *Journal of the Royal Anthropological Institute* 94, no. 2 (July-December): 201-229.
- Bascom, William R. 1952. "The Esusu: A credit institution of the Yoruba." *Journal of the Royal Anthropological Institute*, 63-69.
- Boserup, Ester. 1970. *Women's Role in Economic Development*. New York: St. Martin's Press.
- Geertz, Clifford. 1962. "The rotating credit association: A 'middle rung' in development." *Economic Development and Cultural Change* 10, no. 3.
- Green, Margaret M. 1964. *Igbo Village Affairs*. London: Frank Cass, esp. pp. 44-48.

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Isong, C. 1958. "Modernization of the Esusu credit society." *Niser Proceedings*, pp. 111-120.

Leith-Ross, Sylvia. 1965. *African Women: A Study of the Ibo of Nigeria*. London: Routledge & Kegan Paul.

Little, Kenneth. 1965. *West African Urbanization: A Study of Voluntary Associations in Social Change*. Cambridge: Cambridge University Press. esp. pp. 51-52.

Marris, Peter. 1961. *Family and Social Change in an African City*. London: Routledge & Kegan Paul.

Ottenberg, Phoebe. 1959. "The changing economic position of women among the Afikpo Ibo." In *Continuity and Change in African Cultures*. Ed. William

R. Bascom and Melville J. Herskovits. Chicago: University of Chicago Press.

Ottenberg, Simon. 1955. "Improvement associations among the Afikpo Ibo." *Africa* 25, no. 1: 1-28.

Paulme, Denise, ed. 1971. *Women of Tropical Africa*. Berkeley and Los Angeles: University of California Press.

Van Allen, Judith. 1972. "Sitting on a man: Colonialism and the lost political institutions of Igbo women." *Canadian Journal of African Studies* 6, no. 2: 165-181.

_____. 1974. "Women in Africa: Modernization means more dependency." *The Center Magazine* 7, no. 3 (May-June): 60-67.

Marked Preference for Female Sterilization in a Semirural Squatter Settlement

Leela Gulati

The following article analyzes the reasons very poor semirural women in South India choose sterilization as a means of birth control. The women, who work for minimal wages in a narrowing job market and whose children have little hope for jobs or land marriages, are choosing to be sterilized after two or three births. Among their limited range of contraceptive choices, female sterilization in the nearby hospital where women go for deliveries and abortion is perceived by them to be the most advantageous in terms of the cost of medicines and transportation and time away from jobs. The article illustrates the centrality of economic factors in low-income women's family planning decisions.

The birth rate in rural Kerala has shown a slow but steady decline, particularly in the last 10–12 years, dropping from 37 per thousand in 1966 to 28 per thousand in 1975. For rural India as a whole, the birth rate in 1975 was 37. Although this decline cannot be attributed to a single factor, family planning efforts in the State of Kerala are believed to have played a considerable role in bringing it about (Krishnan, 1976).

The family planning program in Kerala began modestly in 1955 but gathered momentum in the mid-1960s. Its main emphasis has been on surgical sterilization of both men and women; as a result, nearly 24 percent of all reproductive-age couples in the state are now protected by sterilization. Annual rates of vasectomies have fluctuated significantly, whereas female sterilizations have steadily increased. For the period 1970–71 to 1976–77, however, there were 40 percent fewer female sterilizations than male sterilizations.

The purpose of this article is to study the impact of the family planning program on a small squatter settlement called Aakulum Colony, located in a vil-

lage on the outer fringe of the state's capital city, Trivandrum. More particularly, the article explores what form of sterilization was more acceptable among the settlement's very low income households and why.

The Squatter Settlement

The squatter settlement¹ consists of 44 households clustered in a group of impermanent houses made of unbaked mud bricks, mud, or thatch, perched on the slope of a hill about one kilometer from the city limit. The total population is around 215. Most of the working men and women living in these households eke out their livelihood from intermittent wage employment, mostly in unskilled jobs. More than 36 percent of the households belong to scheduled castes (a term commonly used for the disadvantaged caste groups listed for certain preferential treatment in a schedule of the Indian Constitution), whereas the proportion of scheduled castes in the state as a whole is only 8 percent. Even among the remaining households, the overwhelming majority comes from other socially disadvantaged castes. The proportion of households relying on agricultural labor and construction work, categories in which there is a considerable overlapping of workers, is as high as 60 percent, compared with 32 percent for all of Kerala. The general literacy level of the settlement, however, is not significantly lower than the state average.

The squatter settlement enjoys the advantage of being close to a major city (Trivandrum) and of being

¹It is in the same settlement in which I had earlier studied the system of food rationing as it operates in the State of Kerala. See Gulati (1977).

even closer to a major hospital. A bus to the city passes the settlement at almost hourly intervals, and the nearby Medical College Hospital is on the bus route. Without meaning to play down the latter advantage, however, we should add that access to hospital facilities is possibly the least difficult, in terms of the distance to be covered, in the State of Kerala as compared with the other states of India. In more than half of Kerala's taluks (each district is subdivided into 3-5 taluks) the average area covered by a public medical center is less than 50 square kilometers (Centre for Development Studies, 1975).

However, the squatter settlement possesses virtually no other amenities. The 44 households are all served by a single public water tap, which is not conveniently located. This is the only source of safe drinking water. There are virtually no private or public toilet facilities; no hut has an electric connection, nor are there any street lights. By contrast, in Kerala State the proportion of villages with access to electricity is close to 95 percent, well above the all-India average of 36 percent.

At the nearby road junction, a public loudspeaker installed by the Panchayat (the village-level government body) usually relays radio programs. Also, five of the settlement households have portable transistor radios. The corner tea shop buys the local newspaper, and practically everyone who goes there for tea, breakfast, or lunch gets a chance to read it or to hear it read. Families are visited by two women officials from time to time. One is the village-level worker, *gramasevika*, who runs the nearby midday feeding center for children up to age 5 and whom everyone in the settlement, the women in particular, seems to know. The other visitor is the auxiliary nurse/midwife from the nearby Primary Health Centre, based in Pongomood, who is charged with keeping track of the family planning target couples within its jurisdiction.

Sixty-two married women, ranging from 20 to 75 years of age, reside in the settlement's 44 households. Of these married women, only 43 are now living with their husbands; 11 are widows and 8 are separated. Although the incidence of illiteracy among women in the squatter settlement is the same as in rural Kerala, work participation rates among married women in this community are, by comparison, very high. Women married to skilled workers—mostly carpenters, whose wages are generally higher and who also get work more regularly—are virtually the only ones not working. Women workers are engaged largely in unskilled jobs in construction, agriculture, or other occupations, although a few are self-employed.

Knowledge and Acceptance of Family Planning

All married men and women in the squatter settlement know about methods for limiting the number of children. Family planning posters and radio messages talk generally of the need for smaller families. A major source of information on methods of contraception is the nearby hospital. Married women who have given birth had heard the details of family planning at the hospital when they went for their confinements. The majority of deliveries in the settlement now take place in the hospital, making such visits an effective and important source of information on family planning. Women in the settlement had also heard about family planning methods during the periodic visits of the village-level worker and the nurse/midwife.

Mass vasectomy camps (organized in Kerala between 1970 and 1972, in a carnival-like style) were also instrumental in spreading information and helping to remove the stigma of secrecy once attached to family planning. In the capital city of Trivandrum, a 15-day mass vasectomy camp was organized in January 1972. At the time, a number of officials and public men visited the settlement, but the most active among them was the local village-level worker, who worked as a motivator and visited all the houses. Although the camp was organized to perform vasectomies, women too became aware of the family planning program in general and of the aim of the camp in particular. For good or bad, however, the most pervasive and steady medium of information on family planning has been word of mouth. Neighbors, friends, and relatives spread the word about those who undergo an operation for sterilization. Every adult in the settlement seems to know not only who has undergone surgery, whether a vasectomy or tubectomy, but also what postoperative care was necessary in each case.²

Although settlement residents complain about the long lines at the hospital and the rude behavior of the doctors and other hospital staff, they do not seem to entertain strong reservations about hospital deliveries, induced abortion, tubectomy, and vasectomy. Women expressed no fear about surgical sterilization, nor did they attach any stigma to it. With regard to vasectomy, some women spoke about the

²A follow-up study of vasectomy acceptors in the mass camp in Trivandrum showed that nearly 68 percent of the acceptors had prior knowledge of their relatives' having undergone vasectomy. According to this study, "such knowledge might have induced them to undergo the vasectomy operation." See State Bureau of Economics and Statistics (1975).

frequent backaches and loss of physical stamina that their men complain about, but none said anything about the after-effects on women of tubectomy. Some men spoke about their loss of virility. In one case in which a man had undergone vasectomy, his wife still conceived and had children. The man now denies having had a vasectomy and his wife supports his claim. Nevertheless, everyone refers to this case as evidence of the possibility of failure.

Awareness of alternative, temporary methods of family planning was rather patchy. Although many married women have heard of the intrauterine device (IUD), none has used it so far. The IUD program was started in 1965. After an initial spurt in the number of acceptors, a decline set in during the years that followed, probably because of the reported side effects. For Kerala State as a whole, the number of eligible couples using the IUD declined from 14 per thousand during peak acceptance to 6 per thousand in 1973-74.

Why have so few married women chosen to use the IUD? A woman who had undergone tubectomy explained: "When we don't want children, it is better to have the matter finished. Let there be a permanent end to this business of having children." IUD acceptance also meant frequent trips to the doctor.³ For the state as a whole, the ratio of couples protected by the IUD to those protected by surgery has, in recent years, been 1 to 10.

What is more interesting is that while men and women in the settlement were ready to talk openly about sterilization, both were reluctant to talk about the use of condoms. A stigma seems to be attached to condom use; perhaps they regard such use as a sign of oversexiness. Little information could be collected on the extent of condom use. The village worker was not sure that any man in the settlement used the condom. According to the health inspector, acceptance of condoms, which are distributed free, was nil.⁴

Sterilizations in the Settlement

A total of 27 sterilizations have been performed in the squatter settlement: 9 vasectomies and 18 tubec-

³This is supported by observations cited in Estimates Committee (1972): "The decline was partly because of shortcomings in pre-insertion scrutiny and counselling, faulty insertion procedures and inadequate detection and treatment of side-effects. These lapses probably were the cause of discouraging the present users and scaring away the future acceptors."

⁴Even for Kerala State as a whole, the number of couples using conventional contraceptives—largely condoms—is believed to have declined from 9,600 in 1970-71 to 6,522 in 1972-73. For the subsequent period, no estimate has been attempted of the couples using conventional contraceptives. See State Bureau of Economics and Statistics (1979).

tomies. In 4 cases, both husband and wife have been sterilized. Even for the state as a whole, it is not unusual for the number of female operations to exceed the number of male operations. For instance, tubectomies exceeded vasectomies significantly in the years 1973-74 and 1974-75. In Trivandrum district, however, female sterilizations have exceeded male sterilizations all along since 1972-73.

Of the 38 married women in the reproductive age group—those aged 45 or below—20 are protected by either male or female sterilization or both. Of the remaining 18 married women, 13 have had either no child or only one. Strictly speaking, we should exclude these women when determining the number of eligible women married but not protected by sterilization or any other method. If we do so, the total not protected would be 5.

Why did these five eligible women not accept any kind of protection? The reasons given were varied. Two of the women are widows and do not plan to remarry in the near future. A third is a young, separated woman living with her parents. The remaining two women felt that they had reached the end of their childbearing period and that contraception was not really necessary.

Explaining the Preference for Female Sterilization

What are the possible factors contributing to the preference for female over male sterilization? Any answer offered on the basis of our study of the squatter settlement has its limitations. All the same, since tubectomies exceed vasectomies in Trivandrum District, the results of our study may help us to understand a phenomenon that is much more widely prevalent.

In-Hospital Deliveries

The most important factor contributing to this preference for female surgery has probably been the great shift of deliveries in the squatter settlement from one's own residence to the hospital. Out of a total of 225 deliveries recorded among the 62 married women in the squatter settlement, 51 percent took place in-hospital.

While for women aged 46 and above, 30 percent of the deliveries took place in-hospital, the corresponding figure was 71 percent for women aged 31-45 and 84 percent for those aged 30 and below. Actually, the proportion of hospital deliveries would

be higher except for the tendency to wait for labor pains to start before leaving for the hospital. This is due largely to the experience of many that the hospital sends them back home if childbirth is not imminent. As a result, some women have delivered at home while arrangements were being made to shift them to the hospital.

The stated preference for in-hospital delivery is indeed 100 percent among all married women of reproductive age. They feel that hospital deliveries are not only safer but also more convenient. Deliveries in the huts are risky, inconvenient, and expensive. In this context, it is relevant to recall that one of the major problems of the settlement is an inadequate supply of safe drinking water, as well as inadequate room inside most huts. Younger women make no secret of greater faith in doctors at the hospital than in local midwives and old women. Also, if women go to the hospital for delivery, any unforeseen complications can easily be attended to by the staff.

The principal problem in going to the hospital is transportation. A taxi must be hired for about 12 rupees to drive a woman there. Even so, a midwife charges between 5 and 10 Rs. per delivery, depending on the time taken and the complications arising in each case. In addition, money is spent on herbs and special food used during home delivery. All of these expenses often equal the cost of going to the hospital in a taxi and buying a few medicines prescribed by a doctor. Much more importantly, all women who have been to the hospital for deliveries believe that they had far fewer postpartum complications and could return to work much sooner.

Of the total of 18 female sterilizations, 13 were undergone after delivery and 5 after induced abortion—all in-hospital. Nine out of the 13 postdelivery tubectomies were undergone after 3 or fewer births. The general tendency, clearly, is not to exceed a third live delivery. Four out of 5 induced abortions were undergone after more than 2 births, and all 5 abortion cases were followed by tubectomies. It can safely be said, therefore, that an unplanned third or fourth delivery tends to drive a woman not only to abortion but also thereafter to surgery.

According to the married women in the settlement who have undergone surgery after delivery or abortion, there was no question of asking their husbands to undergo sterilization instead. Women go to the hospital anyway, either for confinement or for abortion. In either case, if they undergo sterilization at the same time, no additional hospitalization is required. Nor is it necessary to take additional rest or to incur any additional expense on transportation, medicines, or special diet (Velayudhan, 1965). On the other hand, men have to go to the hospital for the

specific purpose of sterilization and generally take at least a month's rest from work thereafter, although the prescribed rest period is only ten days. Usually, men also ask for a special high-protein diet for several weeks after the operation. On top of this, men are widely known to complain that they cannot work as well as they could before the operation.³ Women in the squatter settlement, particularly those who are working, would therefore prefer to undergo surgery themselves.

Preference for Smaller Families

After how many children does either partner decide to undergo sterilization? To answer this, let us look at the 23 couples in the squatter settlement who have undergone sterilization. Only 1 was sterilized after one child, while 6 opted for sterilization after two children and 8 after three children. As many as 8 underwent surgery after four or more children.

Let us now relate the age distribution of the 23 women protected by sterilization (male or female) to the number of their surviving children. In the younger age group of 30 and below, 5 out of 11 protected women have only two surviving children; for protected women between 31 and 45, 2 out of 9 have two or fewer surviving children. Also, while 9 out of 11 women in the younger age group have three or fewer surviving children, the corresponding number in the next higher age group is 5 out of 9.

It should be reasonable to infer a tendency among the younger age groups in the settlement to opt for fewer children and therefore a small-sized family. This could be connected with the younger age group's confidence in the survival of their children (Kulkarni, 1975). In this connection, it is relevant to note that infant mortality in Kerala State as a whole seems to have declined drastically over the past 15–20 years.⁴ In the settlement, of the 21 married women aged 30 and below, 19 experienced no child loss.

While only 3 men or women were sterilized with no male child, 14 accepted sterilization only after they had borne one male child and 4 after two male children, regardless of the number of female children. It should be added that out of the 14 couples protected by sterilization after one male child, 7 had two female children and 4 had three or more female

³According to the follow-up study of vasectomy acceptors (see footnote 2), while almost one-third of the acceptors had complaints about their operation, about half the complaints of weakness were received from fewer than 10 percent of the complainants.

⁴Infant mortality decline in Kerala has been particularly noticeable in recent years. See Krishnan (1976).

children. What seems interesting to us is that being assured of one male child was important for almost two-thirds of the couples in the settlement who are now protected.⁷

Conclusion

It would appear from this study of a small, semirural squatter settlement in Kerala State that, with the spread of family planning awareness among married men and women in low-income, socially backward households, something effective can be done to limit family size and that there has developed a clear preference for surgery over other methods of contraception. Between male and female sterilization, the preference seems decidedly in favor of the latter.

The pronounced shift of deliveries from the house to the hospital appears to have played an important role in influencing the trend in favor of female sterilization. It appears that doctors and their hospital assistants play an important role in motivating women to combine sterilizations with delivery or induced abortion. This arrangement also means that no extra period of rest for working women is required. At the same time, the decision to undergo sterilization may be connected, quite understandably, with the confidence gained in the survival of children. This is reflected in a larger proportion of

⁷A similar conclusion was reached by a study undertaken by the State Family Planning Bureau. Their main finding was that the acceptors were generally desirous of having a male child. See State Family Planning Bureau (1973). Clearly, the existence of a significant son preference in Kerala State goes against the common belief that, due to such factors as a prevalent matriarchal system and the spread of female education, the preference for male children may have declined. See Krishnan (1976), who seemingly subscribes to this belief.

younger women undergoing the operation after having two or three children. However, while the acceptable family size appears to be declining, having at least one son seems to be a widespread preference.

References

- Centre for Development Studies, Trivandrum. 1975. "Health indicators and demographic trends." In *Poverty, Unemployment and Development Policy: A Case Study of Selected Issues with Reference to Kerala*. New York: United Nations, pp. 138-140.
- Estimates Committee 1971-72. New Delhi. 1972. *Family Planning Programme*.
- Gulati, Leela. 1977. "Rationing in a Peri urban community: Case study of a squatter habitat." *Economic and Political Weekly* (19 March).
- Krishnan, T. N. 1976. "Demographic transition in Kerala, facts and factors." *Economic and Political Weekly*, Special Number (August).
- Kulkarni, G. A. 1975. "Relation between infant mortality and fertility." *Sample Registration Bulletin* (January).
- State Bureau of Economics and Statistics, Trivandrum. 1975. *Demographic Research Centre Paper No. 89*.
- . 1979. *Statistics for Planning*.
- State Family Planning Bureau, Directorate of Health Services, Kerala, Trivandrum. 1973. "A study of factors motivating the individual to accept vasectomy."
- Velayudhan, G. 1965. "How to achieve population control." In *Population Growth in Kerala*. Ed. R. S. Kurup and K. A. George. State Bureau of Economics and Statistics, Trivandrum.

Women in the Household Economy: Managing Multiple Roles

Achola Pala Okeyo

The following article describes the strategies of a group of rural Kenyan market women for coordinating their various family responsibilities: subsistence production, income generation, child rearing, and household maintenance. By approaching the study of these women through their income-generating role, which is essential to the performance of their other roles, this analysis provides an important entrée for understanding all aspects of women's behavior.

Kenya is primarily an agricultural country: a large percentage of its population depends on agriculture as small producers, market traders (i.e., own-account employment), and wage earners in agriculture and related industry. Fishing also provides a limited income for a small number of people living on Kenya's Indian Ocean Coast and around the inland lakes and rivers.

Rural women represent a major constituency in socioeconomic and demographic considerations. Of Kenya's 88 percent rural population, 52 percent are women. Also, women account for 55 percent of the total adult population over age 17.¹ It is further estimated that 90 percent of rural women are engaged full time in farm work on small holdings, compared with 60 percent of the men.²

Although women account for a large percentage of small farmers, their opportunities in wage em-

ployment (including formal agricultural employment) remain severely limited. In the period between 1963 (the date of Kenya's independence) and 1971 women accounted for less than 15 percent of the paid labor force.³ By 1976, 13 years after independence, this figure had risen only to 16 percent. Such disparities are explainable, at least in part, by the structure of access to education. Literacy is an important factor in determining job category, remuneration, and level of entry into wage employment. Estimates show that around 79 percent of rural women aged 15 and over cannot read or write; this is twice as high as the national figure of male illiteracy.⁴

Despite these disparities rural women must still identify and pursue sources of cash income over which they have some measure of control, in order to meet their financial responsibilities, the most important of which is the maintenance of their families and themselves. Informal-sector employment, such as market trade, is one of the main sources of cash income to which rural women look. Figures are not available on how many rural Kenyan women are engaged in full- or part-time market trade; however, observation shows that women account for 70–80 percent of persons engaged in transactions in the marketplace.

The Activity of Luo Market Women

Joluo (Luo people) are the second largest community in Kenya.⁵ They number over one million and live mainly in the Nyanza Province in West Kenya. Their

¹The colonial era introduced a monetized economy in which men and women were absorbed quite differently. While men were drawn into the cash economy through school education (and therefore white-collar jobs), colonial armies, and plantation work as wage laborers, women remained in the nonmonetized subsistence sector of the economy. This explains, at least in part, why women came to form a large part of a stable rural population, since men had to migrate as seasonal laborers into towns and plantation areas.

²See Kenya, Ministry of Finance and Economic Planning, Central Bureau of Statistics (1978).

³See Kenya, Ministry of Finance and Planning, Central Bureau of Statistics (1972 and 1973).

⁴See footnote 2.

⁵Data for this paper were collected as part of a larger study on social change and women's position in Luoland; see also Pala (1977). The main

settlements border on the low-lying plains around Lake Victoria and stretch into the plateau areas around the lake basin. The Luo traditional economy was largely pastoral, but over the last 25 years it has become more sedentary and agricultural, with cattle still playing an economic role. In addition to their nurturing and reproductive roles, women perform important agricultural tasks. They are responsible for much of the sowing, weeding, harvesting, and almost all storage and processing of agricultural and animal products.

A combination of internal and external factors (especially colonization) has created a number of changes in Luo social and economic structure. Among these, formal school education probably accounts for some of the most significant changes in Luo society, because education determines acquisition of new skills and access to salaried employment opportunities, particularly in the urban areas and rural administrative centers.

Because of differential access to formal schooling, more men find work in the urban/formal sector, while women predominate in the countryside as subsistence farmers and petty traders.

In rural Luoland the marketing of food is largely carried out by women.⁶ They perform this activity either as small producers or as market women. Small producers sell produce from their own farms at the local market to raise immediate cash for buying such household and personal necessities as salt, soap, sugar, paraffin, clothing, matches, meat, and cooking oil. Market women engage in the regular buying and selling of agricultural produce and/or fish in and between rural and urban centers within one district or between two or more districts.⁷ Unlike small producers, market women do not sell produce from their own fields; they act as intermediaries between small producers and consumers. They also travel farther than the nearest market and therefore cover substantially greater distances, sometimes as much as 100 kilometers in a round trip. Astute market women try to buy produce during times of bumper harvests of a

particular crop and hoard it until a food shortage affects a part of the district. Shortages tend to occur in the weeding season, a few months before the millet or maize harvest.

Women who specialize in the marketing of fish also buy from areas of high supply and sell to those of high demand. However, whereas the market woman who trades in agricultural produce plays the role of an entrepreneur who makes a profit on produce bought at low cost from the small producers, women who trade in fish buy at initial high prices, which affect the profits they can make on sales. A greater profit accrues to fishermen and owners of fishing boats and nets, who set the price of fish. The market women buy a fresh catch from fishermen on the shores of Lake Victoria and sometimes sell it fresh at the nearest market. Because of the great distances to markets and the slow mode of pedestrian transport, however, they are often forced to smoke the fish and make two or more visits to the market before they are able to sell one load of fish and buy a new supply. Men also trade in fish and have the advantage of bicycles, which enable them to travel to distant markets to sell fresh fish at twice the price of smoked. It is therefore important to point out that market women who specialize in the sale of agricultural produce are likely to do a more successful business than fish traders, because they can travel long distances on the bus without undue spoilage of their merchandise (see the section on income and expenditure patterns, below).

On a typical market day an observer will see two main types of market women: the first, called *johand abedo* (literally, the person who sits and exchanges), can best be described as a retail trader. She arrives at the marketplace by 10 A.M. for markets that start in the morning and by 2 P.M. for markets that open in the afternoon. Normally she has a stall or a designated place where vendors sit according to the type of merchandise. She sits there for many hours (between

⁶The basis of this specialization seems to derive from the role of women in subsistence farming and in nineteenth-century barter trade. Evidence from oral traditions on the premonetary period, especially 1800-1900, suggests that women were engaged in bartering of agricultural and dairy products at border/fringe markets (see Pala, 1977). During the same period, men bartered cattle and have continued to be cattle traders. The current pattern of commercialization of the labor and occupational skills of men and women in the rural subsistence sphere follows closely the precolonial forms of specialization, economic cooperation, and exchange, as well as the importance of the domestic group as a resource base.

⁷In Kenya a district is a geopolitical entity that was first set up by the colonial administration. The second largest administrative unit, it was designed to coincide with indigenous structural boundaries within and/or between linguistic groups and may be designated as rural or urban depending on its physical location. Several districts constitute a province. There are eight provinces in Kenya.

instrument of data collection was a questionnaire containing 14 questions aimed at assessing the participation of women in the marketing of agricultural produce and fish in rural market centers in South Nyanza District in Kenya. Some of the research topics investigated were: the historical origins of Luo market women as an occupational group in the countryside; types of markets visited and conditions of work in food marketing; sources of initial capital; the relationship between household and trading responsibilities and how they are managed; income and expenditure patterns of market women; and obstacles experienced in the course of work. As Luo and Kenyan herself, the author has also drawn information from observations and life experiences. The sample of 84 market traders was drawn from two sublocations and consisted of 54 women specializing in the marketing of agricultural produce and 30 specializing in fish trade.

four and eight per market day), selling produce in small measures of *ondong* (a tiny straw basket the size of a tumbler) or in cans of the same size. If she is a fish trader she will sell medium-size fish in whole quantities and large fish by the piece. Small fish are sold in groups of three or by the handful. Agricultural produce, unlike fish, is usually bulked at home and brought to the market in small portions, entailing at least three to five trips back and forth before one set of grains is sold and a new load bought. Such a slow process of sale seems necessitated by the combined effect of distance from the home to the market and between marketing centers, limitations on carrying capacity by headloads, and the lack of storage facilities in the marketing area.

The second type of market woman engages in wholesale trade. She sells produce in larger measures, usually in paraffin cans weighing 50 pounds, and spends a relatively short time at the market. Because wholesale traders sell produce in bulk over a long period of time, they develop clients with standing agreements for transactions. Other types of marketing women appear seasonally to sell grains to licensed beer club owners or secure a place at such a club to brew and sell beer themselves. These women are sometimes wives or sisters of a beer club owner who manage to earn their own cash while providing the club owner with labor and liquor for customers, as well as a small fee for use of the premises.

Conditions of Work among Luo Market Women

Occupational Socialization

One of the most informative characteristics of an occupational group is the factors that contribute to its decision to pursue a certain specialization within the limits of a set of realizable options. These factors are situational, biographical, and economic and are essentially rooted in the historical and socioeconomic constraints within which such a group operates—for example, whether they live in rural or urban areas; whether their family type is nuclear or extended; skills acquired; lifestyles and income levels of the family. I refer to the role of such factors as *occupational socialization*. In asking Luo women why and how they became market women, I was making the assumption that a pattern could be discerned in their responses that would confirm the hypothesis that

such choices are neither accidental nor mysterious success stories. Rather, they derive from a combination of objective socioeconomic factors that can be described and analyzed.

While the range of cash-earning activities for women in rural Luoland remains fairly limited, the interviews show that specific socioeconomic or situational features in the lives of rural women played an important part in directing the choice to become market women. For instance, source of initial capital, advice and encouragement to start, and support to continue trade are crucial for market women.

To the question, "Where did you get initial capital to start the trade?" 32 of the 54 agricultural produce traders named relatives as the source. 11 said they earned the initial capital from their own wages, and 11 earned the money by selling their own produce. Of the 30 fish traders, 16 named relatives as the source, 10 said they made the money from selling their own produce, and only 4 named their own wages. Thus it seems that the foremost factor enabling a market woman to begin her trade is the capability of her kinsfolk to mobilize the necessary initial capital.² The second major factor is the availability of surplus produce from her own field, which can help her undertake a bigger venture. It would seem that women trading in agricultural produce rely to a greater extent on support from relatives than do fish traders. Although the difference in amounts required is not significant, agricultural traders need more initial cash.

On the question of advice and encouragement, 37 of the produce traders and 17 of the fish traders said they were supported by relatives; 15 of the produce traders and one of the fish traders said they were advised by a friend. The salience of immediate kin in the initial support of the market woman is quite striking in terms both of capital and advice and of encouragement to pursue the trade.

The main reason reported by market women for starting in trade was lack of cash. Cash is needed to meet household expenses and sometimes school fees for children. Although women can rely on kinsfolk to assist them in raising the cash needed to start a business, they seek alternatives that would reduce their financial dependence on relatives. Therefore they prefer to pursue a job that guarantees a steady, independent income for domestic and personal expenses.

²The most frequently named relatives were brother and sister, followed by husband and husband's mother. "Own wages" here refers to money earned as a hired agricultural laborer or from sale of cotton from one's own field.

Organizational Mechanisms for Work

To ensure continued operation of their individual businesses, market women resort to collective work. They quickly learn that the pursuit of specialized commercial activity imposes an additional constraint on their time and labor, which are already substantially committed to farming, housekeeping, providing for the family, and child rearing. Women often experience the severity of labor shortage during peak agricultural activity (especially weeding and harvesting, drying, and storing of produce). This is particularly acute when such agricultural requirements coincide with illness (personal or in the family), death, social visits, recovery period after childbirth, and other domestic commitments. For this reason women make contingency plans to offset labor and time shortages by emphasizing among themselves the principle of collective work and mutual obligation and cooperation.

Market women rely on both agricultural and marketing work groups, organizing them in such a way that they can participate in both groups without too much loss of time for either activity. Agricultural work groups are based upon labor exchanges between group members. If a member is unable to attend, she may send a substitute or the money to hire a substitute for the time she cannot be present. Labor exchange, however, does not automatically guarantee group members access to one another's crops. Similarly, marketing work groups engage in labor exchanges that carry no right of access to profits made by individuals.

Marketing work groups provide traveling companionship and the possibility of increasing profit margins through division of labor in which designated persons travel on certain days while others manage the storage of produce and identify sources of produce. From the field data it is clear that fish traders tend to be traveling companions only, while grain traders tend to form a cooperative in the sense of sharing services in order to minimize individual costs of transportation and storage and thus increase gains.

Although the basic principle of these groups is economic cooperation, they achieve very specific objectives. Grain traders, for instance, work in groups of two to six women. Over the years the groups achieve a more or less cohesive structure with the following functions: (a) to guarantee group members fair play in the trade; (b) to regulate market prices by placing a ceiling on how much to pay the small producers and at what price to sell; (c) to guarantee

members the flexibility to substitute one another's labor and time without loss to the enterprise; and (d) to provide a supportive base for one another's economic and social welfare.¹⁰

Fish traders use their group support differently. They tend to operate more as individual units rather than as a cooperative. However, they usually occupy a designated area of the market and in this way control one another's sale prices. They also tend to travel together, but rarely engage one another to do their business if they have to be away. Again, it should be noted that this organizational strategy differs from that employed by grain traders largely because of the nature of the merchandise. It is relatively easy for grain traders to rely on one another to transport their produce from one market to another because it can be loaded on a bus. In contrast, fish is prone to spoilage and crushing, and fish traders are reluctant to ask another woman to take charge of their fish from the lakeshore to the market and back home. Because the methods of fish preservation are relatively underdeveloped, women fish traders still represent a less well organized and poorly remunerated occupational group in the countryside.¹¹

Effects of Domestic Responsibilities on Commercial Pursuits

Recognizing that women have substantial responsibilities on the farm and in the household, we next explore how such obligations are related to and affect their ability to pursue commercial (i.e., professional) activities. To answer this question, I posed the question: "When you are away on business, who takes charge of caring for your husband and small children, minding the livestock and chickens, cleaning the house, and fetching water?" The assumption underlying this question was, of course, that for a

¹⁰Market women are subject to a number of legal regulations that govern the licensing and movement of produce both in quantity and in quality from one place to another. Quite often they are arrested and fined and occasionally jailed for failure to comply with such regulations. In these circumstances group support is important: members can produce money to bribe the police or lobby with the chief or magistrate to release the arrested women or reduce police harassment. The groups are often quite effective in achieving their intentions.

¹¹Under an improved system of storage and transportation, the Esumu municipal fish market has shown that the fish trade can be quite lucrative. In this market, equipped with refrigeration facilities and a sink with fresh running water in each stall, women earn in one day almost three times what the rural "headload" traders make in a week.

TABLE 1 Substitution of labor for performing market women's household and related tasks

Task	Substitute labor				Not applicable	No response
	Hired labor	Children	Spouse	Other relatives		
Child care	6	51 ^a	5	10	12 ^b	—
Housework						
Water portage	4	38	—	7	33 ^c	2
Cooking	4	46	—	17	15 ^d	2
Cleaning	7	37	—	11	26 ^e	3
Tending livestock	11	32	23	8	6	4

^aThis computation includes 9 respondents who cite the babysitter (japidi) as the substitute labor. Babysitting is always performed by children under age 14 and therefore counts as work done by children.

^b9 respondents have grown-up children, and 3 have no children.

^c22 said they fetch water themselves; 11 have water tanks and therefore no longer have to fetch water.

^d6 respondents are widows and therefore do not have a husband who has to be fed in their absence; 9 do their own cooking.

^eThese respondents said they have to do their own housecleaning.

woman to pursue a career outside the home, she must be able to find some way of substituting her own labor in agriculture, the household, and her career so as to make all her pursuits at least manageable if not remunerative.¹¹

The most striking aspect of the women's responses is that, for every category of work, the labor of older children is the most frequently substituted for adult women's labor when women are away on business (see Table 1). The contribution of children is quite high even for a task like livestock tending, which is ordinarily regarded as a man's responsibility. A small number of women rely on hired labor, while a slightly higher number depend on the help of relatives. The low salience of the husband's role in housework reflects the customary pattern in which men neither cook, fetch water, nor care for small children. Therefore, the presence of a husband at home does not necessarily alleviate the burden of work for market women, except with respect to animal husbandry. The presence of older children, however, enables rural women to pursue an income-generating activity, such as food marketing, for long periods away from home.

The low salience of cowives¹² in substituting for

market women's housework can be interpreted as a reaffirmation of the independence of cowives in providing for their households and in the daily care and maintenance of their own houses. Luo women do not ordinarily rely on a cowife to perform domestic duties, especially food preparation, child care, or housecleaning. They do, however, assist one another in supervising children who remain behind to assume household duties. It is believed that one of the foremost strengths of the wife's role is her ability to sustain the provisioning of her own household without appearing to depend on other women. A cowife may cook for her husband in the absence of cowives because wives in a polygynous marriage share the responsibility of feeding their own husband and other males in that kinship category from the domestic group.

Respondents were further asked to identify tasks they find relatively easy to accomplish either on their own or with the help of a suitable substitute, as well as those for which a substitute was hardest to arrange. By and large, housework was not problematic, and a substitute could readily be found. Some market women are even able to combine such housework as fetching water and housecleaning with their commercial duties. However, a disproportionate number

¹¹Working "outside the home" here refers strictly to long-distance travel that occurs regularly and requires time that must be substituted in some specific way in order to maintain the home and farm. Ordinarily, women farm and sell produce outside the home. However, the distance between farm and market is usually short (1-4 kilometers), enabling a woman to combine her routine household affairs and her marketing and agricultural activities within an integrated daily schedule. Of course, she still relies on help from children and other family members.

¹²One would expect a higher salience of cowives in these tasks since 43 of the women interviewed are married in polygynous unions in which the total number of wives ranges from 2 to 4. Only 19 of the women report a cowife as their traveling companion on business trips. I was also told that a cowife is rarely a traveling companion because someone (usually a cowife) has to stay behind to oversee daily maintenance while the market woman is away on business.

of agricultural produce traders (40) reported that farm work was the most difficult task to delegate to anyone, while only 4 of the fish traders reported this difficulty. On the other hand, 13 fish traders reported procuring food as the most problematic area of labor substitution.

This discrepancy can probably be accounted for by the fact that fish traders can more readily combine agriculture with their work because of the nearness of markets they visit. In fact, they have to depend largely on agricultural production for their livelihood because their meager trade does not provide sufficient money to buy food. Women who trade in agricultural produce, on the other hand, travel long distances and are often not home to do agricultural work.¹² However, their trade is lucrative enough to enable them to raise substantially more money with which they can buy food at the markets they visit. They can also ask someone who stays behind to buy food at the nearest market. The differential in cash availability is also observable in the pattern of hiring labor: in nearly every case, women who report the use of hired labor are those who trade in agricultural produce.

A pertinent observation here is that, even though women depend largely on their children's labor while they are away on business, the availability of money to install a water tank, buy wood for fuel, or hire additional farm labor is important and desirable. For it seems that the use of labor-saving devices in house and farm work enables women to invest more time in trading ventures, with profitable results.

Income and Expenditure Patterns

The majority of fish traders interviewed (23) and only 9 of the agricultural produce traders earn less than 30 Kenya Shillings (K Shs 7.5 = US \$1.00) per month. All of the fish traders and only 19 of the agricultural produce traders earn less than 100 Kenya Shillings.

¹²It should be noted, however, that agricultural work—especially such peak season activities as weeding and harvesting—is more disruptive for women who are long-distance traders in agricultural produce. Although they rely on the group approach to speed up work in such seasons, many of the women regretted having to give up their trading obligations for a time to be present even in a supervisory capacity at times of weeding, harvesting, and storage. Even though the women can buy food with cash from their trading concerns, they still rely on farm produce to feed their families. And it is their responsibility to see that the gran stores are not empty.

Furthermore, of the latter category 35 earn over K Shs 100. Thus the agricultural produce trader with the highest monthly income earns at least three times the amount earned by a fish trader with the highest income.

A large proportion of income earned in market trade is spent on "subsistence" (food, clothing, household goods, and health). Eighty-two respondents reported using market income for personal and family welfare, while only 2 cited school fees as a major expenditure. The response to the question, "Why did you become a market woman?" was invariably stated as lack of money for household and personal expenditure or difficulty in obtaining spending money. Seventy-six respondents expressed the need for cash income that they could control and spend for household and personal expenses. Only 8 respondents expressed the need for school fees as the main incentive to become a market woman.

Three implications can be drawn from these figures and related observations on the income and expenditure of market women. First, a trend in social differentiation is now discernible among the two groups of rural Luo market women: those who trade in agricultural produce are better paid than fish traders and, for this reason, are better able to acquire more and better consumer goods in the local markets. Second, as the Luo economy continues to become monetized, women retain the responsibility of procuring food and providing for their families and must seek ways of earning money to meet these household cash demands. Third, as long as women engage in some income-generating occupations, they continue to maintain their independence as providers for the family. However, if they find no opportunity to raise an independent cash income, they must depend on their wage-earning kinsfolk and/or husband to meet the household and personal cash needs.

During the interviews, several women—both market women and those who had no regular income—expressed continued apprehension over being without money. They characterized this aspect of poverty as the lack of adequate clothing and food. They used such Luo words as *duk* (nakedness), *kech* (hunger or famine), and *lulliruok* (having too little of anything to make ends meet, being perpetually dependent on the goodwill of others). As one woman put it, "In the past all you needed was a piece of farmland and one cow for milk. But today, wherever you go you need money. Tell me of a place where you can mine money from the ground." This statement is indeed a commentary on the changing position of

women, especially the uncertainties brought about by the monetary economy. It ushers in a new form of structural dependence within the domestic group based upon the opportunity (or lack of it) to earn cash income.

References

- Butt, Audrey. 1952. *The Nilotes of the Anglo-Egyptian Sudan*. Ethnographic Survey of Africa, East Central Africa, Part 4. London: International African Institute.
- Dakeyne, R. B. 1960. "The pattern of settlement in central Nyanza in Kenya." *Australian Geographer* 8: 183-191.
- DuPre, Carole E. 1968. *The Luo of Kenya: An Annotated Bibliography*. Washington, D.C.: Institute for Cross-Cultural Research.
- Evans-Pritchard, Edward E. 1949. "Luo tribes and clans." *Rhodes Livingstone Journal*, No. 7.
- . 1950. "Marriage customs of the Luo of Kenya." *Africa* 20: 132-142.
- Fearn, Hugh. 1961. *An African Economy: A Study of the Economic Development of the Nyanza Province, 1903-1953*. London: Oxford University Press.
- Greenberg, Joseph H. 1966. *The Classification of African Languages*. Bloomington, Ind.: Indiana University Press.
- Gutto, S. B. O. 1976. "The status of women in Kenya: A study of paternalism, inequality, and underprivilege." Institute of Development Studies, University of Nairobi, Discussion Paper No. 235.
- Hanger, Elizabeth J., and Jon R. Moris. 1973. "Women in the household economy." In *Mwea: An Irrigated Rice Settlement in Central Kenya*. Ed. Robert Chambers and Jon R. Moris. Munich: Weltforum Verlag.
- Kenya. Ministry of Finance and Economic Planning, Central Bureau of Statistics (Nairobi). 1972. *Employment and Earnings in the Modern Sector 1968-1970*.
- . 1973. *Employment and Earnings in the Modern Sector 1971*.
- . 1978. *Country Profile: Kenya, 1978*. Nairobi (in cooperation with United Nations Children's Fund, Eastern Africa Regional Office).
- . 1978. *Women in Kenya*. Nairobi.
- Krystall, Abigail, and Achola O. Pala (eds.). 1975. "Women and education." *The Kenya Education Review* 2, no. 2 (December).
- Mbithi, P. M. 1972. "Harambee self-help: The Kenya approach." *The African Review* 2, no. 1 (June): 147-166.
- Mutiso, C. G. 1971. "Mbai sya citu: A low status group in the centre-periphery relations." Paper presented at the annual meeting of the African Studies Association, Denver, Colo., 3-6 November.
- Ogot, Bethwell A. 1963. "British administration in central Nyanza District 1900-1960." *Journal of African History* 4: 249-273.
- . 1967. *History of the Southern Luo*. Vol. 1: Migrations and Settlement 1500-1900. Nairobi: East African Publishing House.
- Okoth-Ogendo, W. H. O. 1975. "Land tenure and the transformation of peasant economies in Kenya." Address at the International Women's Year Tribune's Panel on the Family, Mexico City, 27 June.
- Okot p'Bitek. 1971. *Religion of the Central Luo*. Nairobi: East African Literature Bureau.
- Ominde, Simeon H. 1968. *Land and Population Movements in Kenya*. London: Heinemann.
- Pala, Achola O. 1975. "A preliminary survey of the avenues for and constraints on women in the development process in Kenya." Institute of Development Studies, University of Nairobi, Discussion Paper No. 218.
- . 1976. "Women and development: An overview on Kenya." Paper presented at the American Council on Education Overseas Liaison Committee Seminar on Women in Rural Development, Washington, D.C., 21-23 April.
- . 1977. "Changes in economy and ideology: A study of Joluo of Kenya (with special reference to women)." Ph.D. dissertation, Harvard University, Department of Anthropology.
- . 1978. "Woman power in Kenya." *Ceres*, No. 62 (March-April): 43-46. Food and Agriculture Organization of the United Nations, Rome.
- . 1978. "Women's access to land and their role in agriculture and decision making on the farm: Experiences of Joluo of Kenya." Institute of Development Studies, University of Nairobi, Discussion Paper No. 263.
- Southall, Aidan. 1952. *Lineage Formation Among the Luo*. London: International African Institute.
- Staudt, Kathleen. 1975. "Women farmers and inequities in agricultural services." *Rural Africana*, No. 29 (Winter 1975-76): 81-94.
- Sutton, J. G. 1974. "The settlement of East Africa." In *Zamani: A Survey of East African History*. Ed. Bethwell A. Ogot. Nairobi: East African Publishing House.

Women's Reality: Critical Issues for Program Design

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The following article looks at social controls on the behavior of rural women in Bangladesh that need to be considered in project designs if women are to be able to respond to development programs. Rural women in many countries are constrained by analogous social pressures, which usually have an economic basis favoring the more powerful and therefore are resistant to change. Since these pressures on rural women often have a negative effect on the goals of rural development, they need to be understood and addressed.

Once one chooses as part of rural development policy to initiate projects directed specifically to rural women, whether they be agricultural extension, investment in food production, employment, education, family planning, or health services, one must design such projects in ways that rural women are able to respond to. No matter what the project's long-range objectives or what ideology or policy dictates it, the first steps of implementation are always taken with an acceptance of the situation as rural people perceive it.

Underlying the approach of projects intended to reach rural women must be an awareness that particular manifestations of rural women's behavior—such as farming strategies, migration patterns, desired number of children, food consumption patterns, education of daughters—are responses to their total socioeconomic situation. Project approaches based on a partial view are not likely to succeed. Underlying the project approach must also be an awareness that women, like men, act out of self-interest. Women are seeking, to the best of their abilities in society as it exists, to satisfy their needs. Like rural men, rural women are calculating in pursuit of their goals and have little margin for risk. No one involved in development work questions these statements when applied to men. They are equally true for rural

women. However, we must recognize that the cultural or socioeconomic pressures experienced by rural women as a sex (varying with, but not negated by, class) as they pursue security and survival are different from those facing men.

The following description of some aspects of the culture of rural women in Bangladesh exemplifies the kind of information a development project needs in order to be relevant. It is adapted from a longer study of rural women of Bangladesh and the first steps of a Bangladesh project to introduce opportunities for change.¹ It identifies some of the pivotal factors that control responses of Bangladeshi rural women to the introduction of change, and that therefore need to be taken into account in project design.

Status

To initiate change in the condition of women in villages through a project, one must first grapple with the concept of status or prestige, much more than with economic class. The social ideology of status, set by the powerful, controls the behavior of almost all women in the village. If one is seeking to extend resources to poor women to enable them to improve their economic condition, one must understand how the ideology of status limits the ways in which they can afford to respond when new opportunities are

¹The project is the Women's Programme of the Integrated Rural Development Programme (IRDP) under the ministry of Rural Development, Local Government and Cooperatives. It began in 1974 as a component of the Bangladesh Population Planning Project funded by the World Bank and is coordinated with that project by the Population Control and Family Planning Department. See Abdullah and Zeidenstein (forthcoming). Other aspects of the culture of rural women explored in the study are: the work of rural women; life crises; family and female strategies; cooperation and conflict; health and reproduction.



offered. The guidelines a project evolves to initiate action toward long-range objectives must take into account rural women's perspective on their situation. That perspective is not based on class.

Definitions of economic class in Bangladesh are usually based on ownership of or control over land. Definitions vary, but generally they distinguish four classes: the landless, the small farmer, the middle farmer, and the rich farmer. The landless have no more than a homestead, sometimes rented. Small farmers own up to about 1 hectare, middle farmers 1-3 hectares, and rich farmers over 3 hectares. Landless and small farmers comprise about 50 percent of rural families; they cannot feed their families from their own land. We have found through the project that categorizing rural women by land ownership does not explain variations in their response to available resources as efficiently as does the concept of status. Because of status considerations, many of the women among the 50 percent of poor rural families would be unable to act to improve their situation if opportunities were made available.

Status in rural society is frequently a basis for power, influence, and respectability. It is usually accompanied by land ownership and financial means, but may also substitute for them when a family's economic condition has deteriorated, or is building. A family that is newly rich may try to increase its status by marriage alliance with a poorer family that has it—usually a girl with status marrying a boy with money. Status is a viable socioeconomic asset in that it is a basis for making good marriage alliances that will sustain or improve a family's position and for maintaining power, influence, and control over resources. Thus, a land-poor family will seek to hold on to status as long as it can.

One traditional sign of status in rural Bangladesh is the behavior of the women in a family. Appropriate behavior for high-status women includes strict *purdah*, complete sexual division of labor, and relative freedom from menial work. Only families in good economic condition can afford to support such behavior, but because it is the symbol of a family with influence and power, most families aspire to come as close as possible.

The image of relative idleness among its women is projected by families that want to indicate their status. On a trip to western Bangladesh, project staff spoke separately to the men and women of a prosperous, conservative farm family. The women, in response to questions about what they did, spoke about their chickens, vegetables, rice processing, and the like. The men, in response to the question about their women, said "they cook and sew quilts."

The image of shelter for widows and other dependent women is also projected as a mark of status. Even when women are in real need, determination to maintain status will keep them from revealing that need by violating *purdah* or by doing certain kinds of work for money. Women themselves usually recognize the value of preserving status, especially for the sake of their children; but sometimes their need is so great that what the family gives them in return for limiting their possible responses to need is not enough. Several women have spoken of this dilemma.

One woman whose economic condition had deteriorated said, in response to the question "Why don't you work?": "How can I? We were in good condition for so long. Now, how can I do any work?" The interviewer asked: "You can do handiwork, can't you?" "Yes, I can—but for that capital is needed. Where would I get the money?" The interviewer said: "You can grind others' paddy." The woman responded: "It isn't possible. We might starve to death but we have to maintain our status. Otherwise the neighbors will speak ill of us."

A 25-year-old divorced woman with one son, living at home with her "respectable" brothers (who are seeking another marriage for her), told the interviewer that she hoped to raise her son to be a "real person." But she has no money for food or clothing. She helps her mother with the domestic work but wants to take a loan through the cooperative so that she can husk paddy commercially, since she knows how to do it. She will have to do it secretly because her relatives and neighbors will criticize her. "Sometimes," she says, "one may know how to do work, but not be able to get any use out of it."

There are, of course, variations in how families and even whole villages will enforce status through social pressure. But there is no doubt that it remains one of the dominant values of rural society. If one assumes that women in about 50 percent of rural families are poor by class definitions and one adds to that those who are poor and dependent because of the loss of a husband through death, divorce, separation or abandonment, one might expect the number of women who would respond to any economic resource to be very high. But when one recognizes that most of these women and their families are concerned with protecting status—as an economic asset—one understands the complex problem a project faces when it seeks to direct resources to rural women.

Among poor women (excluding for the moment those who have no one but themselves to depend on), we have experienced some basic differences in

response to resources that seem related to differences in their status aspirations. A basic question for a woman and her family seems to be, what do they have to lose by behaving as if she had no aspirations to status? Our experience indicates that women whose families have been without status for a generation or two will act as if they have less to lose than women whose families have been respectable in this or the last generation. They will be more likely to loosen *purdah* to take advantage of economic opportunities, to accept the opportunity to work, and to do any kind of work than women who may be equally in need but are restricted by status considerations. Poor women from families that have declined quite recently, though they may be widows, divorced, mothers of hungry and uneducated children, and unable to meet their basic needs from family resources, are likely to be reluctant to break *purdah* or to do work that is associated with nonstatus women—that is, heavy menial work—for pay. They may be unwilling or unable to take advantage of training unless it is given in the village or to earn money in ways for which there are ready markets, such as making mats or processing rice. As one woman said, "We are not the kind for making mats or selling puffed rice. Our prestige will go." In many cases it is not just that a woman will not do this kind of work for fear of losing status; she may not know how to do it because of the economic condition of her family. Rice processing, for example, requires great skill passed on traditionally and cannot be quickly learned. Because she is also unlikely to have been given education that might now suit her for work having some status, she is in a very helpless situation.

Some of these women will earn a small income within the shelter of *purdah* in such respectable ways as making fans, quilts, baskets, and even fish-nets for commercial marketing. Ironically, they are more likely than women without concern for status to be exploited by family and middlemen because of the restrictions on their behavior, their lack of experience in making money, and their dependence on others. Although the latter women may be exploited by society at large, they know, at least within the limits of their work world, how to negotiate business arrangements in their own self-interest. They can do anything and go anywhere opportunities are offered—to the city to be servants, to "food for work" projects, to special training programs. But of course, as soon as they get back on their feet, they will seek to re-establish their status and return to respectability and shelter. No matter how hard these women work and how well they do, no one in rural society will willingly emulate their behavior or consider it respectable.

Any project concerned with the integration of women in rural development must therefore deal directly with the issue of status. It is not something to lose sight of in efforts to reach the "poorest of the poor," nor should the needs of women who value status be rejected because they offend the work ethic of planners and critics. Project administrators must recognize that programs for rural women have to be concerned with changing social values related to women. They must seek ways to substitute work for idleness as status symbols, and they cannot do so only by addressing the poor. They must address the more complex problem of how to enable status-bound women to maintain and even raise their status through regular income-producing work. It is not easy, but it is the only viable way. It means that the long-range policy of a program for women must be to find ways for all women in need to be able to work, not just those who are poorest now. The approach for the present generations if one wants to move in that direction must be to find various kinds of work for women under varying social pressures and with varying skills.

Purdah

Purdah, or the veil, is a characteristic of Islam. Its practice varies from place to place. Our concern with *purdah* in Bangladesh is not with its religious significance but with the way it affects the behavior of rural women.

The strict practice of *purdah* is a social and religious ideal in rural Bangladesh. Strict practice means that a woman stays within the family compound, which is surrounded usually by a "wall" of vegetation and sometimes has screens of woven rushes to protect the inner courtyard. If possible she stays within the inner courtyard. She is never seen by any but close family males. This degree of seclusion requires access to water for bathing within the compound and the presence of servants. If a woman in strict *purdah* must leave the compound to visit her parents once or twice a year or for an emergency, she wears a *bio kahi*, a loose garment that covers her from crown to toe, and travels in a bullock cart with a cover over each end or in a rickshaw with the front covered, or travels at night by boat.

As a result it is costly for a rural family to maintain strict *purdah* for its women, and only the wealthy or those males (such as religious leaders and school teachers or those with a "name" to preserve) who make a special effort of time and energy can afford it. Only a few compounds in a village—perhaps

five or six, can maintain such strict purdah, but what is important to realize is that many villagers look to these houses as the most prestigious and respected—an honor to the village—and to this way of life for women as the most desirable. In fact, they do not like to see a lapse in the behavior of these women, and if there is one it will take time before the family's prestige can be restored.

Almost all village women *aspire* toward purdah. Except for the very poor who have no choice but to work in others' houses or beg or glean the fields, most rural women practice purdah in a way that strives to emulate the ideal, yet has flexibility to allow for certain economic realities of the family situation. These women may move discreetly within a cluster of compounds—usually of related families—when men are in the fields or at night. Beyond these compounds, reachable by sheltered paths, may be open fields and public roads, which, using Merriksi's terminology, are "male space" (1975). Women do not usually traverse male space except on visits to their parental homes. At such times they wear burkhas if they can afford them. If not, they may cover their faces and bodies with a *sari* arranged like a burkah and shield themselves with an umbrella. Those who cannot afford these symbols of modesty cover their heads and faces as much as possible with part of the *sari* they are wearing. It can be seen, then, why rural Bangladeshi women are so dependent on men. Maintenance of purdah means that women cannot have access to the world that lies beyond the boundaries of the compound, except through intermediaries: young children for small matters; husbands, fathers, brothers, and grown sons for whatever they need from outside. Most women do not visit the marketplace, the center of economic, social, and political activity. They do not go to the mosque, the center of religious and social activity, nor to the fields, the center of agricultural activity. They do not go to school past puberty, even if they can afford it, if doing so involves being with males or walking beyond permissible boundaries. They do not have access to the fruits of their labor nor the chance to labor when in need. They do not go to the centers where medical and family planning services are available, and they cannot see the families to whom they send their daughters in marriage.

It is commonplace to say that women's work is complementary or auxiliary to that of men—that women help men. But that terminology is not useful. To better understand the situation of women, we must understand that women's work does not have direct access to the marketplace. At every turn it comes up against the boundaries past which male intermediaries are necessary if it is to find a market or

social value. Women without men simply cannot get their money's worth or their rights. This is why the greatest need in a woman's life is male support—not necessarily because he earns her food, but because he is a middleman for her production.⁷

Women and Income

The Islamic ideal as it concerns the family economy is that the male provides for and protects the female.⁸ The obligation that he undertakes as sole authority is that of sole provider. Bangladeshi rural women's work—unlike that of African women or, to some extent, Indonesian women—does not involve, as a norm, *any* economic autonomy. Women say, "If men give us food, we can eat; if they give us money, we can spend." Men say, "We provide." Perhaps that is the reason, in addition to the universal tendency to overlook the struggles of the very poor, we have to look very closely at rural women's lives before we notice that many women are earning small amounts of income, out of various kinds of need.

To design programs that women will be willing and able to take advantage of, one must know as much as possible about how and why women, in contradiction of the ideal, are earning income and what they are doing with it. We must not accept such prevalent myths about women and income as: women are not wage laborers; only destitute women are motivated to earn income; rural women who are not poor want money only for frivolous purposes; male control of the purse is perceived by women to be in the best interest of the family.

These and other myths can flourish in the absence of information about the income-oriented behavior of women, which is an issue of great complexity. For one thing, the lack of attention in the past to the existence of laboring women makes it hard now to estimate the degree of unemployment among them as a result of the gradual increase in machines that replace their labor. Women seek work as laborers when they can no longer be concerned about status. For some women this condition occurs abruptly through the loss of male support and resources. For others, it is dictated by the economic

⁷It is important to note that there are variations in women's experience of purdah by role and age. In spite of purdah, rural women know a great deal about what is going on in the world as it involves their interests.

⁸This section looks at ways in which women have access to and control over income from their labor as opposed to the routine heavy work responsibilities they have as farm wives and mothers. See the chapter on the work of women in Abdullah and Zeidenstein (forthcoming).

condition of the whole family. However, many rural families, in this situation of dwindling resources, even those in which male members are working as laborers, will tolerate great deprivations before suffering the loss of status involved in allowing women to labor.

What is the work of laboring women? The most common way for these women to earn food in rural areas is to sell their labor in other households, doing rice processing and other menial tasks. There are a variety of arrangements for doing this work (excluding exchange of labor among economic equals). One arrangement is the formal contract negotiated for specified periods of time—a few days, a few months, or longer.

Women may have connections with particular households that call them when there is work. To guarantee being called for this work, a woman may have to be generally available for other lighter services, such as cleaning fish or milling rice. A less common arrangement involves year-round work and residence. In addition, women may do rice husking on a more commercial basis—that is, buying paddy from the market and selling it back as rice or a more expensive variation, puffed rice. Some capital is required for this arrangement. Village women can also earn income by milking cows, collecting fuel, harvesting chilis, or performing as midwives. In some places poor women do postharvest gleanings of what is left in the fields, processing and selling it.

In some villages the arrangement between rich and poor women is more feudal than commercial. For example, women from a number of poor households may be at the call of a rich household for various services as needed, often without having to be asked. Such work includes helping with rice husking and milling, fetching water, cooking at feasts, helping in special food preparations, and being available to clear the courtyard of drying rice when rain threatens suddenly. For some of these services there will be no immediate return; for others, some of the food being processed or prepared is given to them. But throughout the year, sustenance and support are given in the form of food distributed on religious occasions such as Shabi Bharat and Eidul Azzah, or in the form of saris and relief goods distributed during natural calamities or at election time, or because of promises made to Allah for prayers granted, or at baby-naming ceremonies or death anniversaries. The rich family may also provide small loans without credit or publicity, or, in times of scarcity, a place to pawn one's valuables for small amounts of credit. (They can be "borrowed" back for, say, a son-in-law's visit and hopefully some time reclaimed.) The

rich family may distribute used clothing, provide special foods for unexpected occasions, lend furniture, pots and pans, and even ornaments for weddings, and provide countless other loans of assistance for which the labor of the poorer women is the "payment." There may be less loss of status in such an arrangement than in a strictly commercial one.

There are other traditional ways for poor rural women to earn small amounts of food or money without having to work in others' houses, which, because it involves heavy manual labor and violation of *purdah*, is one of the least desirable ways to earn food. Women, within the shelter of the compound, may be earning for themselves as older widows or for their children as heads of families. Or, contrary to the accepted view of women, their contribution may be counted on as one of the several sources of income a rural family depends on to survive. In some parts of the country, women with some capital buy goats or cows, which they give to poorer women to raise. The poorer women get the first year's milk and issue from the animals and the second year return the cow or goat and its new offspring. Women with enough resources to buy a few chickens and keep them alive and healthy earn small amounts of income from selling eggs, chicks, and chickens on a fairly regular basis or simply keep them as an asset that can be converted to cash when a need arises. Milk, also, is a marketable asset, in either the village or the local market. Women with cows decide how much of the available milk will be used for the family's food and how much is to be sold. Again, the amounts of income possible from such transactions are quite small. Small amounts of other foods bring in a few *takas* for women—vegetables, fruit, dates, syrup. Or women may use them as barter, along with rice, in exchange for a variety of small household items and trinkets that tradesmen bring directly to the village. It is important to remember—because rural women consider it important—that if women market their produce outside the neighborhood, they are always dependent on others as intermediaries in the transaction. In other words, they do not automatically control the income their work produces. Whether they do control it depends on many factors, but especially on whether there is an intermediary and, if so, who he or she is.

Poor rural women also use their traditional skills in handiwork to bring in meager amounts of money. This kind of work can be done in the security of *purdah* if there are males or children to help out, but at the same time women have no direct involvement in the financial transactions. Women may make quilts on contract for other women who provide the raw

materials. In some areas women make fishnets, spin thread, or make *bidis* (a kind of cigar) by contract to middlemen who supply the raw materials, including in some cases the spinning wheel.

Women who have greater resources or who have only liquid resources have other, though not always more productive, ways to make money. They may keep small shops in their homes, or they may stock rice and other commodities until the prices go up in seasons of scarcity. (They may buy these commodities directly from other women in the village or through intermediaries from the market or save them from their own store.) Some women lend rice for interest; or they lend money for interest, sometimes investing in local businesses, sometimes in land as surety, which they then cultivate through laborers or the "owner" as tenant. In one village near a cottage weaving industry, women of all classes invest money in the weavers, getting perhaps 15 takas a month interest for an investment of 100 takas. Similarly, women from weaving families may lend money to farmers in sowing season and get rice as interest. As one woman said, whatever money they have should not be idle; it should be put to work.

It is important to emphasize that many of these income-producing activities are being carried on discreetly. They are not a secret (except in a few cases) but they are not something to be flaunted. Thus, unless one has gained the confidence of rural women, one may not see how many women are involved in earning income or are interested in doing so. A number of rural women with whom we have discussed income-generating activities have indicated that they were not interested in earning money if it would have to come through the hands of male relatives. In interviews, we have heard of specific attempts women have made to conceal income-generating activities from their husbands. (Women usually told us what *other* women have done.) For example, one woman stocked rice in another woman's house, while another woman had a neighbor raise a goat for her. One woman secretly sold rice from her own storage, while another has opened a "pan" business with her young son and has told him to keep their earnings a secret from her husband. Most women say that they hide their savings in holes in the bamboo, in the roof, or under piles of cloth.

What are the reasons for secrecy? One is the desire to save. Women have said that if their husbands knew there was extra money around, they would spend it and work a few days less if they were day laborers or give women less for expenses if they were wage earners. Some husbands, if asked to market an item for their wives, keep the money for themselves.

Women indicate that this is a matter of the character and behavior of individual husbands. They say that if husbands are "good," women can trust them to buy and sell what they request. But if the husbands are not "good," women try to sell through other women or through vendors. Some husbands, they say, are so bad they will take whatever they can.

How are women spending the small amounts of income they do control? Women in very poor families and those who are heads of households usually spend what they earn on immediate survival—that is, daily food. Women with more money spend it on such expenses as small household necessities like oil or soap; school fees and other educational expenses for their sons; emergency needs like medicine; releasing land from mortgages, leasing land, buying land or a house; gifts for their married daughters; support for their widowed mothers; special luxuries and treats for their sons; ornaments (i.e., personal assets) for themselves. With their own money, women are able to meet family emergencies if they arise and to provide for family security in cooperation with their husband or perhaps, once in a while, in spite of him. They are able to spend money on obligations women especially feel (e.g., for their mother's or daughters' well-being), without having to ask permission from the husband; they are able to provide for their own security when it seems at risk (e.g., if divorce seems imminent or a cowife's children are getting more of the family finances); and they are able to increase their influence over decisions in the family.

Social Change without Program Intervention

In almost all our interviews with rural women over age 30, the women offered unsolicited comments on changes they had experienced in their lifetime. Mostly these changes were related to age at marriage, practice of *purdah*, education for girls, and the dowry system. These are some points of direct impact on rural women's lives of larger forces at work in the economy—rapidly growing population, increasing fragmentation and alienation of landholdings, diversification to sources of income other than land. As Seneratne (1975) carefully describes, changes in the rural resource base produce changes in social practice to take advantage of them; belief systems are concomitantly revised to support the practices of those who control the most resources. Thus, new

patterns in education, marriage, and practice of purdah should, if they seem to be successful strategies for deployment of women, produce changes in belief systems, mainly criteria for status related to women's behavior.

In relation to age of marriage, most older women recalled having been married at least one or two years before the onset of menstruation. They say that early marriage was considered conducive to a good adjustment, for the new daughter-in-law did not have time to develop her own personality and was still malleable. Besides, it was considered a waste of money to keep a daughter in the parental home, where she would require food and clothing but do little or no work. Now, our respondents say, the appropriate age for marriage is the onset of puberty. However, they also indicate that a number of village girls past that age are still unmarried, something they consider a recent social problem. It is obvious that there is still no strong rural belief system to justify later marriages, since relatives of unmarried girls who are clearly 16 or 17 will consistently report their ages as 12 or 13. These unmarried young women are a social embarrassment - there is no appropriate role for them. If they are going to school, their families will justify their being unmarried in the name of education, but in most cases will take them out of school if a good marriage offer is presented. Their families might welcome new strategies that would relieve the embarrassment connected with later marriage and give them some positive justification for having their daughters still at home.

Another change that women indicate is the relaxation of purdah. They continue to emphasize the importance of purdah but recognize that it is being interpreted in new ways. Some condemn this relaxation while others support it, depending, no doubt, on whether advantages are derived from old or new ways. Some prosperous older women who have had to relax purdah to manage their households efficiently say that they have done so "for the sake of work." Parents and husbands of girls past puberty who are going to secondary school or who have taken some of the new jobs that involve contact with men talk about "inner purdah" being as valid as seclusion or the burkah. (In the past, higher education for most girls was said to be impossible because it would "hamper purdah"; now the *definition* of purdah is being changed.) Although strict interpretations of purdah are still the operative norm in most villages, the reasons for these deviations among respectable families indicate that purdah might be relaxed for more women if the tradeoff were really advantageous. If young women from families that are per-

ceived as "respectable" relax purdah restrictions to take advantage of resources that are considered valuable, they may set a standard in the village for the interpretation of purdah that will influence others. The fact that dependent women from well-off urban families have in recent years taken secretarial training and become secretaries has given that job status, so that other women who are more in need and concerned with respectability can also do such work. History indicates that change is possible, but one must be very sensitive to *how* it is possible if one wants to work toward further relaxation of purdah restrictions.

Another significant change reported by rural women concerns the education of daughters. Secular education for rural Muslim males is a fairly recent phenomenon, perhaps accepted for the past 30 years. Primary education (up to class five) as a desirable standard (not necessarily an attainment) for rural girls seems to have become acceptable over the last 10-15 years. There are indications that secondary education for rural girls, though still very negligible, is on the increase, with higher numbers enrolled in areas with girls' rather than only coeducational high schools. Such girls' schools, however, are very rare.

Very few women over 35 whom we interviewed had more than a year or two of primary school. Most were illiterate. They gave a variety of explanations for their lack of schooling. Basically, they said, it was not customary to educate girls in those days. Their fathers and mothers believed that educated girls would not obey their husbands; their characters would be spoiled; they would not adjust well in marriage. Their job was not to learn Bengali, but to learn Allah's kalam (words or sayings). That would serve them in the next world. If they made their husbands happy and maintained the family, they would reach paradise.

All of these women report that they have given some education to their daughters or have wanted to but could not afford it. Even the few who state that they do not believe in educating their daughters say they have nevertheless done so out of social pressure. In these cases, some education for daughters seems to have become a form of behavior associated with status. This seems to be a situation in which the advantages of new behavior are so widely accepted among those who set rural standards that the old belief system that education for girls is bad has been almost completely undermined. It is likely therefore that the main obstacle to some primary education for more rural girls is lack of resources, both in the family and the national budget, and not social sanction.

The change that elicits most concern among women from families concerned with status is the shift from bride price to dowry. Most older women mentioned that in their day the groom gave to the bride's side; the bride's side gave little in return. The typical comment was, "In our time the bride's father did not give a compulsory present in the marriage. Whatever he gave out of his own will was enough. Fathers of those days did not have to suffer in giving daughters in marriage. Nowadays you have to give a dowry to the boy—a cycle, watch, transistor. But in our time the groom's side needed to give lots of gold ornaments to the girl." Probably the dowry system is not yet an issue for those who do not care about educated husbands for their daughters or for those few families whose status is considered a sufficient dowry. As Shirley Lindenbaum (1975) has pointed out, the new emphasis on dowry rather than bride price is the response to a shift away from land as the primary basis of status to the accumulation of money as an alternative or concomitant basis.

Many marital difficulties are being blamed on the problem of dowry. Brides of 14 and 15 are being divorced or not even claimed from their parents' home because promised dowries have not been paid. Educated girls who marry into rural households are being especially abused by their mothers-in-law. Daughters are likely to be considered more of a burden under these circumstances—that is, more costly when resources are scarcer—than when they married earlier and were valued for their ability to do farm work. Families facing these dilemmas might be ready for alternative strategies.

From many indications this time of change in Bangladesh is likely to affect the situation of women. Population growth, war, and inflation have created a strong awareness among rural people of the dwindling of traditional resources and a search for new resources. The burden of dependent women on family resources is becoming heavier. Unsuccessful strategies to deploy women more advantageously in regard to new resources may be increasing the number of dependent women in status-conscious families as well as the number of partially educated women who are stranded in transition between rural and modern life. The number of families that are both status-conscious and in need is increasing. Certainly the number of unemployed poor women is increasing with the mechanization of the heavy work of rice processing.

Change in the social situation of rural women could be very rapid. Both the high-status families, who control village values, and the heads of families, who control family behavior, have fewer resources to

offer in return for the dependent, secluded position of women. Women's eyes have been opened by the atrocities of the recent Liberation War to an awareness of how insecure their situation really is. Once belief systems begin to shift, the change over the next generations will be very rapid because the numbers of young people will greatly outweigh the numbers of elderly.

These changes that rural women have cited as important in their lives have occurred without policy intervention. In a sense population growth has loosened traditional social controls because they are no longer efficient for those who most benefit from them; there is a transition to new social controls. If change continues without significant intervention, one can predict what will happen to rural women. Very poor women will take advantage of any available opportunity, whether it be projects like earth-lifting in exchange for food, brick-smashing to build roads, or migration to the cities. Life women will gain status from higher education as they do in the cities, and certain kinds of jobs for those who remain in the rural areas will not only be acceptable but will have some status attached. The response reported by most projects involving rural women is that after initial hesitation there was little problem in hiring women (usually under age 30) for a variety of jobs, all of which provide income. (As in every culture, white-collar work is more respectable than blue-collar.) Education and jobs will increasingly become a respectable family strategy for rural girls and will quickly exhaust the job market. The majority of rural women will be unable to take advantage of this new standard for prestige set by a small elite and will be left without resources, without an alternative to traditional behavior, and with even less perceived social value than before, when farm work was considered important.

The Project's Approach to Change

To see how the project referred to above is addressing the social and economic pressures constraining rural women, we must note its main features. Paralleling the rural development approach for men and operating through the same institution, it offers rural women an opportunity to organize village-based institutions open to all adult women who purchase a share. Membership requires women to deposit savings regularly, attend weekly village meetings, and send five representatives every week to a training

and development center several miles from the village. The project entitles women to credit for economic production; access to modern training, supplies, and services for upgrading economic activity; and improved family planning and health programs.

The project cannot enter a village without the approval of village leaders. But once leaders have sanctioned a credit/production institution for rural women in their villages, individual members of the group can act to meet their economic needs as they could not have done alone because of status considerations. Since credit is given for *individual* enterprises, women of different socioeconomic backgrounds, skills, levels of education, and ages are able to use it to pursue the economic ventures that they consider appropriate to their present situation. For example, some are raising livestock, processing rice, or making pottery, while others are becoming tailors, paramedics, or literacy teachers.

The fact that the group depends for its existence (including new economic resources) on five representatives traveling to a training center each week, and that obtaining new training opportunities in valued skills requires leaving the village to go long distances, sanctions a loosening of purdah and may even give such opportunities some status. The existence of the institution *in* the village offers alternatives and possible status as leaders to young unmarried or divorced women in their parental homes who, without such an institution, would have no alternative to total dependence. At the same time, it provides their families some relief from social embarrassment that would further devalue their daughters and from the added economic burden of a grown daughter at home.

Because the project addresses the interests of women and their families in increased economic resources without loss of the socioeconomic asset of respectability, women are able to respond to and take advantage of them. At the same time, the thrust of the project is toward changing what is accepted as respectable for women. That is, many women can join and benefit from this project without leaving the village, but, to the extent the project succeeds, it works

toward combating the tradition that status is accorded for idleness and strict purdah and toward increasing the value of women.

Of course, the project has a long way to go and faces many problems as it develops. But the direction in which it is moving seems appropriate to the situation as rural people perceive it. Although one might have anticipated resistance, since villages do not reveal their potential for change until new resources are introduced, the response of village men and women has been positive and pressure for expansion has been steady. However, further progress in directing resources to women depends on how substantive the advantages are in competing with an old, though weakened, code. And that, of course, depends on how much planners are willing to invest in development through women.

References

- Abdullah, Taherunnessa, and Sondra Zeidenstein. *Village Women of Bangladesh: Prospects for Change*. Oxford: Pergamon Press (forthcoming, 1980).
- Lindenbaum, Shirley. 1975. "The value of women." In *Bengal in the 19th and 20th Century*. Occasional Papers, South Asia Series. East Lansing: Michigan State University Asian Studies Center.
- Mernissi, Fatima. 1975. *Beyond the Veil: Male-Female Dynamics in a Modern Muslim Society*. Cambridge, Mass.: Schenkman.
- Seneratne, S. P. F. 1975. "Micro studies, employment and strategies of development." Unpublished.
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From Research to Policy: Rural Women in India

Vina Mazumdar

The following article describes the new awareness of rural women's role in development in India that has resulted from studying rural women directly. It indicates the possibility of moving from research on rural women to the formation of policy and the design of programs that take into account the reality of rural women's lives.

Comprehensive research on rural women is a recent phenomenon in India, as in most other countries. It has led to a more realistic understanding of the roles of rural women and an awareness of the impact of their declining status on rural and national development. In India, the next step has been to translate such findings into recommendations for national policy as reflected in the Sixth Five Year Plan. Although not the final step—which would be successful implementation of policy suggestions—it is a critical one in linking research and action. This article provides a country-level example of how research on women can inform policymaking by analyzing defects in existing policy and programs and suggesting improvements on the basis of new knowledge and understanding of the problems.

Research Findings

In 1975 the first major attempt to review and evaluate data on various aspects of women's status and the change in women's roles, rights, and opportunities due to planned development was published as "The Report of the Committee on the Status of Women in India." Among their key findings, they noted that the ratio of women to men has been steadily declining, thus widening the gap between the sexes from 2.3 million in 1901 to nearly 20 million in 1971. Be-

tween 1951 and 1971, the number of women workers in agriculture declined from 31 to 25 million, while the number of men workers increased by 34 million. In the nonagricultural sector, women workers declined from 9 million to 6 million, while men increased from 33 to 48 million. The total number of men workers increased by 27 percent while women suffered a decline of 12 percent, reducing their ratio in the work force to 210 per thousand men.

The last two censuses revealed a preponderance of women in internal migration, at a ratio of 2,310 females per thousand males. Women constitute the larger number of rural-to-rural and urban-to-rural migrants, while men constitute the larger number in rural-to-urban and urban-to-urban migrations. This large-scale migration of women, mostly within short and medium distances, is due, apart from marriage, to severe under- and unemployment.

Identifying an interrelationship between women's low life expectancy, higher mortality, declining participation in paid employment, and increasing migration, the committee concluded that these demographic trends were indicators of "a process of change that is moving in a direction opposite to the goals of our society and its plan for development." In the committee's view, these trends represented an intensifying devaluation of women.

Responding to the committee's conclusion that "changes in the status of women will be a long-term aspect of our social process and will require continuous examination and assessment by persons interested in social change," the Indian Council for Social Science Research adopted a program of sponsored research to generate and analyze data on significant patterns of social and economic organization affecting women's position in the long run, and to develop new perspectives in the social sciences, particularly through clarification of such concepts as the family, household, women's work, economic activity, and

productivity. The restrictive and ambiguous use of these concepts has resulted in a general underassessment of women's contributions to society.

The program emphasized the study of women in the poor (or less visible) sections of Indian society with a view to understanding the regional and sectional differences in women's roles, status, and problems and the differential impact of development on their lives. This emphasis was designed to correct the bias of previous research and policies, which were primarily influenced by the experiences of women in the elite classes.

Influencing the Planning Process

The results of research undertaken by this program during 1975-77 were summarized in a short memorandum, "Critical issues on the status of women: Employment, health, education: Suggested priorities for action," by the committee of social scientists (which supervises the program) in 1977. The memorandum highlighted the alarming trends in the condition of women, and recommended urgent policy intervention by the government, particularly in the areas of employment, health, and education. The publication, which was sent to the concerned government ministries and to the Planning Commission for consideration, aroused considerable interest in the press, academic circles, and some organized women's groups. It was also distributed among various government agencies by the women's bureau, established by the government in 1975 to initiate and coordinate policies for women's welfare and development.

The publication of this document coincided with the decision of the government of India to begin the Sixth Five Year Plan in 1978. It was therefore used to create awareness of the problems of women in development among various working groups, which were appointed to study issues of special concern to development policy, and to provide information and recommendations to the Planning Commission. For the Sixth Five Year Plan several working groups on women were specifically established as part of the planning exercise. This paper summarizes the recommendations of three of these working groups.

While designing the National Adult Education Program, the Ministry of Education appointed a special working group to advise on measures necessary to make the NAEP more attractive, appropriate, and accessible to rural women and to poor working women in urban areas, who together comprise two-

thirds of the NAEP's target population. A working group on Village Level Organizations emerged as part of the government's heavy emphasis on rural development. The government had concluded that the 60,000 village women's clubs, created under earlier development programs, were not always an effective instrument for rural mobilization. A working group on employment was convened by the Planning Commission member responsible for employment policies, stemming from his conviction that the status of women had undergone a significant decline and that mass poverty could not be attacked without expanding women's earning capacity.

Each working group consisted of 10-20 members drawn from researchers, fieldworkers, representatives of the government organizations charged with implementation, and usually a member of the Secretariat of the Planning Commission. Each group had to translate data, reports, and all materials used for deliberation into realistic and politically and socially acceptable recommendations for governmental action within a five-year timetable.

Adult Education

The objectives of the National Adult Education Program are to promote (a) literacy, (b) improvement of functionality, and (c) development of social awareness among the adult illiterate population, the majority of whom are in rural areas. Within this context, the working group on adult education programs for women recommends a special approach to women, because earlier policies to extend educational opportunities, both formal and informal, to the general population have failed to bridge the growing knowledge gap between the sexes. The reasons for this failure lie partly in discriminatory attitudes toward women and partly in the inadequate realization among planners and administrators of women's multiple roles in society. Both formal and informal education emphasizes the importance of household arts in women's training, ignoring the fact that women form a substantial and integral segment of the labor force in agriculture, industry, and services. Failure to strengthen women's productive and economic roles—particularly in rural areas—has also contributed to the gradual erosion of their economic opportunities, increased unemployment, and mass poverty. It has burdened them with exacting labor for inadequate returns, in addition to their housework and child care. The absence of leisure for either education or entertainment is common among poor women, both rural and urban.

To be meaningful to these overburdened women, an educational program must address itself first to increasing their earning power. Health, nutrition, child care, and family planning, currently featured in informal educational programs for women, can be included because they help to strengthen some of women's natural roles. But it is equally important to promote the understanding of women as individuals with basic rights to dignity and autonomy and not merely as instruments of production and reproduction. The NAEF should therefore seek to make women and men more conscious of their rights and responsibilities, of the laws governing women's status, and of the various manifest and concealed causes of women's oppression; assist women to achieve economic viability through acquisition of literacy and other necessary skills and resources; provide them with access to knowledge in such areas as health, child care, nutrition, and family planning; and assist them in forming their own groups for learning and productive activity and in strengthening their participation in the development process.

Most rural women have traditionally been integrally involved in the production and distribution of goods and services in agriculture, livestock rearing, dairy farming, fishing, and other tasks in the primary sector; in cottage or household industry of all types, and in traditional services (e.g., washing; retail distribution of various agricultural and industrial products in local markets). This employment, of course, is invariably in addition to the work women perform in caring for their families.

The social hierarchy of rural society has, however, imposed different types of constraints on different groups. While the economic roles of upper-class women are confined to processing and storage of agricultural products within the home and to the feeding and health care of the farm workers, the landless lower-class women engage in wage labor and suffer from overextended work days, poverty, malnutrition, and perpetual insecurity. Agriculture, household industry, and local services, which have traditionally formed their main sources of livelihood, are affected by the spread of modernization, causing displacement of many rural women from traditional occupations. The increasing gap in knowledge affects both categories of rural women, although they differ from each other in other characteristics.

Educational programs for rural women, therefore, must avoid harvesting and sowing seasons, provide recreational activities and child care arrangements, and adjust the timing of classes so that they do not interfere with other responsibilities. Skill training must include productive, managerial, or-

ganizational, and participatory skills and should be linked to similar programs being promoted by major development agencies seeking to affect agriculture and rural industrialization. Although literacy is indispensable, it should be preceded by promoting consciousness among the learners through discussions of issues that affect their lives. It is not necessary to discriminate between adult women and young girls, since rural society does not differentiate between different age groups in the same manner as in urban and upper-class families.

Rural Development

The report of the Working Group on Development of Village Level Organizations of Rural Women was published in June 1978. The working group's mandate included a review of the objectives and functions of the *mahila mandals*, or women's clubs, and of youth clubs created as part of the participatory infrastructure for rural development.

According to the working group's report, there was a suspicion among those interested in rural development that the activities and benefits of many of the 60,000 women's clubs were not reaching the rural poor, who are too busy coping with a hand-to-mouth existence. The best way to make full use of women's enormous potential is to help them achieve greater productivity, by improving their present skills and developing new ones for generating alternative and new sources of employment. In view of the growing body of evidence that men and women are not equal beneficiaries of development, the working group recommended that the government opt for concrete and systematic steps in favor of women. One of these steps is to help women come together as a group to improve their productivity or employment status and to work toward self-reliance.

The women's clubs have suffered from a lack of clear objectives and of attention to women's multiple roles within and outside the home; difficulties in identifying target groups and inability to reach the poorest rural areas; inadequate training in productive skills, resulting in the program's being regarded as nonproductive by both government agencies and local women; a multiplicity of programs and agencies, resulting in uncoordinated diffusion of resources, inadequate coverage, and absence of an integrated policy or approach; lack of properly qualified field staff and inadequate provision of supervisory staff; failure to mobilize the effective and sustained support of men and the absence of appropriate linkages with local institutions (e.g., the Vil-

lage Councils, or *Panchayats*), leading to lack of recognition or support from these bodies; and rigidity in program design and structure, leaving little room for local initiative or identification of needs.

The program has viewed rural women as a homogeneous group whose primary role is homemaking. It has emphasized the training of better-off women in home management, while the needy or weaker groups, particularly the workers, have been served only through feeding and similar programs. Craft classes, home science education (including training in child care, nutrition, and "home economics"—which sometimes extends to methods of preparing new food crops for family consumption), and nursery schools (*balwadis*) have been utilized mostly by those who have the time and the means to use the training.

The working group recommended a new program, which would be an integral part of the Sixth Five Year Plan strategy. The strategy emphasizes comprehensive area planning and organizations of the rural poor as essential for rural development. These organizations are intended to ensure the poor's access to development resources and to function as pressure lobbies. Village-level organizations of women that enable them to undertake viable projects and measures to strengthen their economic position would also raise their general status and draw them into roles of public leadership and into the mainstream of development. Specifically, the program would reduce under- and unemployment of rural women and provide them with a basis for participation and training in income-generating activities and in all developmental activities; promote self-reliance and collective action for the betterment of the home, family, and community; facilitate better management of resources; improve conditions for bearing and rearing children; and provide forums to enable women to participate freely and fully in decisions that affect their lives and the community.

A single type of women's organization cannot meet the needs of all groups because of existing inequalities and differences in the interests of rural women. The working group thus encouraged a flexible approach with room for several types of organizations—for example, cooperatives, trade unions, and registered societies—to grow in accordance with local needs.

Employment

The Planning Commission established the Working Group on Employment of Women to examine ways to increase full- and part-time employment of

women in the organized and unorganized sectors in both rural and urban areas; identify groups of unorganized self-employed women and suggest ways to strengthen their employment by resolving difficulties of marketing, availability of raw materials, and the like, and by eliminating middle men wherever possible; initiate viable pilot projects among groups of women to generate economic activity; and organize women into associations or unions.

The working group noted that the problem of women's employment is characterized by (a) their inability to reach for services and assistance programs offered by government and quasi-government institutions; (b) a lack of awareness among these institutions of the need to promote women's employment; (c) the tendency of economically powerful organizations to obtain financial and other assistance in the name of women but, once obtained, to divert it to other areas of investment; (d) the fact that technological modernization in several industries has not resulted in the protection and expansion of women's employment opportunities, nor in increasing women's skills, training opportunities, or upward mobility.

The Draft Sixth Five Year Plan has noted the existence of sectoral imbalances between men and women in available opportunities for regular employment, training, and promotion. The plan has also emphasized the need to expand employment opportunities for women and provide special programs to prepare them for such opportunities.

The Draft Plan identified four strategies for increasing employment of women—namely: (1) diversification and expansion of educational and training opportunities; (2) manpower budgeting of the female labor force in all comprehensive area-development plans and designing of appropriate programs to offer a variety of training and work opportunities; (3) promotion of self-employment and small-industry employment among women by ensuring them a reasonable share of credit and other inputs; and (4) a higher rate of investment in "women-preferred" industries and occupations.

The working group wholly endorsed the first three strategies. With regard to the last, however, they cautioned that a policy of increased investment in the so-called women-preferred industries would be a mixed blessing. A look at the nature of these jobs shows that they include generally unorganized activities in which women receive low wages. Working conditions are bad in such jobs as domestic services, sanitation, and such forest-based occupations as gathering fodder and firewood. The working group warned that expansion of these activities

would mean trapping more and more women into physically exhausting jobs, often at below subsistence-level wages. On the other hand, they recommended additional investment in such activities as manufacturing dairy products, canning and preserving fruits and vegetables, and rearing silk worms. Furthermore, the group's report sought an increase in the proportion of women to total employment in these industries. In dealing with the less desirable industries, however, it should be ensured that the proportion of women to total employment in these activities does not decline from the current levels, while steady efforts are made to improve wages, working conditions, and regulation of working hours.

In view of the lack of interest of such promotional organizations as credit institutions in the problems of women's development, the working group recommended that specialized agencies be established to identify, promote, and assist individual women and women's groups in undertaking income-generating activities. The specialized agencies would create a better understanding of women's economic and other needs among various government agencies so that the awareness gap between the aid givers and the potential beneficiaries may be gradually reduced.

It has long been assumed that development programs automatically benefit both men and women. Experience has revealed, however, that unless there is a special plan for women with specific earmarking of funds in sectoral plans, women will not benefit. The working group proposed that utilization of funds earmarked for women's programs be strictly monitored. To achieve this, the government must create adequate and properly trained machinery and cadres in each of its program areas. It must adopt a well-defined policy for women's development, clearly stating the economic and social objectives so that they receive continuous attention and support.

Suggested programs and approaches must take into account the employment issues and training needs relevant to the situation of rural women. For example, institutional training may prove inaccessible to the majority of rural women, because of the illiteracy and relative immobility caused by social and economic constraints. Training programs for rural women may have to be provided by mobile units sponsored by specialized agencies (Small-scale Industries Service Institutes, Village Industries Commissions, Agricultural Extension Departments, and others) or by other training units located nearby (Industrial Training Institutes, District Industries Centers, Farmers Training Centers, among others) after identifying suitable trades on the basis of local skills,

viability, availability of markets and raw materials, investment priorities, and the like. Such agencies should be associated with the project for a period of time to provide needed assistance in follow-up training, supervision, and monitoring. This will call for some reorientation of the staff of existing training institutions to make them responsive to local employment needs, so that new trades can be developed. In order to ensure continuity in training, rural women should be trained both as organizers and as instructors in locally viable trades.

Since the agricultural sector employs the largest number of rural women, the working group considered it necessary to ensure proper training facilities for such women to improve their skills and demand a better wage, as well as to improve their productive capacity. The existing agencies engaged in the training of farmers should be properly equipped to assume the training needs of rural women in agricultural and allied sectors.

To prevent displacement of women's labor through the introduction of new technology in all sectors of the economy, planners must change the existing structure of fiscal law, which tends to support capital-intensive rather than labor-intensive technology. Capital-intensive technology also tends to increase demand on such scarce national resources as power. The working group therefore recommended special studies to examine the employment impact and relative cost efficiency of alternative technologies in both the agricultural and the industrial sectors.

The working group has observed that expansion of employment and strengthening women's decision-making roles would also contribute to the adoption of the small-family norm and improvement of women's status, already accepted as national objectives.

Prospects for Implementation

The recommendations of the three working groups were delivered in 1978. The Planning Commission's review of the Working Group on Employment has been generally favorable, especially to the recommendation that a reasonable share of the funds in each sector (e.g., agriculture, industry, social services, banking) be used to develop programs to expand women's development and access to employment. The recommendations were endorsed strongly by the National Conference on Women and Development, sponsored by the government of India in 1979.

The Ministry of Education has published the recommendations of the Working Group on Adult Education. The recommendations of the Working Group on Village Level Organizations are still under discussion.

The success of any of these recommendations will depend upon (a) adequate communication of the thrust of the policies through all levels of government; (b) debate and discussion on a national scale, including informing women of the existence of beneficial development programs; and (c) the capacity of the governmental machinery to train large numbers of functionaries with the substantive skills necessary

to render services to women, the sensitivity to cooperate with them, and an acceptance of the ideology of women's participation.

This sensitive acknowledgment of women's issues by top policymakers in India is in part attributable to research demonstrating the linkages between mass poverty, unemployment, and rural inequality, on the one hand, and the condition of women, on the other, as well as to the constitutional commitment to equality of opportunity and status for women. Successful implementation, however, will depend on organized pressure from women at all levels of society. Such organized pressure is still highly inadequate.

Part II

Approaches to Learning: A Sharing of Experience

Introduction

Judith Bruce

Tools for learning about rural women have been lacking. Many of the methodologies now in use were developed to describe the male experience and role in rural culture. Women's role and experience when reported on was often heavily filtered through both outside and male views of them. Normative views of women and lack of direct contact with them have generated distorted information on their contribution in national-level statistics and in anthropological literature.

The task at hand is to develop, quickly, a usable and factual information base on which to plan rural development programs that reach and benefit women. "Approaches to Learning: A Sharing of Experience," the second part of this special issue of *Studies in Family Planning*, is a forum for thoughts, methodologies, and learning tools in process. Those studying and working with women have few opportunities to learn from one another; the production and presentation of "papers" is sometimes too time-consuming and formal a means of communication. Further, it often excludes both as contributors and as listeners those deeply involved in development work. Thus we have asked a variety of people who have undertaken research on and work with women to share their experience in several areas: How does one gain access to rural women? What do rural women know and how do they report on it? What kind of work do they do and how can it be measured? How do they perceive themselves and their culture?

Useful information on rural women and its proper interpretation acknowledges at the outset that rural women are a heterogeneous group. Most of the

contributions here discuss rural women in terms of (1) past and present roles—the generation they belong to, (2) class, (3) age, (4) participation in subsistence or market-oriented agriculture, and (5) participation in on- or off-farm employment. Making such distinctions is not only essential to competent information gathering, but is the only basis on which programs and policies can be planned.

The specific ideas on conducting an interview, the questions one might ask, and the methodological techniques described are provided for contemplation, modification, and, where appropriate, use by those doing development work (research or action). Which of these will be useful will depend very much upon the setting in which work is being undertaken. One must consider the socioeconomic conditions, the past history of development efforts, the skills available, the purpose of the work, and the budget. The contributions here cover a wide range of settings and possibilities, many of them low-cost.

We have asked the contributors to feel free to write as if to colleagues and friends. We have asked for and gotten the openness and, at times, the tentativeness that characterize the learning process. Many contributors describe a limitation in their viewpoint or a problem that initially interfered with getting full information and the adjustment that was made to overcome the problem.

Most contributions cover more than one of the issues listed above. Although there are multiple contributions for some countries, the problem being studied is the real focus of each article. Readers are not expected to read this section in its entirety, but to be selective, using the following outline:

Authors	Site of Report	Title and Subject Matter
Group I: Methodological Issues		
Pudjiwati Sajogyo Endang L. Hastuti Syarifah Surkati Winati Wigna Krisnawati Suryanata Benjamin White	Indonesia	"Studying Rural Women in West Java" Developing information on labor utilization patterns, household income, technologies utilization, decision making, and economic authority. Market oriented and home production.
Carmen Diana Deere Magdalena León de Leal	Colombia and Peru	"Measuring Rural Women's Work and Class Position" Sexual division of labor in peasant households. Market oriented and home production.
Nancy Lee Peluso	Indonesia	"Collecting Data on Women's Employment in Rural Java" Off-farm employment.
Group II: Time Use and Project Planning		
Brinda Gael McSweeney	Upper Volta	"Collection and Analysis of Data on Rural Women's Time Use" Framework and methodology. Application of findings.
Vivian Havens Gillespie	Nicaragua	"Rural Women's Time Use" Survey of time use of three types of women. Off-farm employment and women's roles in marketing. Benefits of time use methodology.
Group III: Instruments for Learning		
Audrey Chapman Smock	Kenya	"Measuring Rural Women's Economic Roles and Contributions in Kenya" The Division of Labour Module of the Central Bureau of Statistics. A national sample survey instrument of Statistics. A national sample survey instrument.
Nadia H. Youssef Coralie Turbitt	Indonesia	"Learning about Women through Household Surveys: An Experimental Module" An experimental module for application in an annual survey of women's economic activities.
Michele Goldzieher Shedlin	Mexico	"Assessment of Body Concepts and Beliefs Regarding Reproductive Physiology" Women's perceptions of their bodies as determined by their culture.
Taherunnessa Abdullah Sondra Zeidenstein	Bangladesh	"Project-Oriented Research on Aspects of Women's Knowledge and Experience" Question sets used to understand rural women's culture and develop information for rural action projects that reach women.
Achola Pala Okeyo	Africa	"Research Priorities: Women in Africa" A set of hypotheses about women's access to resources, experience of development, and culture, to guide policy research.

Authors	Site of Report	Title and Subject Matter
Group IV: What Rural Women Know		
Marsha Safai	Iran	"Circumventing Problems of Accessibility to Rural Muslim Women" Measuring the contribution to agricultural production using interviews.
Gudrun Martius-von Harder	Bangladesh	"How and What Rural Women Know: Experiences in Bangladesh" Rural women's terms of description. Demands made by production and agriculture on women's labor.
Joan P. Mencher K. Saradamoni Janaki Panicker	India	"Women in Rice Cultivation: Some Research Tools" Participatory strategies for data collection.
Hanna Papanek	Indonesia	"Research on Women by Women: Interviewer Selection and Training in Indonesia" Interviewer selection and training. Experiences of the research team.
Group V: The Voice of Rural Women		
Leela Gulati	India	"Profile of a Female Agricultural Laborer" Husband-wife differences in income-earning opportunities and patterns of spending.
Mary Elmendorf	Mexico	"Anita: A Mayan Peasant Woman Copes" Family and economic roles of women in a village seeking change.

Group I: Methodological Issues

Studying Rural Women in West Java

Pudjiwati Sajogyo, Endang L. Hastuti,
Syarifah Surkati, Winati Wigna,
Krisnawati Suryanata, and Benjamin White

This note describes some methods used and some problems encountered in a research project on "Rural Household Economies and the Role of Women," which has been under way since mid-1977. The main aim of this research is to describe the problems of rural women in the household, in the labor market, and in society and to achieve a better understanding of the causes of these problems, as a contribution to identifying policies and programs at the national, regional, and local level that can remove some of the barriers to their solution. We describe the main types of information the study hopes to provide, various initial assumptions that resulted in the selection of a combination of research methods, some of our experiences in the application of these methods, and finally some of our hopes and expectations regarding the eventual utilization of research results. After a year of data collection we are now in the midst of data analysis and preparation of the first draft of the main research report. These final stages of the research process are an appropriate time for reflection on both our successes and our failures in achieving our objectives, and we hope our experiences can be of use to those contemplating similar research in the future.

Types of Information Sought

The main types of information our research hopes to provide include:

1. The labor-utilization patterns of rural women within the household's division of labor, including both work that directly provides income in cash or kind and such activities as housework, child care, and the like, which (for want of a better term) we call "home production."
2. Household income, consumption, and expenditure patterns in sufficient detail to relate them to labor inputs and the household's control of land and other resources.
3. Types of technology used in both income-earning and home production work.
4. The role of women in decision making in the household and in society, seen in the context of the division of power and authority between the sexes and between classes.
5. The nature and frequency of women's and other household members' involvement in various formal and informal institutions and relationships in

society. These include interhousehold relationships involving exchanges of goods and labor; group and community involvements, whether ceremonial and religious or social and economic; and interaction with the many village-level government institutions, programs, and services in rural Java.

6. The aspirations of rural women and the barriers to their achievement.

Assumptions Underlying the Research Design

Our study covers a number of topics, but its main focus is the desire for a better understanding of women's work. In economies where the household is the main unit of production, consumption, reproduction, and socioeconomic interaction, women's activities cannot be understood in isolation but require analysis of the division of labor among all household members. We therefore built our research design around labor-utilization or time-allocation analysis, which involves recording all activities performed by respondents within a given reference period based on respondents' recall, with repeated interviews among the same sample of households at regular periods throughout a complete 12-month agricultural cycle. It was clear to us that the accuracy of the data depends greatly on the length of reference period used. In any research of this kind, a compromise has to be made between the desire to achieve representativeness (requiring large sample sizes, long reference periods, and frequent observations), the demands for accuracy in the data (which is better achieved with small samples, short reference periods, and the careful building of close relations between enumerators and respondents), and the researchers' limitations on available time, personnel, and research funds. It was already clear, however, that if we were to obtain a reasonably accurate picture of the time devoted to home production work, the research design should incorporate use of short reference periods, which do not strain the respondents' memory.¹

We also assumed that rural women could not be treated as a homogeneous group and that the study of differences in their activities and problems (particularly those based on class, age, and education)

was as important as the study of common characteristics. It was thus necessary to incorporate sufficient variation (particularly in socioeconomic status) in the sample to permit analysis of these differences. However, numerous tables showing statistical patterns of time allocation, income sources, expenditures, interhousehold interactions, and community involvement are of little use without the kinds of information that provide some understanding of why these patterns occur. This information must be derived from the so-called qualitative techniques (although they may also involve counting) of extended interviews, case studies, observation, casual conversations, and personal involvement in the community. If questionnaires and quantitative data provide the "bones" in research of this kind, qualitative participant-observation methods provide the "flesh."

The desire to combine quantitative and qualitative methods, and to document not only work and incomes but also interactions and relationships, led to the choice of a community-study approach rather than a more widely scattered sample of respondents covering a whole region. We selected two villages in West Java in which some of us had already done research on other topics.

One problem that became more clearly defined as fieldwork and discussions continued is to distinguish between norm and reality. Researchers, respondents, and the readers of research reports are all influenced by their preconceptions and values concerning both the actual roles of women and the roles considered appropriate by them or for them. Norms influence the perceptions of researchers and respondents not only about what ought to occur, but also about what actually does occur. To give some simple examples, questions about a "normal" day's work or diet, the "general" patterns of decision making in the respondent's household, or his/her relations with other households or institutions may yield responses far removed from reality, even when the researcher has developed a close relationship of trust with the respondent. Our awareness of this problem led us to concentrate as much as possible on recent, specific events rather than on general questions on the same topics: not, "What do you normally eat?," "How do you usually spend the day?," "Who usually makes decisions about x, y, and z?," "Do you attend village meetings?," "How did you decide how much fertilizer to buy and whether your child should continue school?," but rather, "What did you eat today?," "What did you do today?," "Did you and your husband discuss it?," "Did you agree?," "Whose view eventually prevailed?," "Did you attend any village meetings *last month*?," and so on.

¹For an introduction to the method of village-level labor-utilization research, see John Connell and Michael Lipton, *Assessing Village Labour Situations in Developing Countries* (New Delhi: Oxford University Press, 1977).

Research Methods Used

Since we had already conducted other research in the two villages (which are about 1½ and 6 hours' distance from Bogor), a basic household census and socioeconomic survey were already available. Samples of 60 households in each village were selected using the landholding data from these earlier surveys to provide approximately equal groups of households in each of three landholding classes: landless/near landless, small farmers, and medium/large farmers.²

For one year (November 1977–October 1978) the four members of the research team lived in the two villages for ten days each month. During these ten days all the sample households were interviewed, with the help of local enumerators, using a long questionnaire divided into four parts. The first part covers the activities of every household member age 6 and above during two reference periods: (1) the 24 hours preceding the interview, for which all work and non-work activities and the time spent in each are recorded sequentially, thus providing the complete "story" of a single day's activity, and (2) the entire month since the last interview, with questions restricted to work directly productive of income in cash and kind and to a few other activities, such as communal and exchange labor and school attendance. The second part records for each household the sources and amounts of income and items (and their quantities and value) consumed or purchased by the household, again using both the 24-hour and 30-day reference periods; this is the longest and most difficult part of the interview. A third part records (using the 30-day reference period only, since equivalent information is covered in the 24-hour time-allocation questions) the involvement of each individual in various kinds of interhousehold/community interactions: communal/reciprocal labor, attendance and contributions at neighbors'/relatives' ceremonies, visits, recreation, meetings of various groups/associations. We include in this section some other information on health and agricultural problems and the efforts made to deal with them. The fourth part of the interview concerns decision making and uses a different approach. No questionnaire is used, but the

enumerators and research team use an interview guide, which simply lists various areas of socioeconomic life both inside and outside the household (divided into eight main categories: production, consumption, marketing, socialization, decisions on family size, education, relations between households, and political participation). We wish to know how decisions are made in all these areas and particularly how authority is divided between women and men. The enumerators and researchers do not ask all these questions at the same time or in the same way, but attempt throughout the year to construct a cumulative picture of decision-making patterns. They seek opportunities for discussion with men and women separately and with husband and wife together, asking how decisions are generally made and referring to concrete examples of recent events. The enumerators and researchers have discussed their results and impressions throughout the year, with the hope that the influence of norms can be progressively reduced to provide the closest possible picture of how decisions are actually made.

One unusual aspect of this research is the use of the two different reference periods. The 24-hour recall provides an acceptable level of detail on the kinds of activities respondents cannot be expected to remember over an entire month, particularly those that are irregular, of short duration, or frequently interrupted by other activities. This applies especially to work in and around the house (handicrafts, repair of tools, splitting firewood, and all home production work). The 30-day recall provides a picture of the whole month's activities, income, and expenditures, although at the cost of much detail. This combination also allows us to make a methodological contribution by comparing results of these two methods with the same respondents and enumerators, to allow estimation of the levels of error involved when the longer reference period is used.

The interviews last between one and two hours, depending mainly on household size and the diversity of activities and income sources. The interview, although long and tedious, is fairly straightforward and has been increasingly left to the local enumerators, with the research team checking and discussing each questionnaire on the following day with the enumerators. The enumerators are mostly women (9 out of 11), from the middle and upper-middle (but not the upper, "power-elite") class; 7 are school teachers, 1 a social worker, 1 a student, and 2 are housewives. They conduct one or two interviews daily during the ten-day period, and each is responsible for the same group of households every month

²The stratification of households was subsequently revised, for two reasons. First, we have had to make many corrections in the original landholding data. Second, a number of landless/near-landless households (particularly in the village closer to Bogor) have access to pensions, salaries, remittances, and other incomes much larger than their landholdings would suggest. Our new criteria combine landholdings and levels of nonagricultural income.

(10–12 households for each enumerator). Interviews generally take place during the evening when all household members are usually home. They are often conducted in the kitchen so as not to interrupt respondents in their work, and the atmosphere is generally informal. When a household member is absent, the others can often provide the information on his/her activities, although it is sometimes necessary to arrange a second visit.

During their ten days in the village each month, the researchers divide their time among several activities: editing and discussing the enumerators' work (this requires considerable time, even though each researcher has to edit only three or four interviews each day); spending several hours each day in informal, extended interviews, participant observation of daily life and various special events, collecting basic life histories of selected respondents, and writing daily fieldnotes based on these observations; and occasionally joining the enumerators in their regular interviews. On return to Bogor these fieldnotes are typed and copies distributed to members of the research team.

The system of repeated visits to the same sample allows the occasional addition of specific questions that do not need to be asked more than once; for example, short questionnaires on marital/fertility history, division of land and other assets between male and female heirs, and various details of household technology.

Methods of Fieldwork, Analysis, and Presentation

Anyone contemplating small-scale research of the kind we have described should remember that the amount of work and expense involved is no less than that required by many conventional surveys with much larger samples. We have spent one year studying only 120 households in two villages, but the amount of data involved is enormous. If each lengthy household interview were divided into sections—1 for the household-level information on income and consumption and 4 per household (on average) for the individual-level data—each subdivided again into daily and monthly recall, and the whole process performed 12 times during the year, each of these sections is equivalent in scale to many conventional “one-shot” questionnaires, and the total effort is therefore comparable to a conventional survey of

about 15,500 ($120 \times 5 \times 2 \times 12$) respondents.³ To collect and process this small-scale information, 4 researchers, 11 enumerators, 1 programmer, and 8 data transferrers have worked mostly full time for over a year. It is therefore necessary to be aware of the heavy demands on time and resources and not to be overambitious. A small-scale approach does not reduce time or expense; its main advantage is rather to allow greater detail and reliability in data collection and the opportunity to place this material in its societal context by incorporating more anthropological, participant-observation, and community-study methods.

Reliability, of course, is not guaranteed by working on a small scale. As in all research, the reality we are looking for (events, attributes, attitudes, or relationships) is not directly accessible to us, but (as the term “data” implies) is “given” to us, never perfectly, by the respondent. Reliability thus depends entirely on the nature of the relationship between researcher and respondent, and on whether that relationship assists or deters respondents in reporting the experiences to which they alone have direct access. In our research, a three-way relationship between researchers, local enumerators, and respondents is involved. Our enumerators were conscientious and reliable and became personally interested in the research. The fact that they were local residents, interviewing neighbors with whom they also interact in daily life, was in many respects an advantage. Any unusual response could more easily be spotted, questioned, and explained, and respondents were also more willing to tell enumerators than the researchers about feelings of suspicion or boredom occasioned by our repeated monthly questions. We tried to be completely open when responding to questions about the purpose of the study; the enumerators were invited to our Bogor office for a weekend to see what happens to the data they collect. This has helped to increase their interest and that of the respondents, to whom they later recounted their experiences. Respondents were not given any formal recompense for our regular intrusions into their daily lives; the researchers on several occasions brought small personal gifts: photographs of each household, seeds for the garden, soap, tea, cigarettes, exercise books for the children, and so on.

Even with the best intentions among respon-

³Paradoxically, if we had carried out a one-shot sample survey of 15,500 respondents scattered throughout West Java (or Indonesia), our research would probably have appeared far more impressive and convincing to policymakers, even though we do not think such a study would have provided them with much reliable or relevant information.

dents and researchers and the best possible personal relationships between them, reliability remains an elusive goal. This applies equally to the straightforward reporting of uncontroversial events and to the more sensitive areas of decision making and authority. This leaves the researcher with serious problems of interpretation, as the following examples may indicate.

Our trial analysis of one month's data for time allocation found that estimates of time spent in income-producing activity (excluding home production) are generally between 30 percent and 60 percent higher when based on 24-hour rather than 30-day recall.¹ We have no reason to assume there were any deliberate omissions in the 30-day recall or deliberate additions in the 24-hour recall. We are inclined to believe the 24-hour recall comes closer to reality, but we cannot say whether either of these conflicting results is "accurate." The two methods produce very different pictures of labor utilization; we will present both in our reports, with the various reasons for preferring one over the other, but what policymaker wants to be bothered with such details? On the other hand, how many other reports of labor-utilization surveys, carried out with less care and using a single method, have reported their data as "facts," without any warning of their probable unreliability?²

The question of men's and women's decision-making and authority patterns in the household and in society is clearly more complex, since, like all matters concerning the allocation of power and authority, it is likely to be sensitive, to involve conflicts, and to be surrounded by private and public norms. These norms may influence informants' perceptions and responses concerning not only what ought to occur, but also what does occur. Responses to apparently direct questions about how decisions are made may reflect a number of "levels of conception"³—the prevailing expressed norms, the respondent's perception of the interviewer's norms, or the respondent's privately held norms of appropriate behavior—or they may express precisely what we wish to know: the respondent's account, as accurate as possible, of what has actually occurred in his/her experience. Our approach was intended to allow us to

gradually peel away the various layers of "norms" in the search for actual patterns of decision making and authority in the sample households (without discarding the layers of "norms" since we are also interested in them and in their influence on behavior).

Our experience with this approach has been mixed. On the one hand, we feel that in many cases, through informal discussions with husband and wife both separately and together and through hearing of and directly observing specific events we have achieved a realistic picture, although it is unavoidably an impressionistic one. On the other hand, in many other cases we feel that we still do not really know how decisions are made. We have, for all cases, information in the form: "According to Mrs. Kartika (or Mr. and Mrs. Kartika), decisions about production expenditures are made jointly (or, are made by Mr. Kartika alone, made jointly but mainly by Mr. Kartika, and so on)." However, this information is often inconsistent with various other less systematic data from or about the same individuals, which we can use to gradually derive conclusions but which is not available for the whole sample or in the same detail for all of them. Some examples from our fieldnotes may help to illustrate the problem.⁴ Readers who have not attempted this kind of research may want to consider how they would interpret the following scattered items of "data," all from or about our female respondents:

1. "I have three regular male laborers for hoeing and six regular women for transplanting. . . . I give them priority in harvesting before hiring others. They often borrow money and pay me back with labor. Also, I often ask them to help around the house, fixing a leak in the roof, cooking when there are guests, and doing other work. . . ."

"After the harvest was destroyed by plant-hoppers, I owed \$25 to the Bimas [agricultural credit] program, but I've paid more than half of it back in installments. I think the Bimas program should be continued, but what to do when the harvest fails?"

¹The phrase is from Robert R. Jay, *Javanese Villagers: Social Relations in Medokuto* (Cambridge, Mass.: MIT Press, 1969), pp. 26-28. He illustrates the problem by describing the three types of responses he received to the seemingly simple inquiry: "In this village, whom does a host invite to a *slametan* [ceremonial meal]?" The various responses (depending on who was present at the interview, and his own relations with the informant) differed not only from one another, but also from his own observations at the *slametans* that he was able to attend.

²We have intentionally selected examples that contrast sharply with the conventional picture of rural women's roles; in many of our other examples, women and men conform more closely to the norm both in attitude and behavior. The point is merely that it is difficult to obtain a systematic picture of these variations when the available information is incomplete.

³The discrepancies are different for each sex and class in each village, although in all cases the 24-hour estimates are higher. In the 12 groups the discrepancies range from 12 to 132 percent, and lie in the 30-60 percent range for 7 groups. After analysis of the entire year's data, we will report in more detail on these differences, including identification of the types of activities in which the greatest discrepancies occur.

⁴See B. White, "Population, involution and employment in rural Java," *Development and Change* 7 (1976): 267-290; and G. Hart, *Labor Allocation Strategies in Rural Javanese Households* (Ph.D. dissertation, Cornell University, 1978), Appendix A.

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"I don't dare to borrow any more, when I still have a debt."

2. *"How many people do you work for each planting season?"*

"Fifteen. But I'm not happy with this life of farm work; it's too insecure and the agricultural prices and wages are getting lower compared with the price of things we buy from the towns. If there was a factory here, I'd work there."

3. *"I got married a lot, ten times altogether. . . . My husbands told me they didn't want me to work as a trader, but I didn't listen. I built this house two years ago, sold some land to pay for it, it was all my own decision."*

4. *"When you work at Sanip's house, how much do you get paid?"*

"Ah, that Sanip has no kindness; he thinks we're no different from animals. We just get fed each day, nothing else."

5. *"I borrowed \$5 for trading capital, now it's increased to \$9. I also borrowed \$160 from our hamlet cooperative to buy some land. Just recently I built a brick house, which cost me \$730. So now I have to find \$13 every month to pay my debts. Women are more persevering than men in such things."*

6. *"I was married at 19, pregnant three months later; the second child came three years after that. Since then I've prevented any more; long before the Family Planning Program I was going to the local midwife for massage whenever my menstruation was late. Then I took the pill and tried an IUD, but they made me ill. I used many local medicines, too. My husband said he'd get a vasectomy, but the doctor wouldn't do it because he was too young and has only two children. So I think I'll ask for the operation; I'll tell him my health is too bad to have any more children."*

7. *"My main worry now is the paddy, what to do about all these pests and diseases. I'm glad we have the hamlet cooperative. I got a loan to buy a sheep and pay for my cultivation costs. The cooperative's paddy store started with some rice, which we women saved every day in small amounts. Now there are six tons in store, and \$290 in cash that we can borrow. I'm not a member, my husband is."*

8. Bu Leah got very angry when she found that the paddy seed she had been sold was not IR 36 but IR 32 [two different high-yielding varieties]. She knew only when it began to ripen much later than the rest. She told everyone she met that she'd been cheated by [ding] [the seller]: "That's what the rich do; they don't help poor people, just cheat them."

9. Bu Ninah made improvements to the house with no help from her husband. He wasn't involved at all in designing the windows and door, buying the materials, finding the money to pay the craftsmen. He just sat in the house idling, not even helping her oversee the workers.

10. *"I've gone to the village secretary and asked him to pass a request to the village headman that women should be encouraged to attend village meetings and to speak their view. The secretary said nothing, but didn't pass on my request."*

Each of these scraps of information and many others like them tell us something about the roles of individual women in decision making, managing a farm, recruiting and organizing laborers, entering formal and informal credit relations, choosing an occupation, family planning, and making major decisions about investment. They also show individual women holding and expressing clear views about various government programs, class relations, responsiveness of village officials, and so on. If we could provide systematic evidence that significant numbers of rural women are greatly involved in decisions relating to production, investment, and household and community welfare, it would have considerable implications for many government programs, which treat such matters as men's affairs. The problem is that, even with our small sample of 120 households, this concrete information has not been forthcoming in many cases. We feel (but cannot demonstrate) that many responses still reflect norms, since these responses are often quite inconsistent with more concrete data in the cases where both are available. How, then, do we present such data? Most readers and particularly policymakers want "proof" and "hard facts," not a few selected cases, however informative they may be. In preparing our final report we have not yet discovered an appropriate way of presenting these data. Since the report is to be directed mainly to policymakers, its results and conclusions should be as clear and unambiguous as possible. On the other hand, to satisfy our own standards as researchers, we wish to describe honestly the problems in analyzing and interpreting the different types of information we have collected, at the same time indicating our personal feelings based on long experience in the villages about what we sense to be the correct interpretation.

Some months ago, before fieldwork was completed, we invited representatives of various government agencies to a small seminar at which we presented some preliminary impressions and conclusions of our research and what we saw to be their

policy implications. This was an extremely useful experience.⁸ By formulating and discussing our preliminary conclusions, we identified many areas in which we lacked necessary information, while there was still the opportunity to collect it or to modify our plans for analysis. Discussions with government officials made us more aware of the limited range of policy alternatives available to tackle the problems we set before them, and in general gave us a more pes-

⁸Not least because it stimulated interest in our research. Shortly after this seminar, the newly appointed Junior Minister for Women's Affairs agreed to provide funds for a national seminar on women in rural development, to be based on presentation and discussion of our research and its implications for both researchers and policymakers, and planned for early 1980.

mistic view of the potential impact of research on government policies directed toward rural women.

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Measuring Rural Women's Work and Class Position

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and

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This note considers some of the methodological problems of measuring rural women's economic participation by sample survey. It draws upon our experience in researching the economic roles of rural women in a national-level study in Colombia and in a regional-level study in Peru.¹ The specific objective of the sample surveys was to quantify the existing sexual division of labor among the peasantry. The unit of analysis was the rural household, and the focus of measurement was the division of labor by sex in such activities as daily maintenance, household production, and incoming-generating activities pursued outside the household.

The theoretical framework upon which both

studies were based sought to integrate the analysis of the sexual division of labor in rural areas with the broader analysis of agrarian change. Specifically, the studies sought to isolate the effect of the process of capitalist development in rural areas on peasant households and rural women's work. We conceptualize capitalist development as the development of a wage labor force and of capitalist units of production that rely on the purchase of wage labor. Our key construct for identifying this process is the social differentiation of the peasantry, through which peasant households become either proletarian, selling their labor power, or petty capitalist, employing wage labor in the productive process. The basis for social differentiation is the unequal access to the means of production among direct producers in rural areas.

Cross-sectional quantitative analysis is required to relate the process of rural class formation, based on differing access to the means of production among peasant households, to differences in the sexual division of labor in productive and reproductive activities. The quantification of the sexual division of labor at a given moment in time also allows historical analysis of different socioeconomic processes of change to inform regional differences in women's

¹The theoretical and methodological designs of the two projects are elaborated in the following: Magdalena León de Leal and Carmen Diana Deere, "Estudio de la mujer rural y el desarrollo del capitalismo en el agro Colombiano," *Demografía y Economía* 12, no. 1 (1978); Magdalena León de Leal and Carmen Diana Deere, "Planteamientos teóricos y metodológicos para el estudio de la mujer rural y el proceso de desarrollo del capitalismo agrario," in *Informe Final de la Investigación "Acerca del trabajo de la mujer en el sector rural Colombiano,"* ed. Magdalena León de Leal (Bogotá: ACEP, forthcoming, 1980); and Carmen Diana Deere, "The development of capitalism in agriculture and the division of labor by sex: A study of the northern Peruvian Sierra," Ph.D. thesis, Department of Agricultural and Resource Economics, University of California, Berkeley, 1978.

work. In addition, the analysis of different forms of land tenure and labor market structures and of the varying options that rural men and women face can be related to differences in the sexual division of labor and in family reproduction strategies, exhibited in family structure and composition as well as fertility.

In the following, we relate some of the problems that we experienced in the elaboration of the sample survey questionnaire, and in the design of the sample survey itself.²

The Survey Questionnaire

We consider it imperative that the design of a sample survey questionnaire be based upon prior fieldwork in the designated regions. This is so not only because of possible sociocultural differences among regions, but also because the concrete study of different historical processes should amend and enrich the hypotheses that guide the measurement effort. In the Peruvian study, the questionnaire was formulated after nine months of participant observation and open-ended interviews in peasant communities and agrarian enterprises. In the Colombian study, the design of the survey questionnaire was undertaken after a one-year qualitative research effort. This consisted of three months of intensive fieldwork in each of four regions of the country by teams of two researchers.³ The fieldwork was followed by detailed historical analysis of the regions based on secondary sources. Finally, the analysis of the primary and secondary data resulted in the preparation of regional monographs on the historical process of agrarian change and of changes in the sexual division of labor. This prior research effort provided the basis for the design of the quantitative research stage.

An example of the importance of prior fieldwork and analysis in informing both the hypotheses under study and the most appropriate formulation of the variables to be measured is provided by the concep-

tualization of peasant household activity. The peasant household may be conceptualized as a unit of production and reproduction; yet the household and the unit of direct production may not be coterminous. In the Peruvian case, the questionnaire reflected a conceptualization of the peasant household as an undifferentiated unit of direct production and of reproduction of labor power. To distinguish between the kinds of activities carried out by various household members, the following delineation was used: household maintenance activities required for daily reproduction; activities geared toward direct production of use or exchange values (agricultural production, agricultural processing and transformation, animal raising, artisan production); and activities carried out external to the household, detailed according to the relations of production or distribution (labor market participation, reciprocal labor exchange, and petty trade). In the design of the Colombian questionnaire, we found it appropriate to conceptualize the household as the particular arena of domestic maintenance activities, separate from the unit of economic exploitation, the farm. This is partly due to the forms of usufruct of land that have developed historically, so that the household itself is sometimes spatially separated from the unit of economic exploitation. Further, there was not necessarily a direct correspondence between the household as a unit of reproduction of labor power and the composition of the labor force that carries out the productive activities. The different forms and organization of production must be reflected in the design of the questionnaire if data are to be captured accurately. In the Colombian case, the household questionnaire distinguished between three types of activities: activities carried out physically within the household (domestic chores, artisan production, country stores); activities associated with the unit of economic exploitation (agricultural work, animal raising, product transformation and marketing); and activities carried out spatially separate from the household (wage work, labor exchange, and so on). A separate questionnaire on agricultural production was then filled out for each economic unit pertaining to the household.

A second problem in the design of the questionnaire concerns the actual measurement of participation of household members in the myriad of activities. Participation can be measured in terms of time actually spent in an activity, of who generally is charged with the activity, or of the average intensity of participation. The most accurate measurement of participation is one based on the actual time dedicated to the activity. Obviously, to be most accurate,

²Many of the points in the following section that refer to the Colombia project are elaborated in Leon de Leal and Deere, "Planteamientos . . ." cited in note 1 and Carmen Diana Deere, Jane Humphries, and Magdalena Leon de Leal, "Class and historical analysis for the study of women and economic change" (Geneva: Role of Women and Demographic Change Research Program, International Labour Office, mimeo, March 1979).

³In the initial stage of fieldwork in the Colombia project, open-ended questionnaires were utilized in the interviews carried out with peasant households and with rural employers and wage workers. The open-ended questionnaires for peasant households were revised and reformulated considerably in the construction of the closed questionnaires for the sample survey.

this measure would require a day-by-day accounting of the tasks in which each member of the family participated and the amount of time required by each, usually referred to as the time-allocation method. In a sample survey to be carried out only once, the time dedicated by various household members to the series of activities is necessarily based on recall.

The recall method suffers from various handicaps. First, it requires the respondent to construct an average measure of the time usually dedicated to the activity. Here the reliability of the measure depends on whether time is culturally relevant. Second, the accuracy of the measure greatly depends on the time unit of the analysis. The average amount of time spent on daily activities is much more reliably measured than the average amount of time spent on activities that are engaged in only sporadically or seasonally. Measurement of the average amount of time spent in agricultural work is particularly difficult given the seasonality of the activity and the varying intensity of participation at different times of the year.

In the Peruvian questionnaire, two forms of time allocation were measured by recall. First, household members were asked the average amount of time spent on a detailed listing of activities, based on the relevant time frame (whether the activities are usually carried out on a daily, weekly, or monthly basis). Second, a detailed participation schematic was constructed for agricultural work. This schematic required that the informant recall the actual persons who participated in each agricultural task and the number of days so employed. Given the extremely small size of peasants' plots in the area, and the fact that agricultural production absorbs a minimal amount of labor, the recall method based on who actually participated in each activity was successful. This method revealed that women were active agricultural participants, whereas the first form of measurement suggested that women dedicated a minimal amount of time on average to agricultural pursuits during the year.¹

The success of the recall method for measuring either actual participation in terms of labor days or

the average amount of time dedicated to an activity greatly depends on the researcher's familiarity with the average amount of time required by the various tasks; that is, it largely depends upon previous participant observation. We do not recommend measurement by recall in questionnaires to be executed by unspecialized interviewers; rather, we suggest that this method is most successful when the principal researcher is carrying out the interviews.

An alternative measurement of participation is the respondent's subjective evaluation of the frequency or intensity of participation in a given activity. Each household member is asked whether he or she always, usually, or never participates in a given activity (after it is determined whether the activity is applicable to the household). In the Colombian study this measurement of participation was quite successful for both household maintenance activities and agricultural work. This form of questioning is readily comprehended by the respondent and is easily administered by an interviewer with minimal training. It has the added advantage of capturing the participation of family members who "help out" in the activity, although they are not principally charged with carrying it out.

While the focus of the questionnaire is on the sexual division of labor, it necessarily must be related to another series of socioeconomic or cultural variables for analysis. The selection of these variables should be derived from the hypotheses guiding the study; yet considerable attention must be given to narrowing the range of inquiry. The time constraint on the length of the questionnaire requires that certain choices be made in terms of the complementary variables to be included. Such variables as the formation of family income, family occupational histories, family structure, and fertility histories are lengthy projects in themselves, if they are to be done correctly. For example, while fairly accurate measures of the average wage earned can be easily obtained, the estimation of agricultural income or income from animal raising requires a detailed accounting of costs as well as disposition of output. Rarely is an aggregate estimate of income from farm production accurate; yet a good farm income questionnaire requires two to three hours to administer.

¹Results of the different measures of women's agricultural participation in the Peruvian case are reported in Carmen Diana Deere, "La division por sexo del trabajo agrícola: Un estudio de la Sierra Norte del Perú," *Estudios de Población* 2, no. 9 (September 1978). The Colombia results are reported in Magdalena León de Leal and Carmen Diana Deere, "Proletarianización y el trabajo agrícola en la economía parcelaria: La division del trabajo por sexo en dos regiones de Colombia" (paper presented to the Conference on Women in the Labor Force, Rio de Janeiro, November 1978; forthcoming in conference proceedings).

The Sample Survey Design

The most important problem in the design of a representative sample survey is the selection of the

population to be sampled. The choice of population must be compatible with the theoretical framework. Since our interest was to measure the sexual division of labor in terms of class formation, our sample had to be representative of the different class strata in the rural areas. Capitalist class relations are defined by the purchase or sale of labor power. However, these characteristics can rarely be anticipated; rather, they are variables that are measured by the questionnaire itself. Nonetheless, the differentiation of the peasantry is theoretically dependent upon the household's access to the means of production. Insufficient access to the means of producing the household's subsistence compels proletarianization, while sufficient access to the means of production to employ wage labor allows a petty capitalist strata to emerge in the rural areas. Thus access to means of production provides the most relevant proxy for measuring the household's class position.

The measurement of access to means of production ideally should be both quantitative and qualitative. The amount of land held in property as well as in usufruct, the quality of the land, the stock of tools, equipment, and the number of animals, as well as their productivity (or age), should be taken into account. This information is, again, rarely available and must result from the survey itself. To define the universe of the sample, one must take the most readily available information, access to land, as a proxy for the class configuration of the rural area. While land held in property is the most adequate measure of social differentiation, land held in usufruct (i.e., land held in property as well as in other forms of tenure) more closely determines the generation of income and the division of labor by sex in productive activities in a given time period.

The choice of the population to be sampled is also greatly constrained by the available data base. This is a particular problem in rural areas, where cost constraints due to the spatial distribution of holdings do not permit more traditional techniques of determining the universe, such as blocking. In the Colombian case, three possible sources of information were available on the composition of the rural areas. The 1973 population census was based on the household, while the 1970 agricultural census was based on the units of exploitation; but neither census was available in disaggregated form to private institutions to allow identification of the units to be sampled. The third alternative was the use of a rural cadastre, or municipal property listings, which were available only for some of the municipalities. Since this was the only data source that identified the agrarian

structure in terms of individuals, it was chosen as the population for sampling.

All of the landholdings held in property in the municipality were stratified according to size ranges. Once the population proportion was known, it was possible to determine the sample cell, taking into consideration sufficiently large cell sizes to allow statistical manipulation, the statistical representation of the sample of the population as a whole, and the cost constraint on the size of sample. Municipal property listings are a juridical classification and do not correspond directly to the economic unit or, in many cases, to one particular household. This is particularly problematic as regards large properties, in which a single juridical unit may be constituted by several economic units under different arrangements, as well as by numerous resident households. The Colombian procedure was to utilize the property listings to arrive at the household; all constituted households that resided within the administrative property were interviewed.

The Peruvian sample survey was constructed as a follow-up to a large peasant household income survey.¹ The parent survey was representative of the distribution of landholdings in property. The follow-up survey was thus designed to be representative of the parent survey, which greatly facilitated the choice of the population to be sampled as well as the execution of the sample survey.

We have attempted to illustrate some of the conceptual, methodological, and technical problems involved in the quantification of women's economic participation in rural areas of developing nations. We stress again the importance of building quantitative work on a solid qualitative foundation. Quantitative results are extremely important for understanding the sexual division of labor, but they must be gathered and analyzed in terms of the substantive historical processes that gave rise to the differences in class formation and in the division of labor by sex.

¹In the Colombia project this procedure resulted in a sample size of 200 properties in one municipality (representing 7.2 percent of the population) and of 150 properties in the other municipality (representing 13.1 percent of the population). Questionnaires were completed for 216 and 163 households, respectively.

²The 1973 Cajamarca Income Survey was carried out by the Socio-Economic Group of the Cajamarca-La Libertad Pilot Project under the direction of Efran Franco and funded by the Ford Foundation. This survey consisted of 1,500 observations of peasant households in two provinces of the Department of Cajamarca. The follow-up survey, focused on 1,050 households in one province and was constituted through random, ordered selection of 105 households for interviewing.

ACKNOWLEDGMENTS This research note draws upon our experience with the Colombia Rural Women Research Project carried out by the Colombian Association of Population Studies under the direction of Magdalena León de Leal, and upon the dissertation fieldwork of Carmen Diana Deere. The

Colombia project, a three-year study, was financed by grants from the Ford Foundation and the Rockefeller Foundation. Ingrid Caceres, Clara Gonzales, and Liliana Motta participated in the formulation and execution of the sample survey reported here. Ms. Deere's fieldwork in the northern Peruvian Sierra was funded by a Social Science Research Council Dissertation Fellowship.

Collecting Data on Women's Employment in Rural Java

Nancy Lee Peluso

Dramatic changes in rural lifestyles and employment have accompanied modernization. Women are particularly affected, for many of the fields of employment traditionally dominated by women are being eliminated or altered as new technology is applied, especially in agriculture. Competition for the remaining labor opportunities is high, and both male and female laborers are grossly underpaid. A single source of income can rarely feed, clothe, and shelter a family, let alone finance an elementary education for the children. Poverty in Central Java means that everyone willing and able to work does—if and when there are job opportunities.

The increasing pressure on the land by a steadily growing population, the resultant masses of landless and near-landless rural dwellers, and the decrease in agricultural wage labor opportunities since the introduction of hullers, sickles, and hand weeders (all of which absorb less labor than traditional work methods)¹ are causing more people to turn to occupations in small-scale trade and manufacturing. However, there has been relatively little research on these sectors of the labor force, especially intensive research that can be put to practical use.

My research was carried out to determine the economic roles of rural women working outside the agricultural sector and to create a system of job classification for small trade and industry that would accu-

rately differentiate between variations in the characteristics and nature of women's economic activities. I decided to focus on women working outside the agricultural sector because extensive research has already been done on the agricultural sector in Central Java and the Special Region of Yogyakarta,² where I would also be working.

Research Methodology

This research was carried out in three phases, each applying a different methodology or seeking a specific kind of data. The three phases were participant observation, the household survey, and the market survey. Because family roles and relationships were of particular interest, the family unit received special attention; because women's economic activities were of primary concern, the survey respondents and key informants were chosen according to the women's occupation.

¹Among the many studies on agricultural employments are the following: Ann Stoler, "Rice harvesting in Kali Loro: A study of class and labor relations in rural Java," *American Ethnologist* 4, no. 4 (November 1977); Benjamin White, "Production and reproduction in a Javanese village," unpublished Ph.D. thesis, Columbia University, 1976; William L. Collier, Gunawan Wiradai, and Soentoro, "Recent changes in rice harvesting methods," *Bulletin of Indonesian Economic Studies* 9, no. 2 (July 1973); and M. Singarimbun and D. H. Penny, *Population and Poverty in Rural Java: Some Economic Arithmetic in Srahano*, International Development Monograph No. 41 (Ithaca, N.Y.: Cornell University, 1973).

²See Rudolf S. Sinaga, "Policy implications of agricultural mechanization for employment and income distribution," *Bulletin of Indonesian Economic Studies* 14, no. 2 (July 1978): 102.

Participant Observation

This phase of the research was the most important for several reasons. First, the aim of the research was to obtain accurate details on women's family life and work routines and the variables that caused changes in these. Eight women were selected for case studies on the basis of information obtained from the hamlet head, other traders, or through my own acquaintance. I accompanied each informant for five days (one Javanese market-cycle week), from approximately one-half hour after her rising until mid-evening (9–10 P.M.). Research hours varied according to the demands of each occupation. For example, one trader of earthenware pots traveled 11–18 kilometers to two different markets on four nights of the five-day week, leaving home at either 12:30 or 2:30 A.M. Observation began just after she had risen to go to market and continued until the next evening. On the fifth day of the market cycle, she bought stock in a morning market 10 kilometers from her home; therefore observation on this day began in the morning. Most of the other women began their income-producing work between 4 and 6 A.M., and I adjusted my hours to their schedules. I visited each potential informant, accompanied by a mutual acquaintance (ideally a former respondent), prior to the five-day observation period; and if she agreed to participate, we explained the importance of her conducting her daily activities as usual. Perhaps because I had been in the village for seven months before the research began and many people at least knew of me, it was not difficult for the informants to accept this. After the first or second day the women tended to ignore the extra attention they received and went about their daily business as usual.

After the initial five days of participant observation, each informant was visited once a week for up to six months afterwards, and all changes or consistencies in routine were recorded. Each woman was also asked to record, in a marked notebook, all of the household's monetary and reciprocal labor inputs and outputs during one month; if the woman could not read or write, another family member was asked to do so.

The second great advantage of participant observation was that it allowed me to get close to the women themselves. Within a relatively short time, usually one or two days, they would confide their feelings and opinions to me, often without my asking. Specific information was collected through informal interviews; that is, in conversations during

slow periods at home or in the market, on the way to or from the market, or while sitting around with the family. Copious fieldnotes were taken on their activities, hours, the people they dealt with each day, and their relationships to each other, in addition to recording their life and work histories.

The eight case studies were followed by two months of participant observation in the local marketplace, a small trade center located between the two study villages. Every day I sat and talked with two or more traders for several hours. At the end of the market day I went home with one of them and spent two or three hours with her family. These visits were particularly informative if older family members lived in the same household or nearby, since they were usually eager to talk about the market of former times. Fifty brief case histories were collected during these two months.

The third and most practical advantage of this phase of research was that the case studies gave me the insight needed to formulate questions for both the household and market surveys. Domestic and trading or production patterns observed in one or more cases could be checked for their general validity through the surveys, briefly discussed below.

Household Survey

The second phase of the research, a 200-household survey, was carried out in the two adjacent villages from which the case studies were chosen. Households were selected according to the woman's primary occupation; thus our sample was biased in that only families in which the woman's primary occupation was outside the agricultural sector were interviewed. Neither the village administrative offices nor the Department of Commerce had registers of names, addresses, or specific occupations by sex. Therefore we compiled the sample by going through lists of households with each of the 28 hamlet heads. The sample was almost equally divided between women working outside the home (such as in the marketplace) and those who did income-producing work at home; all respondents were married, aged 20–49 years, and had at least one child.

In addition to standard demographic data, we collected responses to questions on division of labor in the household, decision making in the family, the woman's time allocation, and her occupation at key points in her life (i.e., before marriage, just after marriage, after the first child, and after many chil-

dren). This occupational data were perhaps the most important data collected in the survey. The last question on occupation at a specific point in the woman's life was worded so as to determine whether there had been any occupational change between the first child and the time of the survey. The question was occasionally misinterpreted, however, and might have been worded more accurately.

Market Survey

The third and final phase of the research was a survey conducted in the local market. Of the usual 350 regular daily traders, 125 of the women, or one-third of all the female traders selling each commodity, were questioned on their daily trading routines, home preparation of their merchandise, and their trading histories in detail, including what they had ever sold, in which markets, and why they had changed if this was the case. Questions were also asked on secondary occupations, land ownership, participation in the rice harvest, and basic demographic information.

This survey was carried out at the end of the research, by which time I had already collected quantitative data on when and qualitative data on why women changed occupations, merchandise, or location of work, as well as on their mobility and participation in traditional and modern community activities, such as harvest labor and the government credit program for small-scale traders. Preliminary analysis of key questions has been made, although the final results have not been completely tabulated.

Research Analysis

The combination of these three approaches produced a complete set of detailed and statistically supported data that would not have resulted from the use of one method alone. We now offer an abbreviated version of one of the case studies to illustrate the type of qualitative information that was checked against survey data. Indeed, the occupational categories and tables illustrating patterns of choice and changes of occupation might have been calculated from survey results alone. However, the strength of the framework used and the reasoning behind it derives from the detailed life stories that I collected during the year and a half that I lived in the village. The logic inherent in the decision-making process could not have been understood without close contact with the people and participation in the village society.

A Trade History

Bu Joyo sells *tape*, a snack made from cassava. She has been manufacturing and selling it for about eight years, since a few years before her fourth child was born. She began trading in the marketplace as a teenager, selling betel-nut leaves on her own in a market near her aunt's house. After about a year of selling on her own, she began to accompany her mother to the city to buy salt, which they sold in the mountain market near home. When the government began controlling the price of salt, she switched to buying unhulled rice. This she took home, pounded by hand, and resold in a roadside market. She was married by then, and when she had her first child, she left the baby boy at her mother's house and picked him up on the way home. Later, when rice hullers became common in the village and pounding rice was no longer practical or profitable, she changed wares again. Long-distance selling was out of the question, for it would require too many hours away from home; she had two young children by that time, and a third was on the way. She began to buy *mlinjo* seeds and pound them into *emping*, a delicacy that is fried crisp and eaten as a snack or with meals. She pounded the seeds at home and could mind her young children while working. Once every five days, she took the *emping* to the district market and sold them wholesale to a regular buyer. She did this until the price of *mlinjo* seeds rose sharply, after which she changed to making *tape*. This process entails boiling cassava and mixing it with yeast, then packing it into an air-tight container and storing it overnight to ferment. The soft, tangy-sweet *tape* is used in iced drinks, fried in batter, or eaten plain as a snack. Until her last child was born, she sold her product in a marketplace an hour's walk from home. She left home at 4:00 A.M. and walked the four kilometers alone, carrying about 15 kilograms of *tape* in a basket slung on her back. At 8:00 or so, when the market was over, she walked another three km. to the central Regency market and bought 20 more kg. of cassava for the next day's market. She walked the final four km. home. She explained that after the baby was born, she felt too tired to carry the child with her to so many places. The market was not near her mother's village, nor were her other children able to mind the nursing baby during her normally long hours away from home. She temporarily stopped selling in the marketplace and instead delivered orders to a group of nearby food stalls. She spent a few extra hours at home each day, bagging *tape* in 5-, 10-, and 25-rupiah size plastic bags. At 4:00 A.M. she fed her child and left him with his 12-year-old

brother while she made deliveries, which took about an hour and a half. Her son went to market in the afternoon to buy cassava. After the baby was weaned, she returned to selling in the market because her profits were higher and she liked the contact with other traders. Being in the market frequently allowed her to take advantage of unpredictable opportunities to make a few extra rupiah, such as by selling fresh vegetables brought in by local farm women. She has been a trader all her life and is always seeking any opportunity to add to the family income.

Occupational Classification

The goal of this research was to provide detailed information on women's employments outside the agricultural sector. Cases such as that of Bu Joyo, combined with survey results, revealed clear trading patterns and groups of commodities traded in a similar manner. I was thus able to draw up a detailed classification system for occupations in the fields of small trade and home industry for the area of research.

The universality of these occupational categories,² even if applied only to Java, cannot be guaranteed, because region-specific cultural and social variables make generalization on such a complex matter difficult. However, further work on this problem led to the formation of a series of questions that could be included on any large- or small-scale census or labor force survey seeking information on the characteristics of the labor force in a specific region.

Choice and Change of Occupation

By using the occupational categories devised for this region, comparisons could be made of patterns shown by women engaging in various nonagricultural income-producing activities, primarily in trade. Cross-tabulations with marital status and the age and number of children showed definite trends in occupational choice according to the life-cycle stage

of the woman's family. This was of special interest because such trends went virtually unnoticed, partly due to the lack of a relevant system of classifying employment and types of trade.

Besides environmental changes incurred by development over which an individual trader has no control, other endogenous variables influence or limit a woman's choice of occupation or the type of goods traded. These variables include access to capital, work experience, trade-specific or product-specific knowledge, total number of hours required inside or outside the home, physical labor inputs, distance to markets or other selling outlets, and potential capital returns per hour per day.

Simultaneously, these factors are dependent on the development stage of the woman's family, particularly her marital status and the number and age of her children. If the demands of the woman's family conflict with those of her current occupation, adjustments are made in hours or work location, or she changes goods or occupations altogether. Bu Joyo's case is a clear illustration of this.

Conclusion

The practical value of the job classification system and of findings on patterns of occupational choice is that they can be used in planning regional development projects geared to the utilization of rural women's labor. The series of survey questions for persons employed in small trade or industry will allow for data comparison with other parts of Java, Indonesia, and possibly other developing countries.

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²For a complete discussion of these categories, see the chapter on occupational classification in Nancy Lee Peluso, *The Economic Roles of Rural Women Working Outside the Agricultural Sector: The Case of Hogoah Sleman, Special Region of Yogyakarta* (Yogyakarta: Population Studies Center, Gadjah Mada University, forthcoming, 1979). The census questions themselves are found in Nancy Lee Peluso, *Putting People into Boxes or Putting Boxes Around the People: Approaches to Designing Occupational Categories for Java* (Yogyakarta: Population Studies Center, Gadjah Mada University, March, 1979).

colleagues and friends at the Population Institute (now the Population Studies Center), particularly Dr. Terence Hull, Dr. Valerie Hull, Marie-Claire Malingreau, and Patrick Guinness. Seminars and other academic facilities were made accessible by Dr.

Masri Singarimbun, whose moral support throughout the project was also much appreciated. And of course to the women who opened their lives to me and made this study possible, I cannot sufficiently express my gratitude.

Group II: Time Use and Project Planning

Collection and Analysis of Data on Rural Women's Time Use

Brenda Gael McSweeney

The Upper Volta/UNESCO/UNDP Project for Equal Access of Women and Girls to Education, a ten-year systematic program to promote educational opportunity for girls and women and to increase their contribution to the economic and social development of the country,¹ was unique in Africa. The project, one of 37 women-related activities undertaken with the assistance of UNESCO during the decade 1965-75,² was aimed primarily at creating the preconditions for educating women in remote rural areas and at designing education programs that would contribute to rural development.³ It was multi-sectoral and was planned from the outset to last ten years.

Launched in 1967, the project assembled data on obstacles preventing full access of girls and women to education and initiated experimental programs in several pilot zones to overcome these barriers and hence to augment available educational possibilities.⁴ Initial operations, based upon findings of sociological studies undertaken in three regions of the country with different levels of economic prosperity, climatic conditions, and ethnic groups, sought to

lighten women's workloads and to improve basic health conditions and standards of living. Labor-saving technologies were introduced: mechanical grain mills, carts, and readily accessible water wells. It was thought that women could allocate a portion of the time thus saved to such educational activities as learning modern agricultural methods, health and civic education, and professional training. Knowledge was to be disseminated through *animatrices*, or dynamic village women, and traditional midwives who were designated by the villagers themselves to attend special courses that would enhance their roles as leaders in change. Functional literacy classes and radio clubs were organized in the villages. The project also introduced activities to increase women's revenues, such as collective fields, the receipts from which were managed by the women.

Collecting Data on Rural Women's Time Use

A major objective of the data collection was the generation of precise information on women's time allocation. Considerable accuracy was necessary to permit testing of hypotheses concerning women's labor inputs and the availability of free time to women in comparison with their male counterparts; to examine women's extrafamilial and intrafamilial alloca-

¹Republique de Haute-Volta, "Plan d'operation: Projet experimental pour l'egalite d'acces des femmes et des jeunes filles a l'education," p. 11.

²"Rapporteur's report on UNESCO's contribution towards improving the status of women," submitted by the United States Executive Board Member, Paris, May 1975, p. 46.

³*Women, Education, Equality: A Decade of Experiment* (Paris: The UNESCO Press, 1975), p. 12.

⁴Republique de Haute-Volta, cited in footnote 1, pp. 1-2.



tion of time and the implications of such time use for development policies and programs;⁵ to record activities in which women's participation was substantial, in order to assess whether the project's training programs and technologies were addressing the appropriate problem areas (e.g., should priority be given to increasing efficiency and easing the burdens of sowing, weeding, threshing, hulling, or grinding?);⁶ to analyze whether time pressures⁷ were in fact an obstacle to women's access to education; and to identify patterns of free time in order to improve scheduling of such activities as radio listening, groups and literacy classes. Another objective was to obtain information on variables influencing time-use patterns and behavior.

In order to meet these various requirements as efficiently as possible, research resources were allocated to a combination of overview and intensive survey techniques. Target and comparable control villages were selected in the three zones reached by the project, and, following the preparation of village monographs, initial questionnaires were administered verbally to all women to gather basic personal and demographic data, as well as data on schooling of children, availability and utilization of technologies, work and earnings, daily activities (by recall), and assistance in carrying out workloads. More detailed information was then collected from a random sample of 30 women in each village and from women leaders in the project villages on available resources, agricultural workloads, opinions concerning technology, and the impact of technology on time allocated to various tasks and alternative use of time thus saved. Parallel questions were asked of the husbands of sample women, their responses to be treated as variables possibly affecting their wives' attitudes and behavior.

Another major component of the data-collection strategy was the use of time budgets. Three cross-sectional time budgets comprising all activities in ap-

proximately the first 14 waking hours were prepared for each of the women in the village samples and for women leaders by means of direct observation. They encompassed the recording in minutes of when the activity began and ended, a description of the activity, the technique or technology used, and any assistance in carrying out the activity. In the north-central zone, which is populated by the Mossi, the majority ethnic group, three time budgets were also prepared for five men from each village, to permit analysis of the sexual division of labor. In addition, a single observation apiece of five girls and boys from each village, stratified by age, was undertaken to furnish indications of the phasing into work. Comparison of information on rural women's time use yielded by the recall technique and by direct observation showed that some 44 percent of women's work was unaccounted for using recall.

Proposed Framework for Analyzing Time Allocation

To quantify the sexual division of labor in rural areas, the African Training and Research Centre for Women (ATRCW) of the United Nations Economic Commission for Africa has designed a framework of informal employment indicators that measure the comparative participation of men and women in a number of tasks: food production, storage, and processing; animal husbandry; marketing; brewing; water and fuel supply; child care; cooking and cleaning; house building and repair; and community self-help projects.⁸ Based upon actual time allocations to these tasks by women and men in a minisample from Zimtenga, a village in the north-central zone of Upper Volta, women assume 80 percent of this workload, including 61 percent of food production. Yet

⁵On this theme, see United Nations, World Conference of the International Women's Year, Mexico City, 19 June-2 July 1975, *The Role of Women in Rural Development* (E/CN.E.06/3P/11), prepared by the Food and Agriculture Organization of the United Nations, 24 March 1975, pp. 7-12.

⁶Emmy Simmons has pointed out limitations on the usefulness of time-allocation studies for development practitioners interested in designing programs to facilitate active participation of women in development. For example, knowing that women allocate more time to farming than their husbands does not indicate whether they will respond to improved seed varieties, nor does it furnish information on their relative roles in agricultural decision making. See Emmy Simmons, *Economic Research and Women in Rural Development in Northern Nigeria* (Washington, D.C.: Overseas Liaison Committee of the American Council on Educa-

tion, 1977), p. 2. In the Upper Volta survey, questionnaire response and views expressed in group interviews furnished complementary information relevant to central research questions.

⁷Philip J. Stone reviews time pressures experienced by women in both socialist and capitalist countries, based upon the results of a multinational study using time-budget technique, in "On being up against the wall: Women's time patterns in eleven countries," in *Public Policy in Territorial Perspective*, ed. W. Michelson (The Hague: Mouton, 1979).

⁸For a development of the rationale for, and a complete description of, the set of indicators, see United Nations, Economic Commission for Africa, *The New International Economic Order: What Roles for Women?*, especially the section entitled "Expediting balanced development: Measuring and monitoring the participation of women as compared to that of men," pp. 26-31, plus the annex.

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TABLE 1 Comparison of time allocations to rural activities, by sex

Activity	Average time allocated (In minutes) ^a		Activity	Average time allocated (In minutes) ^a	
	Women	Men		Women	Men
A. Production, supply, distribution	367	202	D. Household	148	4
1. Food and cash crop production	178	180	1. Rearing, initial care of children	18	0
Sowing	69	4	2. Cooking, cleaning, washing	130	1
Weeding, tilling	35	108	3. House building	0	0
Harvesting	39	6	4. House repair	0	3
Travel between fields	30	19	E. Personal needs	158	269
Gathering wild crops	4	2	1. Rest, relaxing	117	233
Other crop-production activities	1	47	2. Meals	21	29
2. Domestic food storage	4	1	3. Personal hygiene and other personal needs	20	7
3. Food processing	132	10	F. Free time	77	118
Grinding, pounding grain	108	0	1. Religion	2	6
Winnowing	8	0	2. Educational activities (learning to read, attending a UNESCO meeting or class)	17	4
Threshing	4	0	3. Media (radio, reading a book)	0	14
Other processing activities	12	10	4. Conversation	14	69
4. Animal husbandry	4	3	5. Going visiting (including such social obligations as funerals)	43	19
5. Marketing	4	0	6. Errands (including going to purchase personal consumption goods, such as kola, next door)	1	6
6. Brewing	1	0	G. Not specified^b	18	0
7. Water supply	38	0	Total work (A, B, C, D)	587	453
8. Fuel supply	6	2	Total personal needs and free time (E, F)	235	387
B. Crafts and other professions	45	156			
1. Straw work	0	111			
2. Spinning cotton	2	0			
3. Tailoring	2	10			
4. Midwifery	41	0			
5. Other crafts/professions (e.g., metal work, pottery, weaving cloth, beekeeping, etc.)	0	35			
C. Community	27	91			
1. Community projects	27	0			
2. Other community obligations	0	91			

^aBased on time budgets prepared by direct observation.

^bWhen observation did not last the full 14 hours.

this schedule of work accounts for an average of only two-thirds of the total occupations of this sample of women in the first 14 hours of the day, and only one-quarter of the activities of their male counterparts. The Upper Volta data thus suggest the need to revise the ATRCW framework to better capture rural activities by incorporating into the work schedule cash crop production and crafts, and by including measures of time for personal needs and of free time.

A more comprehensive set of indicators (see Table 1), based upon an expansion of the ATRCW's proposed framework, permits examination of the dominant patterns of overall time use and allows determination of whether men score higher on a more inclusive schedule of work than on the initial schedule of work suggested by the ATRCW. The revised framework in Table 1 displays the average time in

minutes allocated to each activity by the minisample of women from Zintenga in comparison with their husbands. According to the new schedule of work, women carry out 64 percent of the production/distribution/supply tasks, 23 percent of crafts and other professions, 97 percent of household tasks, and 23 percent of community obligations. These tasks represent 56 percent of all work performed in the first 14 hours of the day. Women's workloads after the observations ceased can also be expected to exceed those of men, as women then generally prepare the evening meal and wash up afterwards. A significant fact that emerges is that expansion of the food production category into a more comprehensive one including cash crops results in measurements showing a decrease from 61 percent to 49 percent of women's participation in farming relative to that of men,

owing to significant amounts of time allocated by men to cotton production.

Findings

Based upon analysis of the minisample, provisional findings are presented here concerning time pressures experienced by Voltaic women and the influence of polygyny, age, and technology on time use. These findings suggest directions for the analysis of the entire data set.

Time Pressures and Education

The project sought to promote women's education by encouraging the sending of more girls to school, and by training women leaders who would in turn educate their colleagues.⁹ Women's workloads and time patterns could be assumed to greatly affect the achievement of these objectives. Time budget data showed that Mossi women have only 1.3 hours of free time in the first 14 waking hours. Given the magnitude of women's workloads and the importance of the assistance furnished by girls in carrying out daily tasks, it is little wonder that the project team emphasized the introduction of technologies to lighten the food-processing and diverse portage tasks in an attempt to create time in which women might benefit from educational opportunities and so that they might be more amenable to having their daughters and other young female helpers attend school.

Monogyny/Polygyny

The total time allocated to the food production/supply/distribution tasks was higher for women with monogynous husbands than for those in polygynous households. For women without cowives, total workloads, including household work, community activities, crafts, and other professions, averaged 11 1/3 hours, compared with 10 hours for women with cowives (or only 8.8 hours if exceptional project-linked responsibilities of the head of the women's group are excluded). Women without cowives allocated substantially less of their working time to household tasks than their colleagues with cowives. For personal needs, they had less than 1 3/4 hours, compared with 3 hours for women with cowives.

⁹Suzanne Lallemand, *Projet d'Accès des Femmes à l'Éducation* (Paris: UNESCO, November 1970), p. 1.

Age, Sex, and Time Use

Overall inspection of the time budgets supports the hypothesis that age does not strongly affect women's time use. Young and old alike shoulder substantial burdens. Females begin putting in more work hours than males beginning at age seven:

Age	Hours of Work	
	Girls	Boys
7	5.3	0.7
9	7.4	2.8
11	8.5	3.2
13	6.0	5.2
15	8.8	4.4

Technologies: Food Processing and Improved Nutrition

Availability of technology did not correlate with the anticipated reduction in workloads.¹⁰ Of women's food-processing activities, grinding and pounding absorb the greatest share of the time (84 percent of total food-processing time, an average of over 1 3/4 hours per day). Thus the project's choice of introducing mechanical mills is understandable. Questionnaire response revealed that Voltaic women tend to utilize a mechanical mill mainly when tired or pressed for time. If the women intend to prepare meals in the evening despite fatigue, their workloads are lightened by mill use. The villagers stated, however, that the mill is often used to permit the preparation of meals that might otherwise be forgone. In this case, women's tasks are in fact increased, as cooking time will still take 1-2 hours. Eventual impact of the mill should thus be sought, not in time saved but rather in improved nutrition or increased productivity of the labor force.

ACKNOWLEDGMENTS My research in the Republic of Upper Volta was made possible through backing from the United Nations Development Programme and the full support of the Voltaic authorities, notably

¹⁰This corroborates earlier findings of Alexander Szalai described in *The Situation of Women in the Light of Contemporary Time-Budget Research* (E/CN.F.66/BP/6), 15 April 1975, prepared for the United Nations, World Conference of the International Women's Year, Mexico City, 19 June-2 July 1975, pp. 8, 10.

Professor Ali Lankoandé, Scholastique Kompaoré, Marcel Poussi, and many other colleagues and friends. I am grateful to Marion H. Freedman, Brigid O'Farrell, Hanna Papanek, Rosemarie Rogers, Philip J. Stone, Arpad von Lazar, and Robert L. West for

their valuable suggestions. I thank Judith Bruce of the Population Council and Achola Pala Okeyo for inspiring the initial seminar presentation upon which the article is based, and Sondra Zeidenstein and Carol Weiland for their editorial skills.

Rural Women's Time Use

Vivian Havens Gillespie

The time-budget method of obtaining information on rural Nicaraguan women was chosen when a literature search revealed a virtual absence of information on women in general and on rural women in particular in this Central American country.

It was felt that the time-budget method would provide development planners with the most far-reaching and complete baseline data to assess needs and ascertain the impact of efforts directed toward a largely unrecognized and underutilized resource in the development process—women. Time-budget studies offer many advantages over a standard questionnaire methodology. Perhaps the most obvious is that the time-use method details what a person does, when it is done, and how much time it takes to accomplish. This type of information is virtually impossible to obtain solely through recall. Time budgets are taken by accompanying a subject for a period of time—in this instance a full day—and writing down what he or she does and recording the time involved.

Types of Women Observed

We observed the basic work patterns of three types of women: the housewife, who works in her home and receives no financial remuneration; the potter, who fabricates clay pots in her home and sells them for a profit; and the factory worker, who is absent from her home at least eight hours during the day. Their work days reflect various accommodations to child-care and food-preparation responsibilities.

The work day of housewives is incredibly fractionated. These women constantly shift from one activity to another, taking between 5 and 15 minutes to complete each task.

By contrast, potters fabricating various types and sizes of common clay cooking vessels do not have such a fractionated day. They organize all activities around a block of time (averaging nearly 4½ hours) set aside for potting. Because these women work in their own homes, they are able to care for their children themselves. As a group, they did much less food preparation and food processing than housewives, some of these tasks being performed cooperatively by other female household members (daughters, daughters-in-law, nieces).

The third group observed were women working in a hemp-rug-making factory. Over half these women wage earners were living with either parents or parents-in-law, who performed the necessary household chores and cared for the children. Perhaps this living arrangement is due chiefly to the relative youth of the factory workers, whose ages varied between 16 and 30 years with a median age of 25 (this is about 10 years junior to the median of the rest of our sample). Of those not living with relatives, some employed a servant to work in the home, while others prepared the day's food before going to the factory, left children with an aunt or sister while they worked, and took the children home for lunch and again following the afternoon shift.

Benefits of the Observation Method

The benefits of the observation method are several and varied. In addition to sensitizing the observer to her subject's lifestyle—of primary importance to any development planner—this methodology also marks the direction of further research and indicates which questions merit asking or pondering, as well as likely

avenues of action. For example, the Nicaragua study was not specifically looking for information on nutrition; however, because we were present in the home during food preparation and mealtimes, we observed many commonly practiced customs: (1) the husband and/or children were fed before the woman had her meal; (2) if there was an egg or piece of meat to be consumed, it was given to the husband or older male children; (3) the diets of residents situated close to the Pan American highway were more varied and apparently more nutritious than those of residents of more remote villages. This last observation led to the speculation that the high incidence of malnutrition in Nicaragua (estimated to be the primary cause of death of rural women) may be due not only to nutritional ignorance but also to the unavailability (because of poverty, isolation, or both) of more nutritious foodstuffs.

The observation method also illuminates the obstacles that the rural poor face in realizing a fair price for their labors. For example, in the community of Rio Abajo, tomato farmers were observed to sell boxes containing as many as 80 tomatoes to a buyer with a truck for 5 cordobas (7 cordobas = US\$1) per box. The supermarket in Managua buys a box of 80 tomatoes for 35 cordobas. With monopoly control of the means of transporting the *campesino's* (rural inhabitant's) produce to market, the middleman plays a "take-it-or-leave-it" game and invariably wins.

An additional advantage of the observation method is the recording of the actual sexual division of labor. When questionnaire or interview methodologies are used to gain information, the answer is frequently the culturally held ideal, which sometimes differs from the reality. For example, the 16-year-old daughter of a vegetable farmer said that she had finished high school and now handled her father's accounts; and, indeed, she was observed doing just that. However, when a buyer for her father's tomato crop arrived, the daughter joined the fieldworkers and picked tomatoes for five hours without a break for food or water. Later she admitted to having been in the fields two weeks earlier staking the plants. The observation method, employed over the course of the entire agricultural cycle, would yield sensitive data concerning the actual participation of women in agriculture. It would also illumina-

nate how the seasonal migration of rural dwellers to work the cotton, sugar cane, and coffee harvests affects women's role. If they join the migratory work force, do they work in the fields and retain their cooking, laundering, and child-care responsibilities? If they stay home, what additional responsibilities become theirs when spouse and/or older male children are absent? Although the culturally held work place for rural Nicaraguan women is in the home, they may regularly deviate from the ideal to take on agricultural fieldwork as well. Change agents would want to be aware of the degree and nature of this extended participation.

Observed sexual divisions of labor should be employed as a guide for development planners to tailor projects, whenever possible, to the customary way of doing things. A Peace Corps volunteer recounted her frustration with the women of her village, who refused to join her in making furniture (simple tables and benches) for their homes. The observation method easily yields information on customary divisions of labor and shows that although rural Nicaraguan women repair the mud walls and floors of their homes, men build the house frames, put on the roofs, and make the furniture. To be effective, development programs must be in tune with the burden of roles and responsibilities of a local community.

Observation yields a wealth of information about how rural women accomplish their tasks and identifies the tools and technologies used. This in-depth knowledge of an area's activities and of how and with what materials they are completed and by whom can mean the difference between acceptance and success or rejection and failure of modernization projects. Field observers should be encouraged to capture this information and record it in detail for its later review and input into policymaking decisions.

ACKNOWLEDGMENTS Research for this article was made possible by a grant from the Agency for International Development to the Federation of Organizations for Professional Women/International Center for Research on Women.

Group III: Instruments for Learning

Measuring Rural Women's Economic Roles and Contributions in Kenya

Audrey Chapman Smock

Around 88 percent of women in Kenya reside in rural areas, where they make a major contribution to the local economy. The existence of an ongoing rural sample survey program, conducted by the Central Bureau of Statistics, makes it more feasible to collect data relevant to rural women's economic roles in Kenya than in most other developing countries. The Central Bureau of Statistics instituted the National Integrated Sample Survey Programme in 1974, with a permanent field staff in a carefully selected national sample of rural and urban clusters. The key Integrated Rural Survey (IRS) is an annual, ongoing socioeconomic survey in which a variety of questionnaires are administered to the same households within the national sample. The main objectives of the IRS are to develop and refine techniques for collecting reliable, representative, and relevant information from rural areas and to ensure the rapid processing and quick release of the data. During the four annual rounds of the IRS, standard questionnaires have been alternated with special modules. Data collected in the repeated questionnaires include demographic characteristics of the household; physical descriptions and valuations of assets; patterns of household expenditure, consumption, and income; and farm production inputs and yields. Special modules have focused on such subjects as literacy, nutrition, nonagricultural activi-

ties, and access to nonformal education programs.

Data from the first two rounds of the IRS, collected in 1974-75 and 1975-76, confirm the major contribution of adult females to farming, but they do not provide an insight into the division of labor in agricultural production or in other household tasks. The IRS was originally conceived as a household survey. Therefore the approach was to delineate the physical and labor inputs, the farm production yields, and the incomes of the household unit, and the data cannot be disaggregated to distinguish between the productivity, contributions, and resources of various family members.

To complement and supplement existing survey data, the Central Bureau of Statistics has decided to undertake some special modules specifying individual rather than household data. The Division of Labour Module, which was administered in February and March 1979, is one such survey.

The purpose of the Division of Labour Module is to provide detailed data on the contributions of household members to agricultural production and other tasks, such as care of poultry and livestock, food preparation and cooking, house cleaning, child care, buying food, fetching water, and collecting firewood. The questionnaire is divided into three sections: the first part elicits background data on the respondent and the household to supplement data

1

CONFIDENTIAL

CENTRAL BUREAU OF STATISTICS - IRS IV
DIVISION OF LABOUR MODULE
Form 1

Target Population: Female Household Heads or Married Females
in Agricultural Households - over 20 years of age

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	District _____	Date _____											
	Respondent's Name _____												

<p>1 Identity of respondent:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 80%;">Female head</td><td style="width: 10%; text-align: center;">1</td><td style="width: 10%;"></td></tr> <tr><td>Only wife of male head</td><td style="text-align: center;">2</td><td></td></tr> <tr><td>Senior wife of male head</td><td style="text-align: center;">3</td><td></td></tr> <tr><td>Junior wife of male head</td><td style="text-align: center;">4</td><td></td></tr> <tr><td>Only wife of son of male head</td><td style="text-align: center;">5</td><td></td></tr> <tr><td>Senior wife of son of male head</td><td style="text-align: center;">6</td><td></td></tr> <tr><td>Junior wife of son of male head</td><td style="text-align: center;">7</td><td></td></tr> <tr><td>Other</td><td style="text-align: center;">8</td><td></td></tr> </table> <p>2 Age of respondent: _____</p> <p>3 Respondent's highest level of formal education:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">No formal schooling</td> <td style="width: 10%; text-align: center;">1</td> <td style="width: 30%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>1-2 years primary</td> <td style="text-align: center;">2</td> <td>1-2 years secondary</td> <td style="text-align: center;">5</td> <td></td> </tr> <tr> <td>3-4 years primary</td> <td style="text-align: center;">3</td> <td>3-4 years secondary</td> <td style="text-align: center;">6</td> <td></td> </tr> <tr> <td>5-8 years primary</td> <td style="text-align: center;">4</td> <td>4+ years secondary</td> <td style="text-align: center;">7</td> <td></td> </tr> </table> <p>4 Respondent's marital status:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Never married</td> <td style="width: 10%; text-align: center;">1</td> <td style="width: 30%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>Formerly married</td> <td style="text-align: center;">2</td> <td style="border: 1px solid black; padding: 2px;">Skip to Question 8</td> <td></td> <td></td> </tr> <tr> <td>Currently married</td> <td style="text-align: center;">3</td> <td></td> <td></td> <td></td> </tr> </table> <p>5 Number of years married:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Less than 1 year</td> <td style="width: 10%; text-align: center;">1</td> <td style="width: 30%;">8-15 years</td> <td style="width: 10%; text-align: center;">4</td> <td style="width: 10%;"></td> </tr> <tr> <td>1-3 years</td> <td style="text-align: center;">2</td> <td>16-25 years</td> <td style="text-align: center;">5</td> <td></td> </tr> <tr> <td>4-7 years</td> <td style="text-align: center;">3</td> <td>More than 25 years</td> <td style="text-align: center;">6</td> <td></td> </tr> </table>	Female head	1		Only wife of male head	2		Senior wife of male head	3		Junior wife of male head	4		Only wife of son of male head	5		Senior wife of son of male head	6		Junior wife of son of male head	7		Other	8		No formal schooling	1				1-2 years primary	2	1-2 years secondary	5		3-4 years primary	3	3-4 years secondary	6		5-8 years primary	4	4+ years secondary	7		Never married	1				Formerly married	2	Skip to Question 8			Currently married	3				Less than 1 year	1	8-15 years	4		1-3 years	2	16-25 years	5		4-7 years	3	More than 25 years	6		<p style="text-align: center;">Office Use</p> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 5px auto; text-align: center; line-height: 30px;">11</div> <div style="display: flex; justify-content: space-around; margin: 5px 0;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 5px auto; text-align: center; line-height: 30px;">12</div> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 5px auto; text-align: center; line-height: 30px;">13</div> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 5px auto; text-align: center; line-height: 30px;">14</div> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 5px auto; text-align: center; line-height: 30px;">15</div> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 5px auto; text-align: center; line-height: 30px;">16</div>
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collected in other IRS modules; the second section focuses on the participation of members in agricultural production; and the third deals with involvement in other household work. Following the usual procedure at the Central Bureau of Statistics, the

questionnaire employs a precoded format to facilitate data processing.

In order for the module to be suitable for incorporation into the National Integrated Sample Survey Programme, its design had to meet certain specifica-



2

			Office Use
6 Age of respondent's husband			17
7 Respondent's husband' highest level of formal education:			18
No formal schooling	1	1-2 years secondary	5
1-2 years primary	2	3-4 years secondary	6
3-4 years primary	3	4+ years secondary	7
5-8 years primary	4		19
8 Number of generations in household:			
One	1	Three	3
Two	2	Four	4
9 Number of generations that regularly work on holding:			
One	1	Three	3
Two	2	Four	4
10 Number resident in household:			
Females 15 and over		Males 15 and over	22
Females 6-14 not at school		Males 6-14 not at school	24
Females 6-14 at school		Males 6-14 at school	26
			23
			25
			27
11 Number whose main occupation is working on holding:			
Females 15 and over		Males 15 and over	28
Females 6-14 not at school		Males 6-14 not at school	30
Females 6-14 at school		Males 6-14 at school	32
			29
			31
			33
12 Who takes the major share of the responsibility for preparing the land for farming?			
Adult females	1	Entire family	6
Adult males	2	Family and hired labour	7
Adult females and males	3	Hired labour	8
Adult females and children	4	Tractor service	9
Adult males and children	5		34

tions. The survey had to be replicable in all rural areas covered by the national sample, irrespective of ecological zone, household size, or level of economic development. The format had to be simple and clear to facilitate administration by enumerators and com-

prehension by rural respondents, who often have no formal education. The organization of the questions had to produce data that could be aggregated to the national level as well as disaggregated to assess the effects on the division of labor of such factors as edu-



4

 HH Code:

1	2	3	4	5	6	7	8

Province _____ Cluster _____

District _____ Date _____

 Card No.:

7	8
9	10

Respondent's Name _____

FORM III

	Poultry	Cattle									
		Stall Feed	Grazing	Milking	Sheep or Goats Grazing	Food Preparation and Cooking	House Cleaning	Child Care	Buying Food	Fetch Water	Fetch Firewood
Females 15 and over	11	12	13	14	15	16	17	18	19	20	21
Males 15 and over	22	23	24	25	26	27	28	29	30	31	32
Females 6-14 not at school	33	34	35	36	37	38	39	40	41	42	43
Females 6-14 at school	44	45	46	47	48	49	50	51	52	53	54
Males 6-14 not at school	55	56	57	58	59	60	61	62	63	64	65
Males 6-14 at school	66	67	68	69	70	71	72	73	74	75	76

women than men are involved in agricultural production suggested that females would be able to supply more accurate descriptions of the type of work undertaken by different family members. Enumerators' experience has shown also that it is

easier to locate and interview females than males.

The module elicits data on the contributions of six groups within the household: females aged 15 and over, males 15 and over, females 6-14 not at school, females 6-14 at school, males 6-14 not at

school, and males 6-14 at school. Data specification by groups rather than on an individual basis simplifies both collection and analysis. Although such a group approach eliminates the possibilities of undertaking some types of analysis, it still permits consideration of how individual, family, ecological, and community factors affect the division of labor within the household.

The survey seeks activity-specific responses to questions about particular types of work on the major agricultural crops and about various household tasks. Previous survey experience at the Central Bureau of Statistics has shown that rural respondents are unable to answer questions dealing with time allocated to various tasks, even when the recall period is limited. The basic problem is not so much recollection as it is conceptualization according to time units. Therefore time-budget methodologies, which study the division of labor by measuring time investments, appear unsuitable for large-scale observation of respondents for the purpose of recording time allocated to specific tasks. Such a technique is far more suited to intensive anthropological investigations of small communities than to national surveys.

The activity-specific approach is simpler to conceptualize and makes it easier to record data and to compare patterns across communities and in a variety of ecological zones. In the questionnaire the agricultural cycle is divided into four activities—planting, weeding, harvesting, and marketing—for each of ten major crops. Respondents are requested to detail which groups within the household (1) do not work, (2) work regularly, or (3) work sometimes, at each of the four stages of the agricultural cycle for each of the ten crops. Enumerators omit all crops not grown by the household. Respondents similarly are asked which groups within the household (1) do not work, (2) work regularly, or (3) work sometimes, at a variety of such household tasks as care of poultry and livestock, food preparation and cooking, and fetching firewood and water.

The Central Bureau of Statistics hopes to have data from the Division of Labour Module available for preliminary analysis by late 1979. The intention is to analyze the results and to supplement the analysis with a more systematic investigation that incorporates data on the same households and communities from other IRS modules.

Learning about Women through Household Surveys: An Experimental Module

Nadia H. Youssef and Coralie Turbitt

We present an experimental module recommended to the Indonesian Central Bureau of Statistics as a way of increasing policy-relevant information about women's economic role in the household and labor force. Its approach is likely to be relevant in any country where such information is scanty. As yet there is no indication that the module has been adopted in Indonesia.

The module is intended to be administered every fifth quarter for five years, thus including data about women's activities in different seasons. It is intended to be administered to all females in the household aged 15 and over.¹ Since there is a lack of methodology to ensure that enumerators and women respondents acknowledge women's actual economic

role, the module is meant to be supplemented by a series of micro-studies to determine whether the macro-study is sensitive to the situation of women—that is, whether the right questions are being asked to obtain data in sufficient detail to accurately reflect women's lives and concerns. The results of the micro-studies are expected to produce refinements in the module ready for inclusion the second time it is scheduled to be applied. The interaction between macro- and micro-level data should be a continual process to capture the dynamics of change. Such efforts are critical if one is to achieve an interpretative understanding of the condition of women and to influence policy planning.

The module asks questions of women under the headings "Economics of the Household" and "Individual Economics," to correct the bias that emerges when the unit of analysis is the household rather

¹It is assumed that a normal household chart will be completed for the entire household, listing everyone who lives there, their ages, and their relationship to the household head.

24

than household members. When the household is considered the unit of analysis and questions are asked of the male as head, the economic activities of women are submerged. Consciously or unconsciously, questions about economic activity and productivity are geared to the male, and much misinformation about women's dependent condition is perpetuated. The module also seeks to include information about the economic roles of all adult females in the household, not only the wife of the household head.

The Experimental Module

General

1. Age —
2. What ethnic group do you belong to?
3. What language is spoken in your home?
4. Can you speak Bahasa Indonesian [the lingua franca]?
5. Does your household own any of the following?
 - a. agricultural land (more than .5 hectare / less than .5 hectare);
 - b. other real estate;
 - c. family home;
 - d. physical place of business (e.g., shop / boat / other work place);
 - e. none of the above.
6. Have you ever had any children?
 - a. number of children born;
 - b. number of children living;
 - c. number of children who died;
 - d. age at first pregnancy;
 - e. age at last pregnancy.

Education/Training

7. Can you read and write? In what character?
8. Are you presently attending school or a training program?
 - a. If in school, what type of school (e.g., vocational secondary—government; general secondary—private; primary—religious)?
 - b. If in a training program, what type (e.g., on-the-job; nonformal literacy; nonformal home science)?
 - c. If not currently in school or training, have you ever attended school or a training program? Highest level of formal schooling; type of school? Type of training; number of years of training?

9. Are there any training programs (other than formal schools) that you know of in this area?
 - a. If yes, what is being taught?
 - b. Have you attended?
 - c. If not, why not (e.g., no time / no money / no interest / don't feel welcome)?

Migration History

10. Are you now living in the province of your birth? If not, where were you born (location and province)?
11. How long have you been living in your present town or village?
12. If you have moved from your birthplace, what was the direction of your last move?
 - a. rural to rural;
 - b. urban to urban;
 - c. rural to urban;
 - d. urban to rural.
13. On your last move, did you move—
 - a. alone;
 - b. as part of a family move, following: spouse / parents / adult son / adult daughter / other family members?
14. How many times in your life have you moved from one province to another?

Marital History

15. Current marital status: single / married / separated / widowed / divorced / abandoned / consensual union / polygamous marriage. (If never married, skip to question 20.)
16. Number of years in current marital status?
17. If married, is spouse currently present in the household?
 - a. If not, how long has he been absent? For what reason?
 - b. If spouse is present, within the last year has he been absent from the household for a period of 6 months or more? If yes, for what reason?
18. Age at *first* marriage? Age at *last* marriage?
19. Number of previous marriages?
 - a. Approximate number of years spent in each previous marriage: first / second / third / fourth;
 - b. number of children from each marriage: first / second / third / fourth.

Family Headship

20. Who in this household takes responsibility for the family in terms of—

- a. providing financial support;
- b. making decisions regarding important family matters?

21. How do *you* define the term "head of household"?
22. Do you consider *yourself* the "head of household"? If yes, why? If no, why not?
23. Have you ever considered yourself as head of *this* household? If yes, why?
24. If previously married, have you ever considered yourself to be the head of a household at any previous time in your life? If yes, specify for what period of time, for what reason.
25. Have you ever been the main provider for your family? If yes, when was this? Why?

Household Economics

26. In the past year, have you contributed in any way to bring money or other material necessities (food, clothing) to this household? If yes, in what form (cash / other / both)?
27. Are there other members *in this household* who contribute to the support of this family? If yes, who (family member / type of contribution—cash, other, both)?
28. Are there any persons *living away* from this household who contribute to the support of this family?
 - a. none;
 - b. relatives (cash / other / both);
 - c. nonrelatives (cash / other / both).
29. Does this household receive any income from sources not mentioned above?
30. Who is the person responsible for managing the household finances?
31. Do you consider the family income to be: adequate / not quite enough / far too little for your household needs?
32. If additional income is needed, is there additional work available in this area? If work is available, who in your household would be *qualified* to get such work (self / other female / other male)? If work is available, who in your household has the *time* for extra work, qualified or not (self / other female / other male)?

Individual Economics

33. Are you currently (this season) engaged in some kind of economic activity? (If yes, skip to question 34.)
 - a. If not economically active, are you looking for

work? If not looking for work, why not (e.g., gave up, ill, no need, not proper season, in school, retired)?

34. Complete the following chart for all women who are engaged in any economic activity. Complete *one* chart for their current primary activity and for as many as two secondary activities [maximum of three charts]. If they do other kinds of work in addition, simply list the remaining activities.
 - A. Primary Activity [] Secondary Activity []
 - B. Specify type of work. For agricultural workers, is it on own farm or another's farm?
 - C. Method of Payment:
 - a. cash: amount (Rp) per _____ (time / piece);
 - b. in-kind: amount per _____ (time / piece);
 - c. none.
 - D. Is the work you are now doing permanent / irregular / seasonal? (How many seasons is it available to you in a year?)
 - E. How many hours per day do you engage in the above activity?
 - F. How many days per week are you engaged in this work?
 - G. Status of worker: employer / employee / own-account worker / unpaid family worker.
 - H. Place of work: home/ farm / marketplace / plant / no defined place.
 - I. Do you need capital for your work?
 - a. If so, where do you get it?
 - b. Do you require daily capital?
 - J. Do you need tools or machinery to do your work?
 - a. Are they your *own* tools or machines?
35. Do you engage in other economic activities during the year that are different from the ones you have just described?
 - a. If yes, list them by season and by primary activity / secondary activity.
36. What would you say is your *main* economic activity for the year? (If no one activity can be named, enter "not defined.")
37. Are your current year's activities your usual sources of income (say, over the past 5 years)?
38. What is your busiest time of the year?
39. What do you think are the best (highest paying) economic opportunities for women like yourself?
40. What are the worst opportunities?

41. If you could choose, what kind of work would you prefer?
42. If you needed to borrow money in an emergency, where would you get it (e.g., relative / employer / friend / bank / informal local lender)?
43. Do you own, in your own name, any real estate? If so, what?

Individual Health

44. How would you describe yourself: healthy / not very healthy?
45. Is there a doctor or medical facility near you?
 - a. If so, have you ever used it for your own health problems?
 - b. If you were ill, would you use it?
 - c. If not, why?
46. If you are, or later hope to be, the mother of chil-

dren, would you take your children to such a medical facility if they were ill?

47. Who usually attends to you when you need medical care?

ACKNOWLEDGMENTS This work was carried out under a grant to the Federation of Organizations for Professional Women. The final report, entitled "A preliminary study in three countries: Kenya, Nicaragua, Indonesia," was funded by the Women in Development Office of AID. The authors were influenced by Eva Mueller's paper "The women's issue in measuring household behavior," presented at a conference on Women in Poverty: What Do We Know, sponsored by the International Center for Research on Women, 30 April-2 May 1978.

Assessment of Body Concepts and Beliefs Regarding Reproductive Physiology

Michele Goldzieher Shedlin

The instruments presented here were developed during 1974-76 as part of an anthropological study of factors relating to the cultural acceptability of modern contraceptive methods and services in a traditional community in Central Mexico.¹ They have since been adapted and used as tools in research, teaching, and evaluation by a number of social scientists working in Asia, Latin America, and the United States.

Interest in the study of body concepts was fostered by Steven Polgar for many years before his death in 1978. In addition to the research presented here, work has been carried out by Susan Scrimshaw and Michele Shedlin in an urban slum in Cali, Colombia, and by Scrimshaw with pregnant Hispanic women in New York City. Research by Mary Elmendorf is currently under way among Mayan women in the Yucatan. Susan Philliber is using both male and female drawings as part of an evaluation of an adolescent sex education program in Virginia. She also plans to use these instruments as part of an eval-

uation of the Young Adult Clinic at Columbia Presbyterian Medical Center.

The rationale for developing these instruments was the belief that the way in which individuals experience and perceive their bodies is culturally patterned. Perceptions of the structure and functioning of the body are a reflection of culturally determined cognitive categories. Inherent in many health care programs, especially those designed by developed countries for countries of the developing world, is the erroneous assumption that the body, its processes, and modifications to it (i.e., disease, side effects of contraceptive methods, and the like) are universally experienced in the same way.² These assumptions by planners and providers of health care have contributed to the lack of cultural acceptability, underutilization, and lessened impact of many of these programs. It is becoming increasingly clear that we must understand what receiver populations perceive as *their* health needs—perceptions that deal

¹The instruments as illustrated here are approximately 60 percent of original size.

²P. Manning and H. Fabrega, "The experience of self and body: Health and illness in the Chiapas Highlands," in *Phenomenological Sociology: Issues and Applications*, ed. George Psathas (New York: Wiley, 1973).

with a personal sense of well-being, as well as with clinical diagnoses of health and illness.

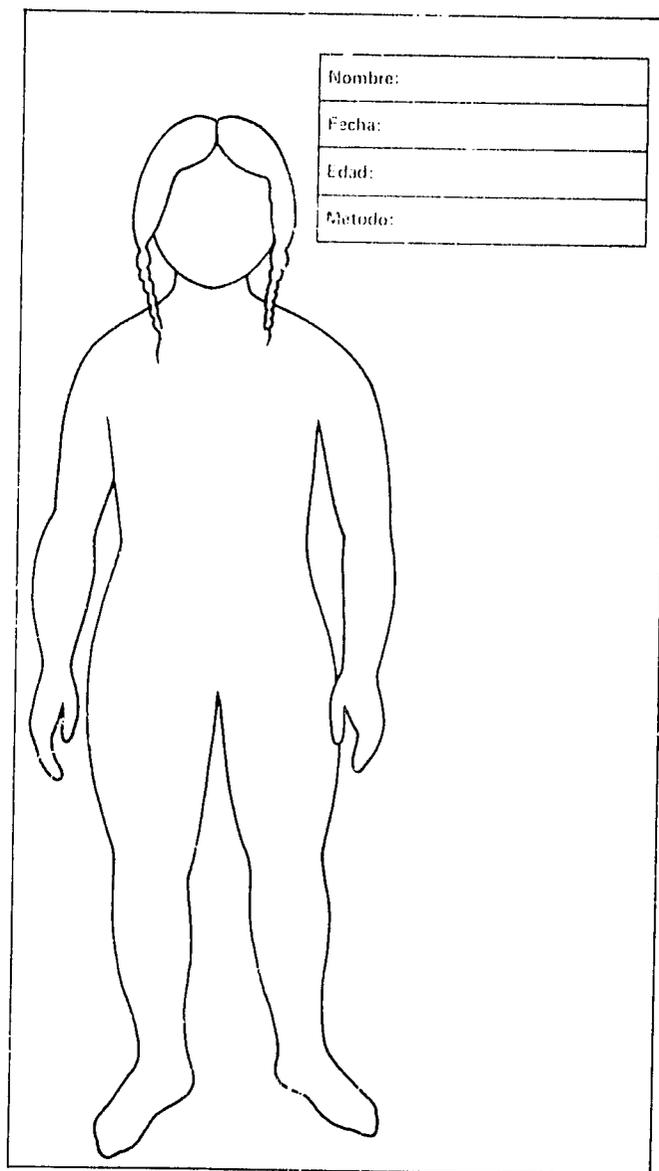
In many developing countries where education and information have not yet reached large sectors of the population, interpretations of the body and body processes are based upon folk beliefs. These beliefs, which are both cause and effect of the individual and cultural context of body concepts, often contain distorted and fallacious ideas about the structure and function of the body. Because individuals may have little correct information, they have varying amounts of difficulty in developing a clear map of their bodies, especially the internal body.³

In studying the body concepts held by a particular population, we can obtain a perspective on the culturally structured experience of the population, especially with regard to health, illness, and reproduction. In a general sense, questions and answers related to the body provide keys to understanding the importance and role of the body and body parts, the interpretation of body processes, and cognitions associated with the body. This information can also serve to explain such related behaviors as motivations and constraints in seeking, utilizing, or rejecting health education, preventive medicine, and other health services, including family planning.

In addition, the investigation of body knowledge and concepts can be important in such areas as the assessment of correct information about the body and body processes, the identification of erroneous beliefs and gaps in knowledge, and the identification and understanding of attitudes about the body and body parts. This information can be used specifically to increase communication and assist in the educational process by providing an awareness of body vocabulary and the cultural appropriateness of body terms to health personnel involved in promotion and education.

These areas of information can be used by planners and providers of health care services in the design and delivery of more culturally appropriate promotion, education, and services to particular groups. The instruments presented here can also be used in evaluating the impact of promotion and education.

In the anthropological investigation in Central Mexico for which they were developed, these instruments assisted in identifying culture-specific perceptions and attitudes concerning the female reproductive cycle and in eliciting information on menstruation, conception, pregnancy, breastfeeding, and fertility regulation. They were also used in determin-

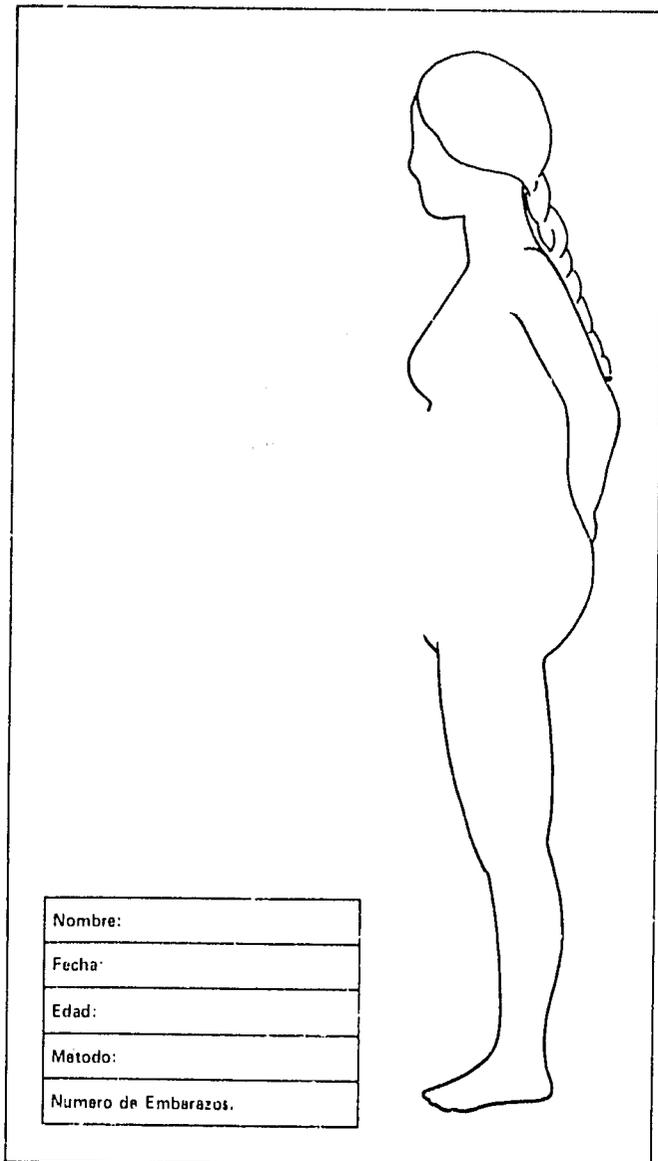


ing how body knowledge and beliefs are related to an understanding and acceptance or rejection of modern contraceptive methods.

The women interviewed in this investigation were largely illiterate and were members of a traditional Indian and Mestizo community. They were between the ages of 15 and 44 and in sexual union at the time of interview.

The body outlines, filled in or finished by the women, and the concepts of reproductive physiology elicited during the drawing process, show varying degrees of knowledge and accuracy. However, when viewing them together, various patterns and themes emerge. With regard to knowledge of specific internal organs, the most frequently drawn were the stomach, intestines, heart, liver, uterus, and lungs.

³ See S. Fisher, *Body Consciousness* (New York: Jacob Aronson, 1974).



Less frequently drawn were the kidneys, ovaries, the "neck of the uterus," and the placenta. Ribs were occasionally included, the only bones that were spontaneously indicated.

The external structures most frequently drawn were the breasts, vagina, and umbilicus; the area of the waist was sometimes emphasized. In general, all internal and external structures were represented as circles of varying sizes, usually quite small and rarely connected to one another in any way. When a spatial connection was perceived, such as between the stomach and the intestines, the ovaries and the uterus, or the heart and the liver, the organs were usually represented as concentric or contiguous circles. Drawings of organs that occasionally varied from the circular form were the intestines, drawn as

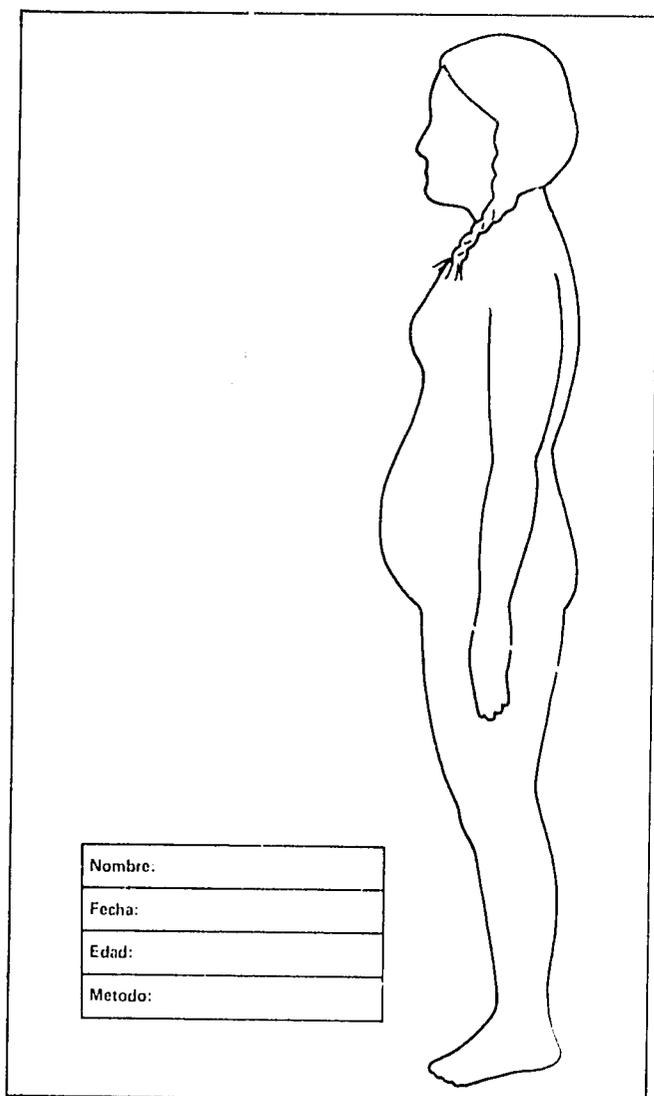
varying types of lines, and the heart, which was represented as a valentine.

The accurate placement of internal organs was uncommon. The heart was located directly behind one of the breasts, in the center of the body, or directly between the breasts. The liver, frequently placed adjoining or even attached to the heart, had the largest range of variation in placement. It was drawn high in the chest near the heart, in the center of the chest, at waist level on either side, in the center of the body, and even at different points in the abdomen. The kidneys, one or both, were placed in the abdomen, with little idea as to correct placement. The lungs were usually placed at shoulder level. Intestines were drawn above, below, inside, and outside the stomach. The stomach, like the liver, also occupied many locations but with less of a range than the liver, being generally in the abdominal area and placed centrally. The uterus was the organ most frequently located correctly, and when the ovaries were identified, they were more or less in the right area also, although slightly high or low. The placenta was drawn inside, outside, and near to the stomach or uterus. The only reluctance in answering or drawing was encountered when the women were asked to draw or give names for the vagina. They denied the existence of any names and often covered their mouths with their *rebozo* (shawl), an action that reflects embarrassment and discomfort. Most, however, did answer eventually when encouraged and reassured.

The only other external parts the women were encouraged to draw were the breasts, essentially to learn the terms used. Breasts were usually represented as small circles, and nipples were rarely indicated.

One of the main objectives of the drawing instrument was to elicit the names used for body parts, not only for purposes of communication, but also to obtain an idea of the relative importance and awareness of the various parts as illustrated by the number of terms that existed. The parts with multiple names were the breasts, stomach, uterus, and vagina. The use of five different terms for the breasts clearly reflects an importance and awareness among women, who lactate and breastfeed for a large proportion of their reproductive lives.

The names for and locations and explanations of the structure and function of the stomach and uterus were confused by many of the women. When the baby was believed to grow in the stomach and not the uterus, the stomach was located differently and the uterus seldom drawn. Thus, the part identified as "where the baby grows" was called not only *matriz*



(uterus) but also *estomago* (stomach), *barriga* (belly or pregnancy), and *vientre* (abdomen, belly, womb).¹

The type of terms given to the vagina reflects a lack of usage of names for the area and the embarrassment associated with referring to it. It is called generally *la parte* (the part). Other terms occasionally used instead were *cuero* (body), *colita* (little tail), and *nalga* (buttock).

Explanations of why certain organs are identified and hold more importance for these women are found in, among other things, women's disease experience and their beliefs about disease. The beating heart is the sign of life and is believed to "move the

blood" and to make blood. It is also believed to be the origin of feeling and emotion and has religious and emotional as well as physiological meaning. Cirrhosis of the liver is common in both men and women due to the constant and heavy consumption of alcohol, and problems of the liver are associated with coronary failure. Tuberculosis is common in the area and is known to affect the lungs; along with other respiratory conditions it is a major cause of morbidity and mortality, especially in the winter months. Blood in the sputum is known to come from the lungs. Also prevalent in this area are numerous parasitic and gastrointestinal conditions affecting the stomach. When discussing susceptibility to disease, the stomach was frequently cited as the most susceptible area. This belief is also related to awareness of the intestines.

The uterus, whether or not confused with the stomach, abdomen, or other organs, was also drawn frequently since numerous health problems occur among these high-parity women. The associations of the uterus with menstruation, conception, and pregnancy are ever present in the women's experience and conversation. A "fallen womb" (*matriz caída*) is a common complaint.

The placenta is seen by the women during the birth process. The waist, kidneys, and abdomen (*vientre*) are cited as areas where one feels menstrual discomfort, as well as aches and pains caused by infections, changes in climate, foods, and so on.

The infrequent inclusion of internal reproductive organs other than the uterus directly reflects the women's beliefs about reproductive physiology, especially their beliefs about conception. The majority of the women explained that sexual contact was necessary to become pregnant, but many felt that between two and ten separate acts of sexual intercourse (*el me usa*—"he uses me") were necessary for a child to begin to form, since conception occurred when the liquid, or blood, of the woman united with the blood of the man in her *matriz*, *estomago*, *vientre*, or *barriga* and since numerous contacts were required to accumulate enough "blood." Some felt that the woman's liquid was always present in the uterus; others said it was formed there during intercourse. One woman said that the woman's ovaries produced the liquid and that a male ovary produced the man's liquid. This liquid, when believed to be blood, was said to change its color to red once it had entered the woman's uterus or had mixed with the blood of the veins. A few women said that only the male produced a liquid and that once inside the uterus it began to grow into a child.

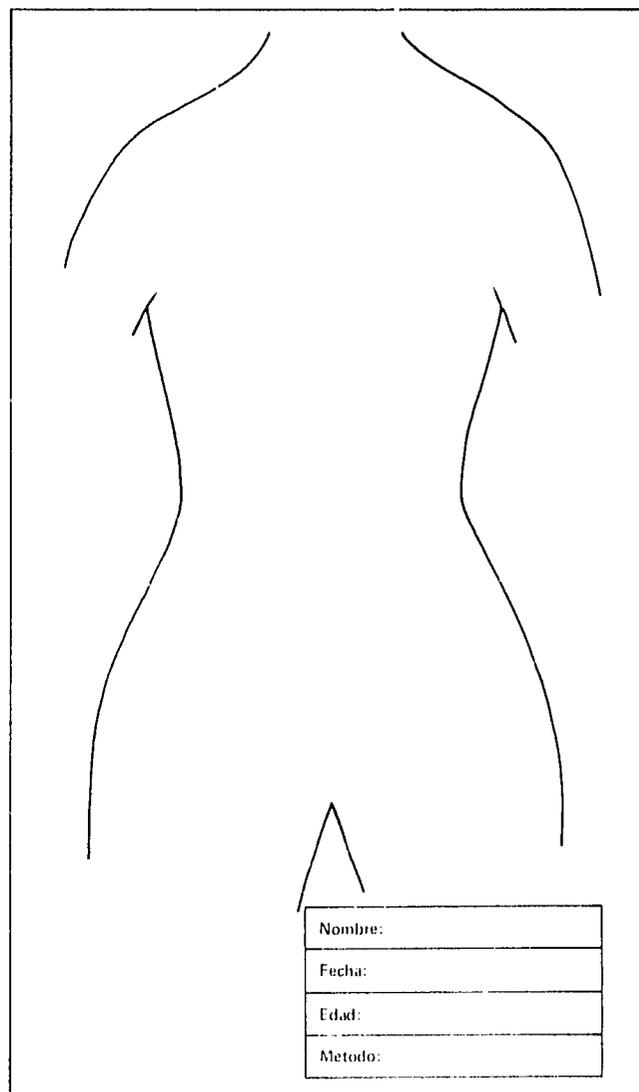
¹Note the ambiguity between *barriga* and *vientre* and that both definitions include alternative meanings of stomach and uterus; thus the actual definition depends on usage.

The instruments included here reflect the general body shape and size of the Indian and Mestizo women. Variations such as a torso-only (shown at right) or a slimmer version with short hair were pre-tested and rejected. It was important for the respondents to be able to identify with the basic body outline; however, it is possible that some groups may respond equally well or better to an "ideal" body type. This must be decided in each case in the field by pretesting the instrument.

One of the most useful aspects of these instruments is their flexibility and adaptability. They are easily modified to the respondent population, and questions can be developed to meet the needs and objectives of specific research, education, or evaluation. In addition, the drawing process assists greatly in stimulating discussion and adding depth to open-ended questions. The instruments were not meant to be ends in themselves, but rather tools to assist in the interview process. The completed drawings can be studied and evaluated individually along with the interview and then in conjunction with the other drawings in order to provide scope and depth to overall conclusions about the population. When the drawings are viewed as a group, they tend to bring out the erroneous folk beliefs of significance, as well as to illustrate correct notions of body structure and functioning. They can be evaluated according to:

1. number of parts correctly mentioned;
2. number of parts correctly placed;
3. correct representation of size and relationship to other parts;
4. correct terminology;
5. number of terms given for any one body part;
6. consistent errors in size, location, or function of a body part; and
7. consistent omissions.

Comparisons of body concepts such as those of respondents with and without access to information or services, of rural and urban women, of different age groups in the same population, of different cultural groups in the same area, or even cross-cultural comparisons can be useful in identifying perceived health problems, evaluating the impact of services, and in guiding research related to the cultural acceptability of health care.



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Project-Oriented Research on Aspects of Women's Knowledge and Experience

Taherunnessa Abdullah and Sondra Zeidenstein

The following sets of questions were developed to influence the content of a centrally administered rural development project intended to direct resources to women organized in village-based institutions in Bangladesh. When the project was initiated, it was obvious that prevalent urban views of rural women were far removed from the reality of their lives. A project based on such views would have little relevance to rural women or rural development and would rapidly deteriorate. In an effort to reveal certain features of rural women's lives as a basis for defining relevant project content, sets of questions were developed and administered, in interviews of one to two hours, to women individually or in groups in different parts of the country. Hypotheses suggested by women's answers were confirmed or modified by project staff posted throughout the country and routinely in contact with rural women. There was no attempt to conduct a rigorous scientific study of rural women. The purpose of these questions was to find out *from* rural women of various socioeconomic backgrounds their experience and knowledge regarding issues the project could address.

One critical area where information was needed to ensure the relevance of training, supplies, and financial support was women's involvement in agriculture. Questions were developed to discern women's level of knowledge and basic practice in regard to postharvest rice production, which is their responsibility within the sexual division of labor. Another short set of questions was developed to ascertain their knowledge about livestock care. Neither of these areas was initially considered relevant to a project for rural women. Because most rural women of Bangladesh are limited by *purdah* from involvement in field aspects of agricultural production, there was little awareness of what they knew about decisions relating to field production. Questions were also developed to ascertain their level of knowledge on these matters.

The national project for rural women was structurally parallel to a project for rural men, which included provision of credit for increasing agricultural production. For women's projects such economic content was new; it raised questions and disapproval on the grounds that control of money was a male role

and that extending credit to women for their economic activities would cause conflict and undermine the family. Two sets of questions were developed to explore the degree of women's involvement in income generation prior to project input.

Another goal of the project was to find ways to link women in villages with family planning and health services. To do so required an initial sense of women's knowledge and practices in these matters. In regard to family planning especially, it was felt that women needed reliable information about contraception, since they were isolated in their villages. To counteract the normative view that women did not discuss their reproductive functioning and therefore might be "corrupted" by such an approach, it was important to ascertain the actual situation.

Another issue that was completely obscured by normative belief was divorce. Awareness of the prevalence and significance of divorce in rural areas was important in understanding rural women's behavior. Questions on divorce and on the village code of good behavior for women were intended to provide a more realistic picture of the social pressures influencing village women's behavior. Such information was considered important in interpreting women's responses to new resources.

Research Questions

Rice Processing

1. Who parboils and dries rice in your bari?
2. Why do you parboil rice?
3. How long do you parboil it?
4. How much heat do you use?
5. How do you know when it is finished?
6. How can you tell when the rice is dried?
7. Do you get a lot of broken rice?
8. What causes "Cheeta dhan" [spoiled rice]?
9. How do you store the rice seed?
10. Do rats and/or insects spoil the seed? Why? Why not?
11. Why do some seeds *not* germinate?
12. How much rice do you get from one maund of paddy?
13. How much *koi*?

14. How much *morri*? [*Koi* and *morri* are special rice products.]
15. Do you get better rice from a *dheki* or a mill?
16. Do you use the mill? Why? Why not?
17. How much does the mill charge?
18. How much time does it take for one woman to process 10 maunds of paddy?

Livestock Care

1. How can you tell if a cow, bullock, or goat is of good breed?
2. What do you feed your animals?
3. How do you care for them?
4. What diseases do they contract?
5. How do you treat them?

Knowledge of Field Production

1. How much paddy land do you own?
2. Where are your plots?
3. How many crops did you grow this year? Last year?
4. How much yield did you get this year? Last year?
5. When were the crops sown this year? When were they harvested?
6. How much paddy did you sell this year? At what price? How much last year?
7. How many laborers did you hire this year? How many days did they work?
8. Do you have irrigation?
9. How much did you pay for seed?
10. How much did you pay for fertilizer?
11. How much did you pay for insecticide?
12. How much is your land worth?

Earning and Saving

1. Do you know women who are earning money? Tell about one.
2. What do you think of her?
3. What is her attitude toward her husband, in-laws, family?
4. Do other villagers approve of her behavior?
5. Do villagers object to her earning?
6. Some women save money. How do they do it? Tell me about one.
7. Where does she keep her money?
8. What does she do with her savings?
9. Does her husband know she has savings?
10. If she wants to do business, how much interest does she charge?
11. If she lends her savings, how much interest does she charge?
12. If she stocks paddy, how does she manage it?
13. If she lends goats, what are the arrangements?

Women's Earnings

1. Who decides how to spend the money you earn?
2. Do you give your earnings to your husband?
3. Have you bought land with your earnings? In whose name?
4. Did you buy ornaments for your sister's marriage? Did you have to ask your husband's permission?
5. How do you spend your earnings?

Menstruation

1. How old were you when you had your first period? Was it before or after marriage? Was there a special ceremony? Describe it.
2. Did you know about menstruation before your first period? If yes, how? If no, who explained to you about menstruation? What did she say?
3. Can you say why we have menstruation? Why does it start? Why does it stop?
4. Do you know anyone who didn't menstruate? Can you have a baby before menstruation starts or after it stops?
5. What different names are used for menstruation in your village?
6. After how many days do you get your period? Do you feel pain before and/or during menstruation? What other feelings do you have? How many days does the bleeding continue? Does it happen this way every month? If not, do you know why?
7. How do you keep yourself clean during menstruation?
8. Is there any prohibition regarding food, movement, daily activities, and religious activities during your period?

Pregnancy

1. Do you have children? How many?
2. What is the age of the youngest? Of the oldest?
3. Did any babies die? How many? Of what? Any miscarriages? What were the causes?
4. When you first got pregnant, how did you know you were pregnant?
5. What words do you use for pregnancy?
6. Are you told to eat any special foods during pregnancy?
7. Do you have any special ceremonies during pregnancy?
8. Do you get any special instructions about how to behave during pregnancy? If yes, what and from whom?

Childbirth

1. How old were you when your first child was born?
2. How old were you when you got married?
3. How many years after marriage was your first child born?
4. Whose house did you give birth in—your mother's or mother-in-law's?
5. Which room in the house was the child born in—the main room, side room, or other?
6. How long were the labor pains with your first child? With the next child?
7. Who was present during labor? During delivery?
8. Sometimes the baby's navel or the mother's womb gets infected after childbirth. What was done in your case to prevent infection?
9. Did you have an infection after childbirth? If yes, how did you take care of it? Who prescribed the medicine?
10. Did your baby have an infection after childbirth? If yes, how did you take care of it? Who prescribed the medicine?
11. How was the baby born? Were you lying down, sitting up, or in some other position? Can you show us?
12. To make the baby come faster, lots of things are done. What was done in your case?
13. Immediately after childbirth, what were you given to eat?
14. Did you take any medicine? If yes, what?
15. Think about what you ate for the first 40 days after childbirth. What did you eat a lot of? What were you not allowed to eat?
16. Did you get special foods to dry up the birth canal? For producing milk?
17. To dry up the baby's navel quickly, what was done?
18. How long after childbirth did you have to stay in the same room?
19. What prohibitions were there about moving after childbirth? Could you move about any time of day or night?
20. Did you nurse all your babies?
21. When did you start nursing after childbirth? How frequently do you nurse your baby? How long did you nurse your first baby? Your last baby?
22. How long were you bleeding after childbirth?
23. When did your period start again after the first child? After the last child?
24. How many more children do you want?
25. Have you ever heard of family planning?
26. Have you ever used it? What method? Did you have problems with it?

Sex

1. Village girls know about sex before marriage. How old are they when they know? How do they know? Don't girls talk about the comings and goings from the husband's room? What do they say?
2. When you got married, did you know about sex? Who told you?
3. What words are used among village women to discuss sex?
4. If there are sex problems, to whom do girls talk?
5. Whom does your husband talk to about sex?

Abortion

1. Many women don't want more children after they have had 7 or 8. Perhaps they can't afford to feed and clothe more children, or they have some other reason. Do you know anyone who has had an abortion? If yes, why? How? What method was used? Did the husband or family know of the abortion?
2. Are there doctors of any kind who give medicine for abortion?
3. What other methods do you know of for abortion?
4. What other reasons might there be for abortion?
5. What do villagers and village leaders think about abortion?
6. Do you know cases of premarital sex, of unmarried mothers, of relationships with men other than the husband?

Divorce

1. How common is divorce in your village?
2. Mention some cases that you know of.
3. What were the causes?
4. Who initiated the divorce?
5. What happened to the wife?
6. What happened to the children?

Village Code

1. Who is considered to be a beautiful girl in your village? What does she look like?
2. Who is considered to be a good girl? How does she behave?
3. Who is considered to be a bad girl? What has she done? Do you think she's bad?
4. What happens to a bad girl in your village?
5. What do you consider to be a good husband?
6. What is purdah? Do you keep it?
7. What does the *moulvi* [village religious leader] think is a good girl? Do you believe the *moulvi*? Does your husband?

Research Priorities: Women in Africa

Achola Pala Okeyo

An Expert Meeting on Research and Data Collection on Women and Development was held in Nairobi, Kenya, during 4-9 December 1978 as a follow-up to a meeting of researchers held in Nairobi in August 1975.¹ The meeting was convened by the United Nations Children's Fund (UNICEF) and codirected by the author and Virginia Hazzard (Senior Programme Officer, UNICEF, Eastern Africa region). It was attended by experts in research on women and development in Africa, including a representative of the African Training and Research Centre for Women (ATRCW) of the United Nations Economic Commission for Africa (UNECA).

Although the discussion took place in the context of African development and the situation of women in the Eastern Africa region in particular, it was felt that the results of these deliberations would have a much wider application to the situation of women in other regions with agrarian-based economies.

Objectives and Scope

The main objectives of the meeting were to develop a conceptual and methodological guide for a baseline study of the position of women in development. This was to be accomplished by reviewing research on women and development in order to evaluate its validity and effectiveness in explaining the position of women and contributing to their advancement; formulating hypotheses and indicators of the position of women; generating questions, based on formulated hypotheses, that would guide future research designed to validate the hypotheses; and presenting a guide for data collection that would discuss research methodology, not simply in terms of techniques or instruments of measurement, but by

identifying factors that should be included in an analysis of the position of women.

Hypotheses for Research

During the International Women's Year (1975) and subsequent years, a number of meetings have been held at international, national, and regional levels at which research needs were emphasized. In most of these meetings, research needs were identified and recommendations for future research presented. It was the consensus of the Nairobi meeting, however, that the identification of research priorities was important but should build upon what is known. This consensus was based on a review of literature on women and development, which concluded that a number of assumptions have been made on the situation of women, but that adequate and comparative data are insufficient to substantiate them. It was felt therefore that it would be useful to reformulate hypotheses suggested by available data and to generate questions that would guide data collection (using primary and secondary sources) to validate or refute them. The group formulated hypotheses based on the literature review, personal research experiences, and a consideration of the minimum knowledge needed to assess the situation and needs of women.

Although there may be a bias in the hypotheses chosen because of research interests represented at the meeting, it was felt that data collected on the basis of such testable propositions would further a scientific understanding of the roles and status of women by moving from the *perception* of their situation (description) to an *explanation* of observed trends and processes (conception).

The hypotheses and questions listed here were formulated by the two working groups during the meeting.

Modernization of Agriculture

Hypothesis. Agrarian reform leads to increased work loads for women, restriction of female employment to the primary phases of the production cycle

¹The following discussion is derived from the *Report of the Expert Meeting on Research and Data Collection, 4-9 December, 1978, Nairobi, Kenya*, United Nations Children's Fund, Eastern Africa Regional Office, Nairobi, Kenya, 1978. Copies of the complete document are available from Virginia Hazzard, UNICEF, Eastern Africa Regional Office, P.O. Box 4445, Nairobi, Kenya.

(in the manual as opposed to the mechanical operations), and devaluation of female labor.

Suggested Questions. What crops are grown? Which are for sale; for home consumption? Who controls cash crops; the production process in cash crops; the income from cash crops? Who makes decisions about land use in farming; disposal of income? Who provides labor; what type and amount (time-budget studies)? What is the breakdown of labor by age and sex in farming (by crop)? What variables govern the use of hired labor?

Hypothesis. Mechanization tends to be used by men, and leads to increased demand on female labor (time spent) and displacement of women by men from their traditional agricultural roles.

Suggested Questions. What is the available technology for use on the farm and in the household? Who uses the technology; for what purposes; with what result? What effect does technology have on production; on social organizations? Who determines what technology is used? What technology purchases are made? What is the impact of farm/home technology on women?

Hypothesis. Land reform leads to loss of landholding and user rights by women and to their economic dependency.

Suggested Questions. Do women's rights to land differ from those of men? Has land reform altered women's rights? What was the previous landholding pattern? How has land reform affected women's cash income? Has land reform increased women's labor burdens?

Hypothesis. Agrarian reform leads to changing legal rights,² including title rights (ownership and disposal), user rights, and disposal rights (sale, mortgage, inheritance).

Suggested Questions. How has land reform affected women's traditional land rights; their ownership and user rights? What legislative measures have been introduced to protect disposal rights? What provisions have been made for women's inheritance rights? What are the rights of women to land under customary law; under statutory law? In a given situation, which law is applicable? What are women's land rights in customary law? Are women aware of their legal rights? Are laws regarding women's rights being observed in practice?

²It was proposed that these changes be examined within both customary and statutory law.

Hypothesis. Agricultural extension services tend to exclude women.

Suggested Questions. What is the breakdown of agricultural extension users by sex? What is the percentage of women farmers participating in agricultural extension? What is the size of their holdings? What are the types (curriculum content) of agricultural extension activities in which women engage? What is the sex composition of agricultural extension staff? What are the career histories of extension workers?

Hypothesis. The structures of marketing and industry undervalue work done by women.

Suggested Questions. What commodities do women market? What is the scale (size) of their marketing? Do they employ other persons? What marketing facilities (i.e., infrastructure) are available to women producers and distributors? How does availability or unavailability of infrastructure affect women's market activities? What is their access to local, regional, national, and international markets? What is women's knowledge of market conditions? Has any market research been done relative to women's production? How do women participate in industrial production; in what types of industries? What types of tasks do they perform? How do they perform them (techniques, structure)? Do men and women have differential productivity? Why do women predominate in lower job categories (socio-economic, cultural factors)? What is their access to support facilities—for example, day care centers or family members who can manage the housework? What is the availability of training opportunities? Are there any legal bars to women's participation in industrial production?

Nutrition

Hypothesis. The nutritional condition of women and children deteriorates with the introduction of cash crops.

Suggested Questions. Does cash cropping decrease land area devoted to food crops? How much cash crop income is used for food purchases? Does family diet change with cash cropping? What factors influence food purchasing habits (e.g., multinational corporations, advertising, social mobility, nutrition education)? What factors influence sales of domestically produced food? What disease patterns are associated with poor nutrition? Are there any correlations between cash cropping and nutritional deficiencies, by sex, age, and life cycle?

Migration

Hypothesis. Male labor migration creates changing social structures and leads to sex role restructuring, psychological stress on women, female-headed households, and changes in household decision-making patterns.

Hypothesis. Female labor migrants tend to find employment in low-paying and demeaning job categories in urban centers.

Suggested Questions. What is the structure and rate of male/female migration? What is the extent of urban-to-rural and rural-to-urban migration? How does this vary by age and sex? To what sectors of the labor market do female/male migrants move? What is the impact of labor migration on family structure and decision-making patterns?

Population and Health

Hypothesis. Increased economic opportunities lead to reduced fertility.

Suggested Questions. What is the extent of population policy in the region? What is the impact of population activities (programs)? What is the relationship between fertility and increased opportunities; responsibilities? How do increased education and job opportunities affect fertility? What is the relationship between access to health services and fertility?

Women's Programs and Support Structures

Hypothesis. Programs designed especially for women perpetuate the sexual division of labor, restrict women to the beginning of the production chain, and channel women into the stagnating sector of national and international economies (e.g., handicrafts).

Suggested Questions. What is the breakdown by sex of work done in community self-help schemes? To what extent are day care services available for working mothers? What is the cost per child? Who supports the organization of women's groups? To what extent are they organized spontaneously? To what extent is there a coordinated, mutually supportive women's movement?

Women's Development Priorities

Hypothesis. Development research and planning have overlooked the priorities of women and their development goals (an evaluation of women's

present situation and their perceived direction for change is a suggested methodology).

Suggested Questions (description of an actual situation). What is good/bad about the respondent's life and why? What could improve the respondent's life? What are the constraints (problems)? How do women evaluate their life situation (criteria)? What are women's views of a good life (individual, group, and community)? What are the factors they consider essential to having a good life? What are the constraints on having a good life? What are the potentials within the existing situation for achieving a good life? If there must be a choice, what would be the priorities?

Socialization

Hypothesis. The socialization process reinforces sex role definitions, affects women's aspirations, determines male/female spheres of power, reinforces male/female decision-making patterns, and determines sex preference for children and family size.

Suggested Questions. What are the prevailing patterns of child rearing (from infancy to maturity)? Do women see a need for any changes in the socialization practices that reinforce sex role definitions and aspirations? Do women see any possibilities for alternative social systems in which sex role definitions are changed? To what extent do women accept the possibility of such alternative socialization practices? How would respondents feel about a situation (society) in which traditional sex roles were interchangeable (especially with men assuming more roles in home and child care)? Who are women's role models? Are there cross-sex models? What forces (individual situations, etc.) affect or determine women's aspirations? To what extent are women aware of the effects of their socialization practices on the aspirations of their own children?

Power and Decision Making

Hypothesis. Modernization has led to the loss of traditional bases of authority and decision-making power among African women.

Suggested Questions. What are the sources of power (social, political, economic)? To what extent do women have access to them? Are women aware of these sources of power? How do women contribute to the definition of group values? What are women's rights and obligations in the reproductive processes and functions? Are women aware of their power potential and how this might be used in their favor?

What social institutions perpetuate women's relative powerlessness compared with men? On what kinds of issues do women feel they can make a decision? What are the methods a woman uses to counter a decision? Under what circumstances do the normative patterns of decision making hold, and when do they not hold?

Guidelines for Methodology

These approaches and questions are not directed toward a single research methodology.⁵ One of the major considerations in undertaking research on women is to remain open to a variety of research methods, particularly innovative ones (such as life histories). Since the data-collection methods used in the past have not generated sufficient information about women's participation in development, it is hoped that openness and flexibility in research methodology will help to overcome some of these deficiencies. The following guidelines were emphasized at the Expert Meeting in Nairobi:

- Comparability should be taken into account whenever applicable by sex, age, rural/urban residence, time perspective, and the quantitative/qualitative aspect of the problem.

- Participatory research/action research is a desirable methodological approach, which should often be preceded by observation and survey research to determine the best method of participation. Data should be collected with community participation for determining specific program objectives; data collection should be followed by action (and should provide a base from which later evaluation can take place); data collection must be anchored in localized goals and emerge from the people.

⁵See also Ulrike von Buchwald and Ingrid Palmer, *Monitoring Changes in the Conditions of Women: A Critical Review of Possible Approaches*, United Nations Research Institute for Social Development, UNRISD/78/C.18, Geneva: UNRISD.

- An interdisciplinary team approach of men and women is strongly recommended. Use local resources for data collection.

- Locally available research and information should be used if it is judged to be valuable.

- Use of local expertise should be a priority.

- A statistical profile should supplement qualitative data.

Participants at the Nairobi meeting felt strongly that a statistical profile of women in each country would be informative in describing at a glance the global situation of women compared with men. Among the suggested information needs for such a profile—which could be gathered using survey techniques and would require fewer resources, are the following: access to services (maternal and child health/family planning, water, credit, education, supportive structures, cash, markets, transport); education; formal sector employment; income distribution; division of household labor by age and sex; fertility levels (from census data or demographic baseline studies); urban/rural informal sector employment; nonagricultural activities (e.g., off-farm work); attitudes toward family size; MCH/FP services (availability, frequency of utilization, and distribution); cash value of household tasks; and heads of households by sex.

ACKNOWLEDGMENTS The following persons participated in the Expert Meeting in Nairobi: Thelma Awori, Patricia Bifani, Freda U. Chale, Jane Cole, Laketch Dirasse, Grace Githu, Nancy Hafkin, Virginia Hazzard, Jane Rose K. Kikopa, Roberta M. Mutiso, Achola Pala Okevo, Francesca Otete, Ayodele Akiwumi Otu, Annie Thairu, Miriam K. Were, Ken Williams, and Serena Zwangobani. Their addresses can be obtained from Virginia Hazzard (see footnote 1, page 401).

Group IV: What Rural Women Know

Circumventing Problems of Accessibility to Rural Muslim Women

Marsha Safai

In 1977, the Center for National Spatial Planning of the Plan and Budget Organization of Iran undertook a study of rural women's work. The *dehestan*¹ of Am-lash, a region near the Caspian seacoast of Iran, was selected because it was representative of an area of intensive agriculture. Within the *dehestan*, two-stage probability sampling procedures were employed: villages were divided into four population strata, then one village selected randomly from each one. We were then faced with the question of whether we should attempt random sampling within villages. We had been advised that this would be problematic, that we could not obtain accurate listings of inhabitants, and that even if we obtained a list, women would often be inaccessible. We were, however, able to circumvent this problem. Two members of our team visited each village a day in advance and met with the village headman (*kadkhoda*) or some other village official, who was able to name every family in the village with little or no trouble. Consequently, from the listing we were able to choose a 20 percent random sample of women. Moreover, we were unable to reach only two of the women randomly selected. In both cases the women were working in fields far from their village, and we could not reasonably follow them there. In all other instances we interviewed the women wherever they happened to be—in the field or working at home.

We had been led to believe that the men would be suspicious of us, would give us the impression

that their wives did little work outside the home, and would feel uneasy if we asked to speak to their wives alone. In fact, the reverse was true. Upon arriving at each village we were always careful to talk to a village official and to several of the men. We explained that we had come to speak to some of the women and that we were interested in finding out what the women contributed to agriculture and how much of the work was actually in their hands.

Most of the men were quick to give credit to their wives and seemed eager for us to talk to them. We were told on several occasions, "Of course my wife works in the field. I could not live without my wife's help. We work together." Our access to the women was due in part to the manner of proceeding. But another important factor was the fact that we used only Persian women for interviewing the village women, and that the only male accompanying us was originally from the area, was familiar with the customs and dialect, and helped with our initial sampling and our meeting with the village officials.

We were interested both in finding out what rural women contributed to agriculture and in quantifying the amount of work they do. A questionnaire, precoded for computer analysis, proved not only workable, but allowed us to devise indexes for each stage of agricultural production.² In Am-lash there are two principal crops, rice and tea. Consequently, a question was asked regarding every task relevant to rice and tea production. Each woman was asked who

¹The smallest administrative unit in Iran.

²The questionnaire took approximately one hour to administer.

helped with a particular task. If she responded that she was involved, we asked how much of the work she did: all of it, more than half, half, or less than half. Throughout the interviewing the women were responsive to these categories. In fact, contrary to opinions expressed prior to our fieldwork, rural women are willing and able to discuss the work they do; they know the steps and the technology involved and give very exact answers. We were able to check the answers in several ways—for example, against the number of other individuals whom the interviewee listed as helping with a particular task. She might say she, her husband, and one other laborer did the weeding. If she followed this by saying she did less than half of the work, her answer was reasonable and needed no further discussion. If, on the other hand, she responded that she did half of this task, the interviewer would question her further. Since our questionnaire had been precoded for computer analysis, we combined sets of questions to construct various stages of rice and tea production. Using the range of scores for each stage, we were able to determine cutting points so that scores could be categorized into three groups: high, medium, and low participation.

We now briefly summarize the findings. Our most important assumption—that women are substantial contributors to agriculture—proved to be correct. With the exception of the first stage of rice production, in which paddies are leveled and

formed, women do considerable work. Our assumption that women's work can be measured also proved to be true. In general, we found that little impact has been made on the traditional division of labor; the tasks that were known to be done primarily by women, including transplanting, weeding, and tea picking, are still theirs.

While the methodology utilized in Amlash may need to be modified in other areas—in different agricultural environments or in areas where traditional religion is more prevalent—the basic approach taken in this pilot study should set the stage for the rest of our study. Our experience in Amlash demonstrated that random sampling is possible, both at the village level and within villages; that men need not feel threatened by a female research team; that it is possible to get reliable information from women concerning what they do and how much of the work is theirs; and that even though women may be illiterate and, at times, need a little encouragement, they are willing and eager to discuss the work they do.

ACKNOWLEDGMENTS My special thanks to all of the staff members at Amayesh, the Center for National Spatial Planning, Plan and Budget Organization of Iran and especially to the Director, Ata Safai.

How and What Rural Women Know: Experiences in Bangladesh

Gudrun Martius-von Harder

My empirical study¹ in Bangladesh during 1974–75 was based on the thesis that rural women provide an important economic contribution that can and should be used for the country's rural development. Remarkably, this economic contribution is almost entirely neglected because it cannot be seen as a real income-earning contribution to the family income. Because of the very limited knowledge of the working patterns of rural women, there is little basis for a

specific supporting program for this target group among city-based political decision makers.

The study focused on the following main questions: (1) In what activities do women in rural areas have an important role? Do they have key functions in specific activities? (2) What demands does agricultural production place on women's labor? What approaches result from this for integrating women into the process of rural development? (3) What consequences derive from these findings for integrating women into social and economic life, and how effective are these efforts?

In the following I outline the kinds of problems

¹The *Triad in ländlichen Bangladesh: Eine empirische Studie in vier Dörfern im Comilla District* (Saarbrücken: Verlag Breitenbach, 1978). *Sozialökonomische Schriften zur Agrarentwicklung*, Vol. 29.

researchers face in undertaking a field survey in a country like Bangladesh. The approach has to be different from what the researcher considered applicable for surveys conducted in industrialized countries. It is especially important to develop an awareness that certain questions definitely tend to solicit inappropriate answers from the interviewees if they are asked in the wrong way, or to evoke a wrong interpretation of information when the field data are being processed.

Rural Women's Knowledge

Women who cannot move freely outside their *bari*² because of existing values and norms cannot answer questions about landed property, quality of soil, percentage of irrigated land, supply and demand in the marketplace, and so on. To be able to classify the households, it was necessary to include the male household head in the survey as a resource person. Using his information it was possible to determine the land-to-man ratio, the degree of household self-sufficiency in food, and the household's marketable surplus.

Questions on types of activities in the household, within the family, and in agriculture were reduced as much as possible to fact-finding questions. For example, it was not possible to ask women how long—in minutes or hours—they have to work to husk a certain quantity of rice. They do not live with watches; their days are divided by the five prayers and the sun's position. An attempt was made, therefore, to observe women performing their tasks and to find out how many persons were involved in the specific work and the time required. Time measurements were recorded for all activities women were involved in, whether in the household or in the fields.

Questions on quantities, frequencies, and women's age could never be asked directly. It was necessary to alter these questions so that a connection to the women's local environment could be found. Efforts were made to trace the village and country history as a basis for establishing dates the researcher was interested in. To determine a woman's age, for example, we asked whether her date of birth was before or after the partition of India (1947) or related it to particular natural calamities. Only an approximate age could be discovered in this way.

²The *bari* is a patrilineal group of relatives with a traditional leader, as well as the residence of families related through the paternal line (three to ten houses around an inner courtyard).

Rural women frequently pay for purchases in kind, using such local units of measure as coconut shells, water containers, and cooking pots. Therefore it was necessary to measure the contents of these receptacles to learn the price of the purchase. For example, the village trader may have been paid two coconut shells of paddy for pottery or jewelry. By knowing the weight of the paddy in the shell and the local market price, it was possible to find out how much the women spent in terms of currency when paying in kind. In this way we found that payment in kind was always higher than payment in cash. The dealers knew this and preferred payment in kind.

It was also very important to know which activities were performed by women and which by men. If women were asked about something outside the scope of their responsibilities, the researcher could not expect a reliable answer. Although women would not hesitate to answer a question about how many bullocks were on the farm, in most cases their answer turned out to be incorrect. On the other hand, it was not advisable to ask men about the number of calves, because the women looked after them.

In many cases, neither men nor women used exact figures. Usually only a quantity of two or three is exactly specified; if the number increases, a quantity that expresses a "big amount" is given. For instance, a woman in a household having more than 30 chickens would say that she has 20 or 30 chickens, although she looks after them every day. If the researcher asks for the age of an elderly villager, he or she will very likely be told that the villager is 100 years old, because "100 years" indicates that this person is very old. Thus, figures usually stand for such expressions as very old, many, a few, and so on. In addition to lacking formal education, rural women obviously do not require the exactness of quantification valued by scientists or even by market-oriented women. If items do not have any specific meaning for the villagers, they will be considered simply as an abstract quantity.

Another example of an inappropriately answered fact-finding question was the information women gave when asked whether or not the comparative payment for male and female day laborers had changed within the last few years. Male laborers, who are usually paid in cash and with meals, realized that their cash payment was not increased during the high-price period of 1974-75 and that, as a consequence, the buying power in terms of rice for their stable cash income decreased. The value of women's earnings had always been lower than men's before recent years, but because they were usually paid in kind and with meals and their payment in

kind was kept stable during the high-price period, their income at that time was in fact higher than the income for male day laborers. Over a time period of three seasons, only a few female employers changed the rate of payment in kind. Although all the women knew that rice prices had gone up, they could not see any connection between higher prices for rice and the rate of payment for day laborers, because they are not very market oriented. This example points up the importance of asking complex and more abstract questions carefully enough to avoid misleading answers from the interviewees, who are not in a position to answer such questions appropriately.

These examples clearly illustrate the difficulties

facing researchers who are unaware of the specific conditions in developing countries when they try to employ the normal research procedures used in industrialized countries. This is especially true if closed questions are used in the questionnaires and interviewers are operating independently of the researcher.

It would seem necessary that researchers working in a new cultural and social environment allow themselves a very thorough pretesting and general study phase before the actual topic is investigated. It is not necessarily the quantity of figures that reflects how good a study is, but rather a very careful interpretation of all results.

Women in Rice Cultivation: Some Research Tools

Joan P. Mencher, K. Karadamoni,
and Janaki Panicker

The primary goal of the project described here is to document in detail the role that women in India play in rice cultivation—as agricultural laborers, supervisors in their family-owned fields, employers of labor, and participants in the agricultural decision-making process. In addition, for laboring households, we attempt to obtain detailed data on the extent to which female earnings provide for the basic household economy—that is, to document the relative proportions of male and female earnings that go for food, clothing, and other household expenses.

This project derives from our previous research on agriculture, rural social structure, and the development process in rural areas in South India. During our earlier work, we were impressed by the ability of rural women, even illiterate ones, to provide us with detailed and accurate data about their recent and past participation in agricultural activities. In planning for the present project, two strategies were available to us. We could have limited the study to a few villages, relying on one another to collect the data with part-time local assistants. The alternative strategy, which is the one we chose, was to undertake a more extensive study and to ask local women to help us in collecting data about themselves.

For landowning households, we are asking a few

illiterate women to keep diaries of all activities pertinent to agriculture, including buying pesticides, discussing questions of land use and labor with their husbands, supervising work in the fields, paying the laborers in their own house compound, and so on. We have already experimented with keeping diaries in several villages and have found the response to vary considerably from village to village. In some cases, women understood our request immediately and were eager to keep a diary; in others, they were somewhat shy and hesitant. Some women had difficulty understanding why we wanted this information. It soon became clear that it is necessary to devote a good deal of time talking to women and explaining to them in detail not only about the project, but also about why their help is so important. Although both landowning and laboring women are used to being interviewed, being asked to do something themselves requires a great deal more explanation. We usually have to explain our project to their husbands, as well as to the women themselves.

We are also asking a few women who say that they do not participate in rice cultivation to keep diaries nonetheless, so that we can check their assertions. We have greater trouble convincing husbands of these women that there might be some point in

their wives' keeping the diaries, and only a few have agreed. Our previous experience suggests that such women often participate a great deal in discussions about agricultural matters.

The most innovative part of our study, which we would like to make available to other researchers, is the charts we distribute to illiterate women who work in the fields (either their own or other people's fields). A sample of both charts accompanies this article. Each woman marks two charts each day for the entire week. On the household income chart (below), the women are asked to fill in sources of income or food brought to the house each day. The first figure on the bottom represents a standard local measure of paddy; the depiction of a rupee note represents cash payment. In many areas, people are paid a certain number of local measures for a day's work. We want to know how much is brought into the house each day by the woman herself, by her husband, and by other household members. Amounts are indicated by vertical strokes, with one stroke equal to one rupee. Our hypothetical family consists of no more than seven working people, including four adults and three children or adolescents. This may not be completely adequate for every household, but according to our household-composition data for Kerala in 1975-77 and for Tamil Nadu in 1970-71, this allowance will fit more than 95 percent of the households.

On the agricultural operations chart (pp. 410-411), she indicates what agricultural tasks she performed (if any) on a given day - in the morning (in the column headed by a picture of the rising sun) and in the afternoon and evening (in the column with a dark box under the sun). The final two spaces are left blank to allow women to enter any agricultural operations not depicted. When the charts are collected, the women are asked to name any operations they have added. In testing the charts in January 1979, we found that women had no difficulty recognizing the pictures of the various operations. In a few villages, we have enlisted the help of local educated males to instruct and guide the women in the beginning.

We hope to have each woman keep the charts for five or six months. So far, the women who have been asked to fill in the charts have been interested and curious. When we explain that very little is known about what women actually do, they all agree. The fact that we are women has helped us in collecting the information.

Obviously, there are many questions about how accurate this approach can be. One method of checking for accuracy, which we use each time one of us visits a village, is to discuss the charts at length with the women who are keeping them. In the course of a long informal interview with each woman (which is spread out over four visits), we also check, without

The household income chart

The household income chart is a data collection tool. On the left, a vertical column contains eight icons: a man's face, a woman's face, a man's face, a woman's face, a man's face, a woman's face, a man's face, and a woman's face, followed by a house icon. To the right is a large grid with 10 columns and 10 rows. The bottom row of the grid contains seven icons: a paddy stalk, a rupee note, a paddy stalk, a rupee note, a paddy stalk, a rupee note, and a paddy stalk. The rest of the grid is empty for data entry.

charts and distributing a new set. Along with spot-checking the charts, we will also spot-check the work done by the village assistant by independently checking the data she has been collecting at two or three different time periods.

Obviously, in spite of all the checks, there will still be room for error. However, having looked at the way census materials are collected, as well as the vast

majority of sample surveys, and having seen the kinds of errors that creep into any type of data collecting in India in which a number of research assistants or interviewers are used, we are convinced that there may not be greater errors using local women than one finds in much other material. From our preliminary use of these materials in three Tamil Nadu villages and one Kerala village, we find that, while

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there might be a considerable difference in the amount of time needed for different women to learn how to fill in the charts, and while women might stop keeping them if they are not picked up weekly, on the whole women have not taken to filling in charts incorrectly. The charts are either filled in correctly or left blank. We now hope that using the village assistants to distribute the charts each week will help to keep up their interest. We have also devised a better method for teaching the women how to fill in the charts, which we hope will add to their accuracy.

ACKNOWLEDGMENTS The project reported on here is titled "Women and Rice Cultivation: A Comparative Study in Four Rice Regions of India—Kerala, Tamil Nadu, West Bengal, and Orissa." It is being financed by the Indian Council of Social Science Research. The funds for Ms. Mencher's participation are being provided by the Research Foundation of the City University of New York and by the Smithsonian Institution.

Research on Women by Women: Interviewer Selection and Training in Indonesia

Hanna Papanek

Interviewers play a crucial role in social research. In large surveys, they are the only contact between researcher and respondent. Their success in reaching out to people affects what is said in response to questions and how much people are willing to reveal about themselves. But interviewers are often the most neglected members of a research team, paid little, trained less.

Between 1973 and 1975, a group of Indonesian and US researchers—all women—collaborated on a study of urban women in the middle strata of Jakarta's population.¹ These women were neither very poor nor very rich, and, although they were long-term residents of Indonesia's capital, what we learned from studying them has broader implications. We wanted to examine a wide range of questions with relatively few women; we therefore chose a stratified sample (146) of married women with children, some employed in paid jobs outside the home, some not. We conducted long, in-depth interviews

with these women, seeking to understand some relationships between selected demographic and socio-economic factors. In particular, we wanted to learn something of the women's ideas and feelings about themselves, their children, and family life.

Even among these urban women, there was little in their everyday lives to make them familiar with the techniques of survey research, much less with the in-depth probing we wanted to do. But for populations, such as women, that have not been well studied in the past, such detailed studies are needed to displace the often unwarranted assumptions that have found their way into theories and methods of social science and into popular beliefs.

We began our study convinced of the importance of field interviewers in this kind of research, and with several basic assumptions about the need to match interviewers and respondents as closely as possible so they could talk freely with each other. First, we took it for granted that only women could develop the desired rapport with female respondents and that they should be married or of marriageable age in a study of married women. We knew that it was unusual for mothers and daughters in Indonesian middle-class families to discuss sexuality, contraception, or husband-wife relationships. We therefore expected that young, unmarried women would not be suitable as interviewers; as it turned out, we did recruit a few for special cases. We also felt that the experiences of childbearing and rearing would be discussed more freely between women who had shared them.

¹Initial findings have been reported in Hanna Papanek, Mely G. Tan, T. Omas Ihromi, Yulita Rahardjo, Ann Way, and Pauline R. Hendrata, *Women in Jakarta: Family Life and Family Planning*, Report to the Interdisciplinary Communications Program (Washington, D.C., 1976, xeroxed) and in *Cultural Factors and Population in Developing Countries*, Occasional Monograph No. 6 (Washington, D.C.: Interdisciplinary Communications Program, 1976), pp. 129-166. An Indonesian translation of the condensed report appeared in *Masyarakat Indonesia* 5, no. 2 (December 1978): 217-259; a translation of the full report is in progress. See also Hanna Papanek, "Jakarta middle class women: Modernization, employment and family life," in *What Is Modern Indonesian Culture?*, ed. Gloria Davis (Athens: Ohio University Press, 1979), and Hanna Papanek, "Development planning for women: The implications of women's work," in *Women and Development: Perspectives from South and Southeast Asia*, ed. Rounaq Jahan and Hanna Papanek (Dacca: University Press, 1979).

Second, we were deeply aware of Indonesia's ethnic and religious diversity and the importance of these differences in everyday life. Hence we included women from many ethnic and religious backgrounds in our sample, as well as in our group of interviewers. We tried to assign interviewers so that they matched respondents in terms of religion and ethnicity. In some cases in which this was particularly important, as among the ethnic Chinese, we even chose a few additional interviewers from the same ethnic group—in this case young, unmarried students. By a joint decision of the research team, non-Indonesian researchers participated only in pre-test and background interviews, not in final field interviewing.

Our experience showed us that the field interviewers could make many important contributions beyond conducting and reporting interviews. The most important of these was in planning the content and procedure of the interviews. For four months prior to the start of fieldwork in early 1974, interviewers attended a weekly three-hour training session. These sessions turned out to be particularly important because very few of our interviewers had previous experience with this kind of work. This was a consequence of the selection criteria we had established. Although university students and young professionals customarily worked for short periods on the large-scale surveys then common in Indonesian social research, married, middle-class women with families did not. The women we recruited for our interviewing team came from three main sources. A few were staff members of a school of social work and some others worked in research institutes, but our largest group came from among women with some education who had participated in mental health courses for nonprofessionals. Initial training sessions were conducted jointly with another research team studying child rearing among Jakarta families,⁷ after we had pooled resources in recruiting suitable interviewers.

Interviewers were paid a token salary and transportation allowance for attending the training sessions, but they were highly motivated to attend by their interest in the research itself. In the meetings, we discussed the kinds of information we hoped to obtain, why we considered it important, and how we expected to use it. The interviewers' participation in the study from its inception assured that they understood the reasons behind a particular set of ques-

tions, the order in which they were arranged, and the need to follow through with nondirective probes.

Interviewers often suggested how questions could be worded to avoid giving offense or to encourage women to be most explicit. Sometimes they made it clear that their own standards of proper behavior would not permit them to ask questions in the way the researchers first suggested. For example, in our question about ideal family size, we had originally intended to ask women whether they had "enough, just the right number, or too many" children. Several interviewers pointed out that if a woman felt her family was too large, she could not be expected to say so. In fact, she might fear she would somehow lose a child if she said she had too many. It turned out that quite a few women spontaneously replied that their families were too large, but as this question was finally worded, it took a composite form and was posed fairly late in the second session of the interview:

You told me that you have [] children now. That is correct, isn't it? Is that about the right number now, or not enough? How does your husband feel about the number of children you have? Would he like to have more? How does your mother feel about it? How does your mother-in-law feel about it? How many children did you want to have before you got married?

This type of long, composite question often led to discussions of women's complex feelings on the subject, feelings that might not have been stimulated by short, rapid questions checked off on an answer sheet. In this free-flowing interview format, the interviewer was told not to interrupt the respondent but to guide the discussion back to the next question when she was finished. If a question was discussed out of order, it was not deferred; answers were written down as they were given. Throughout the interview, there were many opportunities to double-check earlier information by referring back to it and continuing to probe further.

The complete interview covered 40 composite questions, moving from simple background information to complex, thought-provoking, open-ended queries about women's attitudes toward ideas, persons, and events in their own lives. Interviewers had to learn how to structure the sequence of questions and answers, letting a woman speak about something even when it was not the next point in the Interview Guide. Judging from the transcripts, this worked well, probably as a result of very high Indonesian standards of tolerance and politeness.

Interviewers also had to learn to record this information and respond to it appropriately. This was a new skill for most of the women who had had no

⁷See Caroline Strout, Betty Hardjawan, and W. Edith Humris-Pleyte, *Young Javanese Children in Jakarta: Maternal Perspectives on Child Rearing*, Report to the Psychiatry Department of the Faculty of Medicine, University of Indonesia in Jakarta, 1977, seroed.

previous experience as interviewers in research or social service agencies. We asked them to use small notebooks to write down what respondents said, using the Interview Guide only to refresh their memories. They were asked to avoid displaying the Guide (a set of mimeographed pages) except at one specific point. Respondents were shown a list of contraceptive procedures and products, giving common Indonesian brand names, to elicit a detailed history of contraceptive use. In asking interviewers to take careful written notes of respondents' answers, we were greatly helped by the prevailing custom of taking detailed notes in classrooms, at group meetings, and in refresher seminars. Only one interviewer, trained in its use, preferred a tape recorder. Although others did not want to use one, she reported no difficulty in having respondents accept it.

As soon after each visit as possible, each interviewer was required to type up her notes (or arrange to have someone do so) as close to verbatim as possible, following the sequence of the actual interview. A face sheet, to accompany the completed transcript, was filled out by the interviewer after the first session to indicate basic data for preliminary analysis and to remind her of points already covered.

Payment for each completed interview reflected write-up time, as well as interview and travel time, at rate comparable to the interviewers' alternative earning opportunities. Once interviewing began, weekly meetings continued so that completed work could be turned in and paid for, and new assignments made. This was also the occasion for private discussions about the work of individual interviewers, requests for return visits to fill in missing information, and consultation with others about particular difficulties. A member of the interview team became supervisor, handing out assignments, receiving completed work, and reviewing interviews for completeness and adequacy. Occasionally, members of the research team attended these meetings for special discussions.

Although the language of the interview could vary according to the interviewer's ability and the respondent's preference, final transcripts had to be in Indonesian. Expressions from other languages, such as Dutch or Javanese, were liberally used and included in the transcript. Most interviews were, in fact, conducted largely in Indonesian, but the ability to share a regional language reinforced the importance of a proper match between interviewer and respondent. Another aspect of the importance of proper matching was shown in the training-group discussions about establishing a feeling of familiar informality (*keramahtamahan*) during visits to respondents. Javanese expressions conveying nuances

of feeling and behavior were another important topic of discussion, again illustrating the role of language.

At the same time, we had to caution interviewers not to put words into the mouths of respondents. We regularly used role-playing to test interview situations and specific questions during the training period and to overcome the fears of some interviewers. Some less confident women asked whether they could conduct interviews in pairs, but we discouraged this because we thought two strangers, instead of just one, might overwhelm some respondents. The best way to give interviewers confidence was to involve them as closely as possible in preparing the final Interview Guide, so that they would feel responsible for implementing work they had helped to plan.

When interview transcripts were handed in, all interviewers were also required to hand in their raw notes and keep no copies of transcripts. The promise of anonymity had been particularly important in securing the willingness of respondents to be interviewed. Most wanted specific details about the study before they would consent to a visit, but our overall refusal rate was very low. We usually approached women through existing networks; once a woman had been contacted through a get-acquainted visit, she almost always consented to participate.

Although most of our interviewers had initial difficulties with the idea of a long, intensive, and probing interview, almost all adjusted very quickly to our requirements. Excluding initial contact visits, the average total interview time was 3 hours and 20 minutes; the shortest interview lasted 90 minutes, the longest 6 hours. The usual time was about 2 hours for each of two sessions, usually at the respondent's home, although some employed women asked to be interviewed at their place of work. Fewer than one-third of all interviews were conducted in a single long session. Considering the time spent locating a respondent at the address given, interviewing her, and writing up the final transcript, an interviewer probably spent an average of 10 hours per respondent, excluding travel time.

We also asked interviewers to write down their comments about the respondent's house, the behavior of children or others present in the home, and any additional points they wanted to add. However, since we did not provide concrete, written guidelines for these observations and had spent very little time on this point during the training sessions, very few interviewers succeeded in doing this well.

Some respondents used the interview situation to discuss personal problems with the interviewers. We neither encouraged nor discouraged this but asked each interviewer to make sure that interview

questions were completed in a reasonable time and that she make no commitments she could not personally keep.

Since the project was fully collaborative among US and Indonesian researchers, we agreed beforehand to provide complete duplicate sets of all interview transcripts, punch cards, and computer printouts so that they would be available in both countries to the three senior researchers.

Sexuality and reproduction were important topics in the interviews, along with education, child care, earning opportunities, household budgeting, and so on. Although the interviewers felt comfortable with all other aspects of the interview, we found that their knowledge of reproduction and contraception was quite uneven. This was also true for the young women who later coded the interview materials for initial computer analysis. Since we felt very strongly that interviewers and coders could not work well if they did not understand the subject matter themselves, we organized discussion groups on reproduction and family planning. Whenever possible, actual products were brought to meetings to be examined by those who were interested, and we also showed films on reproduction and family planning. Although we were careful not to make these discussions too personal, most of the women were eager to discuss specifics, once bolder members of the group had begun asking questions.

In summary, the experience of our research team shows the importance of field interviewers in shaping the content and approach of research among people much like themselves. Other researchers have had similar experiences. For example, an interdisciplinary group of women researchers developed a "photo-interview kit" with the help of some "key informants" among market women, factory workers, and domestic servants in Lima, Peru.³ These photographs of women at work and at home were later used with a structured, open-ended questionnaire in interviews with 200 women from the same population. These researchers tried to understand the "subjectivity of informants" and decided to use visual materials for people who might have difficulties with language, often because they were bilingual. We achieved some of the same goals within the population of Jakarta by matching respondents and interviewers by age, marital status, language, religion, and ethnic group.

The collective, participatory style that we developed in our training group resembled modes of organization already familiar to Indonesian women from other settings, such as clubs, neighborhood prayer groups, and informal savings associations (*arisan*). Our personal experiences as women brought us together in spite of national, cultural, ethnic, and religious differences, although comparable educational and class backgrounds also played a role. Researchers coming from the middle or upper strata of their societies must usually pay special attention to ways of overcoming the barriers of class and educational differences, whether in their own or other nations. Imaginative new research tools, such as those developed by the researchers in Lima, become even more important when such differences must be overcome.

Our Indonesian study illustrates three major points of research methodology: (1) in-depth interviews require particular care in matching respondents and interviewers in terms of age, marital status, and child rearing experience, particularly when the interviewers have not already been extensively trained; (2) in a society where ethnic, religious, and language distinctions are important in everyday life, interviewers and respondents should be matched as closely as possible to avoid breakdowns in rapport; (3) the common experiences and shared interests of women studying women make it easier to develop a collaborative style of work that benefits the research process.

In more general terms, research by women on women is an important step toward ridding social science theories and methods of the often unconscious but tenacious assumptions about women that diminish everyone's ability to deal with important issues in research and social policy.

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³See Ximena Bunster B., "Talking pictures: Field method and visual mode," in *Women and National Development: The Complexities of Change*, ed. Wellesley Editorial Committee (Chicago: University of Chicago Press, 1977), pp. 278–293.

Group V: The Voice of Rural Women

Profile of a Female Agricultural Laborer

Leela Gulati

This profile is part of the author's study of low-income working women. The author adopted the methodology of in-depth case studies in seeking answers to questions regarding employment, consumption, savings, and investment. The events discussed in the profile occurred in India during 1977.

Kalyani, a 35-year-old agricultural laborer belonging to one of the scheduled castes,¹ lives with her husband and five children in a small thatched hut in a squatter settlement on the outskirts of the city of Trivandrum, capital of Kerala State.

Kalyani collects her wages in cash. She generally earns Rs. 7 (Rs. 1 = US\$0.125) a day, whether she is working in the fields or on construction. Her children usually know where she has gone to work and can guess when she will return home. If Kalyani has gone for transplanting or weeding, she is back around 5 P.M.; if she has gone to a construction site, she returns home around 6 P.M. Vani, her second daughter, aged nine, often waits for her mother at the road junction near the squatter settlement where there is a small market. She carries a small basket for rice and groceries and two bottles, one for kerosene and another for coconut oil.

Since Kalyani has mortgaged her ration card,² she must buy all her rice in the open market, where the price (Rs. 2.50 per kg.) is currently about 50 per-

cent higher than at the fair-price shops. Two years ago, the free-market price was more than double that of the fair-price shops. Since she buys 1 $\frac{3}{4}$ kg. of rice every day, this purchase alone costs Rs. 4.40.

Her daily shopping needs also include fish for Rs. 1.00-1.50; coconut oil for 25 paise (Rs. 1 = 100 paise); raw coconut for 40 paise; onions and spices, including tamarind, coriander, and chillies, for 50 paise; and kerosene for 25 paise. She spends a total of Rs. 7-8 per day, depending on whether soap has been included. She buys a bar of soap every third day. The days both Mosha (her husband) and she are out of work, she does not buy any fish. Although the grocer and coffee shop give her credit, the fish vendor does not. Most of what she buys is used in preparing the evening meal for the entire family; there is always a little cooked rice and rice gruel left for the children's breakfast and lunch.

From her daily wage of Rs. 7, Kalyani has to pay 60 paise for her breakfast and 50 paise for her midday snack and tea. On working days when she is not doing transplanting and has a full rice lunch, she has to pay Rs. 1. She must also purchase the quantity of betel leaves and nuts she consumes daily. While on other days she spends 50 paise on betel leaves, she spends almost twice this amount on transplanting

and wheat from a fair-price shop at a cost usually well below the market price. Mortgaging the ration card is illegal but commonly resorted to for raising a loan, which, though nominally interest-free, carries a high imputed interest charge. See Leela Gulati, "Rationing in a Peri urban settlement: Case study of a squatter habitat," *Economic and Political Weekly* (19 March 1977).

¹Members of the scheduled castes belong to the disadvantaged caste groups listed for preferential treatment in a schedule of the Indian Constitution.

²Under the system of food rationing in Kerala State, every household has a ration card, which entitles it to buy limited quantities of rice

days. Thus, she is usually left with only Rs. 5 from her own wages for daily shopping. On the days she buys soap or talcum—the latter is a must even in the humblest of cottages, for men, women, and children dust themselves liberally with it after bathing—she must cut down on her daily food purchases.

On the days Mosha has work, however, he gives Kalyani Rs. 5 or more. Indeed, on days both of them have work, the household can be run smoothly. Problems arise because work is not available every day for both Kalyani and Mosha. For every day Kalyani works, she spends at least one day without a job, however hard she may try. When Mosha was in good health, he fared better: for every day he went without work he had two days of employment; so on average, at least, one of the two was always working. In practice, there are days when both are with or without work, creating problems of management that Kalyani seems to find very hard to solve.

To the delicate question of why Mosha spends more than twice the amount Kalyani spends (Rs. 5 compared with her Rs. 2 every working day), Kalyani's answer is emphatic. Mosha is a man and should have some freedom to spend his money as he likes. He does a far more strenuous job than she and does not get home until 8 P.M. So he has to eat a lot more, and oftener, outside. Moreover, all men in the neighborhood eat out on working days. Mosha does not drink and only smokes bidies. The whole neighborhood considers him extremely well behaved. Still, the fact remains that Mosha spends almost half of his wage eating out.

This year the monsoon came early and in force. The first showers of the season were so heavy that Kalyani's thatched roof, which had not been replaced for two years, and part of the walled structure gave way. Kalyani's immediate concern is to repair the house and move back as quickly as possible. If she had not already mortgaged her ration card, she could pawn it now to borrow Rs. 100 to buy new dried palm leaves and some bamboo and areca poles.

Employment has been fairly steady for both Mosha and Kalyani. Lately, Mosha has been getting work four days a week. Kalyani got regular work in construction for nearly a month before the monsoon season, and then she got work as an agricultural laborer doing transplanting. Even so, they have very little money saved with which to rebuild the house.

Evidently, Mosha had other priorities. He felt that the family had done without new clothes for over a year. They bought nothing for Onam (the most important Hindu festival in Kerala) of 1976, and he and Kalyani were embarrassed about the state of their clothes. So Mosha bought two lungis (wrap-around skirts worn by both men and women) worth

Rs. 12 each and material for a shirt for Rs. 15. He also paid the tailor Rs. 3.50. Kalyani was upset that Mosha spent his money on new clothes instead of doing something about their roof. She felt that moving back to her own house was much more urgent. What can she tell Mosha now? She tries to take on work as often as possible, whether it be cutting lemon grass, collecting medicinal herbs, or carrying bricks. Now that there are no jobs in the fields or in construction, she goes as often as possible to carry bricks. This work fetches only Rs. 4-5 a day. She even joined one of the several chit funds, an informal mutual saving society run by a carpenter's wife in the squatter settlement. The woman promised to give Kalyani Rs. 30 after she had paid her first four installments of Rs. 3 each. Kalyani dutifully paid her installments, but the woman could not advance her the Rs. 30 because some other members of the chit fund had defaulted. The squatter chit-fund organizers continually face the problem of default. So Kalyani quarrelled with the chit-fund woman and withdrew her Rs. 12, part of which she used to buy jaggery and black pepper for making a drink to treat her cold. Naturally, the prospect of redoing the roof receded somewhat.

If Mosha had put all his money aside instead of buying clothes, they would certainly have been closer to their objective. They have been able to buy only half the quantity of palm fronds needed and must somehow quickly raise the extra funds to buy more palm leaves and other materials. They have already stayed with Nagamani (their neighbor) longer than they had expected.

On days he gets a job, Mosha has to work hard for such long hours that when he comes home he is too tired to think about anything except sleep. He is concerned about whether the truck will come for him tomorrow, but he tries not to worry about the distant future. Unlike Kalyani, who is always looking for work, however ill paid, Mosha is content to spend his unemployed days whiling away his time in the house or on the street corners.

To the neighbors in the squatter settlement, however, there is little difference between Kalyani and Mosha. The neighbors feel that both of them live from day to day and do not worry about tomorrow. They feel that most of their money is spent on eating out either by themselves or with their children and that they are never sufficiently concerned about the future. So, when their roof collapsed, there was not much sympathy for Kalyani and Mosha in the settlement. If one tries to explain that Kalyani is much more concerned about the household than Mosha, the neighbors laugh it off by saying, "But Mosha is not a woman." The fact remains that Kalyani is much more hardpressed in every way.

Anita: A Mayan Peasant Woman Copes

Mary Elmendorf

Chan Kom, the site of this case study, is a rural Mayan peasant village in Mexico's Yucatan peninsula. Ten years ago the village was reachable only by jungle trails, but today it is only 20 minutes by road from the famous ruins of Chichén-Itza and only a few hours by bus from Can Cun, the newly developed luxury resort area on the Caribbean coast. There is now daily bus service to the small city of Valladolid, the area's commercial center and site of its regional hospital and of the Coordinating Center of the National Indian Institute (INI).

Since 1935, Chan Kom has been the head of a *municipio* (county) consisting of 15 other outlying villages with a total population of over 3,000. According to the survey we conducted in the village in December 1978, there were 95 households in Chan Kom. The population was 623, of which 307 were under 15 years of age and 49 were aged 50 or over.

The majority of Chan Kom villagers are swidden agriculturalists who are dependent for their subsistence, to varying degrees, on the production of maize by slash-and-burn cultivation. Most of the lands used for agriculture are communally owned (*ejido*) lands that were assigned to the village during the Mexican Agrarian Reform.

Chan Kom is well known to most social scientists as one of the sites of Robert Redfield's classic study on the *Folk Culture of Yucatan*. Excellent ethnographic material that covers a period of more than 50 years is available, but the roles of women are discussed only through the eyes of men, either the ethnographers or their male informants. During the last ten years I have been trying to listen to women and let their voices be heard. By learning about the women in this village—a village in search of "progress"—perhaps we can understand better the needs and wishes of rural women and the ways in which they can help bring about a better life for themselves and their families.

Anita is one of several women I interviewed in depth in 1971–72 during the early stages of my research on the role of Mayan women in change.¹ This research has continued and has involved at least semiannual field visits and specialized studies, as well as continued longitudinal studies of the original women, their daughters, and their grandchildren.

At 38, Anita has had ten pregnancies and seven

living children. Anita nearly died while bearing her youngest child, Maria, in March 1976. "I was unconscious for three days," she told me. "Demetrio was sure I was dead." Anita's husband, Demetrio, 56, is a subsistence farmer, but supplements their crop of corn and beans by working part time as a salesman for his brother, by baking bread, and by helping in local construction or in any light odd job. Demetrio asked Anita to marry him when she was 14, but her father would not let her marry until age 17. Anita recalled, "My father needed me to run the house for him. But Demetrio agreed to pay for my food for three years so that no one else could have me."

Anita has a wonderful relationship with her children. She is very relaxed and playful with the young ones. They all know games and songs, even the youngest, and with the older children there is a feeling of comradeship. Rosita, the oldest daughter, who married three years ago at 17, spends as much time as possible with her mother.

When 16-year-old Emiliano was 12 and finishing the sixth grade of primary school, Anita said to me:

Emiliano is so bright. I do want him to go on studying, but Demetrio doesn't want him to. "If he learns," he says, "he won't want to come back and work the *milpa* [corn field]. We will lose him if we send him away."

Anita went on:

I also am afraid he won't come back, but he wants to keep going to school just like I did and I think he should. He is bright and he will work.

Emiliano wrote a letter applying for a scholarship to the Escuela Técnica Agropecuaria (ETA), a newly opened coeducational agricultural vocational school. After the scholarship was approved there was concern over the cost of transportation and living expenses. Demetrio kept saying that it was impossible. He needed Emiliano to help with the *milpa*, and there was not enough money to pay for his room and board. Everyone pitched in to get the last pesos needed, however, and Emiliano entered school in the fall with enough money for his first month's expenses.

Anita sewed more embroidered dresses and blouses to sell, while Emiliano and the younger children made and sold hammocks—and everyone took care of the turkeys, hens, and pigs. Emiliano finished the first year of school with good grades, although it was still hard for the family to find the extra cash each month.

¹An expanded version of that research was published as *Nine Mayan Women: A Village Faces Change* (New York: Wiley, 1976) and *La Mujer Maya y el Cambio* (Mexico: 1973).

At the village fiesta in November of Emiliano's second year at school, I did not find Anita sitting with the other mothers and daughters around the dance floor. Instead, she was seated behind a low table covered with a large embroidered cloth, selling *atole* (a drink made with ground corn) and *tacos*. Her stand was off to the side, away from the entrance to the dance. I stopped to talk with her several times.

"I'm making money so that Emiliano can stay in school," she told me. "I can watch the dancing from here." The next day I learned that Anita was also selling *aguardiente* (a cheap alcoholic drink) from beneath her little table. No alcohol is sold in Chan Kom, except for beer during fiestas, but Anita has kept up her business on the side. "I sell only to people from the *rancherías* [small communities]. It's a service to them; because they can't get to Valladolid. I make more money this way than selling just *atole*. I can't make enough money selling embroidery."

In June of 1979, Emiliano finished his third year at ETA, and he has been recommended for the position of *promotor*—village worker—with the National Indian Institute. Anita is very proud:

Last summer I was so worried. Emiliano was making fun of his little sister, who spoke only Maya. He was ashamed of being Maya—but now he will be working in villages with Maya-speaking, *campesinos* [peasants]. I am so proud.

Anita smiled and went on:

But now, Esperanza is finishing primary school and Demetrio says girls don't need to be educated. She can just get married like Rosita. This makes me sad. She's brighter than Emiliano, you know.

Last winter, Emiliano brought back details of the story about a boy at ETA who had raped five of the girl students. Anita expressed anxiety: "If we had relatives in Valladolid, then Esperanza could live with them the way her friend Leyde does and go to ETA, but I cannot let her be *desgraciada*—what can I do? She wants to go on studying so much."

On my last day in Chan Kom I had a long talk with Anita. "I'm so sorry Esperanza can't go on to school," I said just before leaving. Anita replied:

But she is going on. I've worked it all out. Even Demetrio is happy. She's going to Merida. She's going to live with the daughter of my *comadre* [godmother], and Elena is going too. Maybe Esperanza can learn to type and work in an office in Merida, or maybe she can come back to the village to help do a study like Felicia did with you and Debbie last year. I'd like her to earn money easily that way.

Anita now has only three children at home. Fermín, the other son, now 12, is not the student his

older brother was. This pleases his father since Fermín likes to help work in the milpa. But he does not like to work alone; he wishes one of his younger sisters were a boy who could go with him to gather wood and work the fields. In addition to Maria, six-year-old Lira also lives at home. Anita told me:

Lira takes good care of little Maria, and when Lira starts school Maria can play with Rosita's baby while I do my sewing. She hasn't been as much work as the others. Do you remember how I was when I was pregnant with her?

Anita became very animated as she demonstrated what had happened.

They put me in my hammock like this. I had my head lower than my feet. Much lower even, and my brother helped them massage me and he gave me an injection—for *tuorza* [strength], he said. The baby slipped back up. I could feel it, and then they turned the baby and Maria was born. At first they thought she was dead—and that I was dying—but Dona Anastacia [the midwife] brought a pail of nearly boiling water and they put the baby in it, and then she cried.

The fright of Maria's birth and the difficult miscarriage she had experienced in 1974 have made both Anita and Demetrio afraid of another pregnancy. They are a loving couple who are still looking for the appropriate birth control technique. They are proud that coitus interruptus combined with rhythm has worked for three years, but they keep looking for more information about a safer, more reliable method. Demetrio is extremely frightened that Anita might die in childbirth, since she has been so near death twice. "He takes care of me," said Anita with pride.² "He even tried the *hule*, the condom," she explained, "but he's not sure if he likes that."

Anita and Demetrio were one of the couples most interested in discussing vasectomy with Dr. B., a visiting Maya-speaking American, who was proud to explain his operation. Anita recalled:

Demetrio was really interested. He loved talking to Dr. B. and his wife. He wishes he was sure that he would be strong enough to keep working his milpa. Do you know a Mayan peasant who has had the operation? Americans don't work as hard as we do and they are different, aren't they? Ha!

When Anita rode over with me to interview the midwife, Dona Anastacia, she was full of information. I was particularly interested in what she had to say about the village leader, her father-in-law.

²More and more wives talk about how their husbands "know how to *cuidar* them"—take care of them. For some it means abstinence; for others, coitus interruptus, and for a few, rhythm. There is a strong feeling of male responsibility in parenting.

Don T. explained about coitus interruptus to his sons, and about rhythm too. That's what he used with his second wife, Dona L., all those years, and she had only two children, 13 years apart. We understand how the woman's uterus is opened each month and you have your *negla* [menstruation], and that's when the man's seed goes in if you're not careful for five days before and five days afterwards.

It was Anita with whom I was first able to discuss menarche. In much of Middle America the belief is prevalent that it is a sin to tell young women about menstruation before their first period. When I asked Anita whether she had told Rosita, she said:

I didn't tell her. She was about 12 when she had her first period, and she cried and said, "What am I going to do? What's happening to me?" I asked her what was wrong and she said her clothes were blood stained. I told her, that's what happens to a woman, before, she could go around with the boys, but now she couldn't. She had become a woman, and I told her that little girls don't know about these things, but you know and now you are a woman, now, you are our age.

But then I asked Anita whether, in all those years of living so closely together and doing the laundry in the wooden trough, Rosita had never seen blood stains on Anita's clothes. She replied, "No. During your period you wash your clothes apart from the other clothes." Not until a much later conversation, however, did I clearly understand Anita. She later told me:

During all my married life I have only had one period between my children. Now I have regular periods. Is there really a way that women can keep from having more children and live with their husbands? I've always wondered how Ana and Jorge have managed to have only one child. I've wanted to ask Ana, but I had *vergüenza* [shame].

I found that many of the Mayan peasant women had never had a menstrual period between pregnancies, and others only one. Most nursed one and a half or two years, some longer. "Some women would rather be pregnant than have their monthly periods," said Anita, and a number of other women confirmed this.

In 1970 when I had asked Anita whether she wanted more children, she had told me she would give anything not to have more, so that she could work and take care of those she had. But when I had asked the same question with her husband present, she had said nothing and Demetrio had answered with the usual phrase, "Who knows how many children we will have?" I had told Anita about the private clinic in Xochenpich and had offered to help her and Demetrio get there if they wanted to go. But it

was very clear that she was ready and he was not. Since that conversation, Anita has had four pregnancies—two miscarriages, one early and one at six months with complications—and two daughters.

In November 1976, when I was back in Chan Kom for a brief visit, Anita asked me whether I could take Demetrio and her to talk with Dr. B., who had now moved his clinic to Piste, much nearer. After about 30 minutes with the doctor, they came out, serious but smiling. The nurse filled a prescription for oral contraceptives. I expressed surprise that they had chosen the pill. Anita explained later:

Dr. B. told us about the different things. He told us how they worked—all of them. And he thought I should have an *aparato* [IUD] or, even better, the *ligadura*—my tubes tied. He explained that the pill would not be very good for me because of those *manchas*, liver spots, on my face.

In that case, I asked her, why did she get a prescription for pills? She responded:

Well, first Demetrio said let's get the pills because they are the cheapest; and I thought maybe the *aparato*, but I wasn't sure. And I'm afraid of the operation—cutting into my abdomen. No, that wouldn't be good.

We talked also about the *tipté*—that important fictitious Maya regulating organ, about the size of a small tomato, supposedly located just behind the umbilicus. The fear of disturbing the *tipté* seems to be a key constraint to acceptance of sterilization among Mayan women. Anita explained in detail how the *tipté* had to be exactly in place or you would feel awful: "You can't eat, you feel dizzy. Some people can't have children at all if the *tipté* is out of place."

Anita had told me that she was taking the pills because, as she confessed much later, "I thought you'd be disappointed if I didn't, but I never did. I was afraid of them. And I'm still afraid I'll get pregnant." Recently Anita and I were at the clinic in Valladolid, where Dr. B. is now in charge of family planning. He was delighted to see Anita again after I reminded him of her visit more than two years earlier. And when he asked whether she was still taking the pill and about how it had affected her, she launched into rapid Maya about how her husband was taking care of her.

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