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THE EFFECTS OF FEMALE INCOME ON CHILD NUTRITION
AND
POSSIBILITIES FOR INCOME GENERATION IN INDIA

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EFFECTS OF FEMALE INCOME ON CHILD NUTRITION AND POSSIBILITIES
FOR INCOME-GENERATION IN INDIA

SCOPE OF WORK

Purpose: To provide information to the India Integrated Maternal Child Nutrition Project (#386-0476) design team regarding the impact of increments to income earned by females and to provide the team with a general summary of possible income-generating projects for women which may be applicable to India.

Background: During 1979, the Asia Bureau's Office of Development Planning (ASIA/DP) has become increasingly interested in Agency discussions regarding household income and ways to increase it. A women's income-generating component was introduced by Maureen Norton of ASIA/DP's Evaluation Division during AID/Washington's review of this project (PID APAC) as a way to increase household income, thereby improving child welfare. Norton's proposal was supported by the project officer and the project design team leader, Maryanne Anderson. As part of her International Development Internship training in ASIA/DP, Sara Schwartz agreed to analyze the current literature on the topic and to conduct interviews with experienced professionals in the field. The final document was to be completed within two months.

Methodology:

1. General literature search of materials dealing with relationship between nutrition and income.
2. Interviews with individuals who have been involved in women's income-generating projects and individuals who have participated in nutrition projects or studies which have included household income, expenditure, and intra-family distribution data.

Final Report: The report will attempt to answer the following questions:

1. What are the effects of increments to income on child welfare, specifically nutritional status?
2. Are there any differences between the way males and females spend increments to income and, if so, how do those differences affect child welfare?
3. What kind of income-generating projects would be appropriate for women in India?

4. Which resources are already present in India for the design team to consult regarding specific income-generating projects in specific geographical locations?

5. What would be appropriate guidelines for a research component which would be designed to investigate the impact of increased female income on child welfare?

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EXECUTIVE SUMMARY

In the past, nutrition projects have emphasized supplementary feeding and education programs. This type of assistance does little to encourage family self-sufficiency and can not provide a permanent solution to malnutrition in the Third World. Other alternatives must be explored. Providing employment to the mothers of malnourished children may increase the capacity of families to maintain themselves, develop their own skills, and make independent welfare decisions.

Evidence indicates that increased household income leads to increased family nutritional status. The most vulnerable family members (preschool children and pregnant and lactating mothers), however, do not necessarily benefit even though the family as a whole may be better off. Their welfare may depend on the source of income. Some studies reveal that mothers spend a greater portion of their incomes on family necessities than do fathers. Other research indicates that family well-being declines when mothers are deprived of their traditional sources of income even if the fathers' incomes rise proportionally.

The poorer the family, the more likely the women will contribute goods and services or wage income to the family. Income-generation projects could provide job opportunities to Indian women based on their present activities in many traditional and non-traditional fields. This type of employment can be designed to be compatible with cultural restrictions that limit women's activities outside the home. The women themselves should identify the type of work most appropriate for their own social environment. Some successful Indian income-generation projects have emphasized food production, processing and marketing; handicrafts; and textile production. Women have been trained to perform small-scale industrial tasks and have also worked in rural construction projects. Entrepreneurial skills could be taught to both rural and urban women.

Women's organizations already exist to aid self-employed women. The most successful income-generation projects in India have been carried out by small, decentralized, indigenous organizations managed by strong leaders and staffed by committed volunteers in which women participate actively in the decision-making process. Members of these groups may be among the target population of the Maternal Child Nutrition Project. These grass-roots organizations could help project designers develop appropriate income-generation projects and implement them at the local level.

Providing employment to mothers in order to improve family welfare is an innovative approach to resolving the problems of malnutrition in India. The project should be carefully studied to determine what correlations exist between mothers' income and children's nutritional status. If increasing mothers' incomes do improve family welfare, women's income-generation projects could release poor families from their dependence on welfare programs like traditional supplementary feeding projects. They would allow families to become self-sustaining and to improve the quality of their lives.

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INTRODUCTION

The India Integrated Maternal Child Nutrition Project (#386-0476) seeks to "reduce the prevalence of severe malnutrition and moderate malnutrition for all children 0-5 years in the target areas and to determine the technical feasibility and costs of improving the birthweights of children" (Project Identification Document). Evidence indicates that increased household income leads to improved family nutritional status. Some studies suggest that increments to the mother's income is spent on the needs, including food, of the most vulnerable members of her family, i.e., children aged 0-5 years and pregnant and lactating women. If increased mother's income leads to an improvement in the nutritional status of the children aged 0-5 years, then an income-generating component for the mothers involved in the India integrated Maternal Child Nutrition Project is justified.

This study was designed to explore the potential impact of implementing an income-generating component in the nutrition project. A general literature search of materials dealing with the relationship between nutrition and income was conducted and individuals involved in income-generating projects or nutrition projects or studies involving income and nutrition components were reviewed.

It is not the purpose of this paper to prove that increasing women's income in India will improve the nutritional status of their children. Not enough research has been undertaken to prove that hypothesis. Elizabeth Quizon from the Yale Economic Growth Center cooperated with the Asia Bureau's Office of Development Planning in performing some preliminary tests on the Philippines' Laguna data. Her findings showed a strong correlation between women's income and nutritional status. Others have written descriptive analyses and performed limited empirical studies. While they all show that there is a strong possibility that women spend a greater proportion of their income on their families than do men, none of them have used large enough samples, collected broad enough data, or used adequate statistical techniques to verify that assertion.

The income-generating component of the nutrition project will provide an excellent opportunity to do the research necessary to test the hypothesis that women's income levels affect child nutrition. There is enough data to indicate that the hypothesis may be correct and that it is worthwhile to implement the component. The results must be carefully evaluated to determine whether or not income-generating components should be added to similar projects in the future.

This report will address these research issues. It will summarize the results of past studies and provide guidelines for a future analysis of this specific component. It will discuss successful income-generating projects in India. It will provide information regarding traditional and non-traditional income-generating activities which could be implemented in the context of this project. People and groups who can facilitate the design team's research efforts in India are identified.

An income-generating component is an innovative approach to raising the nutritional status of the poorest Indian families. Michael Rock, in his study of household income, asserts that increases in family income lead to an improvement in the quality of life for those whose incomes rise. Identifying the family member who makes decisions regarding the various quality of life indicators will help project designers reach the primary instigators of development. The hypothesis that the mother's income affects child welfare more so than the father's justifies this approach to decreasing malnutrition in India.

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The Effects of Rising Income on Nutritional Status

There is some evidence which indicates a relationship between rising household income and increased family nutritional status. However, increased household income does not necessarily translate into improved family well-being. Improved family nutritional status does not automatically signify improved nutritional status for the most vulnerable groups (pre-school children, pregnant and lactating mothers). The amount of increments to household income which reaches the most vulnerable groups may depend on the source of that income. This paper will argue that mother's income affects family welfare more so than the father's.

Four hypotheses will be discussed in this paper:

1. Increased income of the poor leads to an increase in the amount of money spent on food.
2. Increased food expenditures by a poor family leads to improved family nutritional status.
3. Improved nutrition in the family means an improvement for the nutritionally vulnerable members of that family (Berg).
4. Increased mother's income leads to an improvement in the nutritional status of the most vulnerable members of the family.

In this section, the links between nutritional status and income will be established. The problems of intra-familial food distribution and the problems of gathering such disaggregated data will be addressed. The impact of female income on the nutritional status of the most vulnerable groups will be discussed in detail.

The Affects of Increased Household Income on Family Food Expenditures.
During the 19th century, Christian Engel developed the theory that poor people spend a larger proportion of their income on food than wealthy people. Engel's law states that as a person's income rises, the proportion of their income allocated to food declines, even though the absolute expenditure for food increases.

In India, the poorest families spend 80% of their income on food compared to 45% of the income spent on food by the most affluent Indians (Rao). A study of income redistribution in Chile showed that those in the lowest income status increased their caloric intake when their incomes rose (Machicado in Norton). A similar study conducted in Peru showed the same results (Ferroni in Norton). A progressive increase in food consumption when income increased was noted during a research project in Sri Lanka (Poleman in Norton).

Increased Food Expenditures and Family Nutritional Status. The studies cited above indicate that the demand for food is greatest among families in the lowest economic stratum and that, when income rises, their food intake increases. This does not necessarily prove that a family's nutritional status will improve when food expenditures increase. Some negative food impacts of rising income are the substitution of white for dark bread, polished for pounded rice, processed and canned foods for fresh vegetables and fruits, and the elimination of legumes from the diet (Berg).

However, a number of studies have shown that as household income rises and food consumption increases, the family nutritional status is improved as well. Both Rao in India and Ferroni in Peru found that when a family's income rises total calories supplied by carbohydrates decrease and are replaced by calories from vegetables, fruits and animal products. In India, increased consumption of milk and milk products rather than meat and decreased consumption of coarse grains and tubers reflect rising income (Rao). Other studies confirm this trend in food consumption. ^{1/}

Nutrition status can increase at a more rapid rate if the mother is educated about health and nutrition issues at the same time income is augmented (Battad). She then would have the money and the information to efficiently allocate her resources for nutritious food. Nutrition education can counter the negative food impacts of rising income such as those discussed above. However, it must be kept in mind that increases in income and nutrition education will have little effect if food prices rise at a fast or faster rate than income. The nutritious food must be accessible, physically and financially, to the target groups.

^{1/} Berg confirms Rao's study, finding the poorest families in India spend 80% of their income on food versus the 45% of income which the most affluent families spend on food. He found that as income increases, consumption of food grains decreases, and consumption of milk products, fruits and vegetables increases. The higher the income, the more variety of foods is present in the diet. In the Morinda study, Levinson found that "consumption of nutritious foods increases more or less linearly along the income spectrum" (Levinson p. 11). Based upon the Laguna data in the Philippines, Battad found that family nutritional intake increases as income rises. In addition, Battad noted that nutritional intake increases at a faster rate if educated women receive additional income. Finally, Alves, Evenson, and Rosenzweig found that as the income of low-income households in Sao Paulo, Brazil rose, their nutrient intake increased. Nutritional status was also highly correlated with the mother's education.

Intra-Familial-Food Distribution. Intra-familial food distribution refers to the way food is distributed within the family and among family members. Not all family members receive equal amounts of food. Each member's needs may vary. Cultural practices and traditional food habits may restrict one group of family members from consuming the same food as that of another group. In other words, "the family" as a single food consuming unit must be disaggregated into individual units in order to determine the nutritional status of each member.

The target group of the Indian Integrated Maternal Child Nutrition Project is not "the family." The specified recipients are pre-school children and pregnant or lactating mothers. Therefore, it is necessary to determine whether or not increments to household income increase these vulnerable groups' nutritional status.

Studies have demonstrated that women and girls have a greater incidence of malnutrition than men and boys (Valenzuela, Levinson, Berg, Rao, Hitchings, and Howowitz). 1/ These same reports illustrate that young children eat less well than adults. It is not clear that by raising income vulnerable groups will automatically receive more nutritious food. In India, Rao found that

1/ In her analysis of the Filipino Laguna data, Valenzuela found that the mother's nutrient intake was significantly lower than the father's and that the male children had a higher nutritional status than the female children. Levinson found during the Morinda study in India that female infants received less food than male infants in lower income groups. Berg states that pregnant women and nursing mothers are among the most nutritionally vulnerable family members. In India, Rao notes that male children are considered more important than female children. As a result, females receive less care and have significantly higher mortality rates. Hitchings found that males had a higher nutritional status than females in Kenya. Another study conducted in Colombia by Drake and Fajardo (cited in Horowitz) demonstrated that girls are more malnourished than boys. Horowitz summarizes other research results gathered from Africa, Latin America and Bangladesh which confirm the above findings.

"the effect of income per se on the food consumption of young children was far less pronounced than for the population as a whole" (Rao, p. 6).
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There are several reasons for the inequity of food distribution within the family. Most traditional food taboos are directed at children and pregnant or lactating mothers. Some nutritious foods are denied these groups because it is feared that the food will induce adverse consequences such as sterility, illness, mental retardation or birth defects (Berg).

Traditional eating patterns also prevent the vulnerable groups from receiving an adequate proportion of family food. In some cultures, the men consume most of the meat before the women and children. When the family eats together from the same pot, smaller children may not be able to reach the bowl or to compete with older family members (Horowitz).

Other factors also influence intra-familial food distribution. Supplementary feedings available to school children may be denied to pre-school children. Seasonal pressures may require mothers to spend long hours in the field planting or harvesting. This can result in early cessation of breast-feeding and less time available to the mother to prepare special weaning foods. In times of food shortages, the productive family members may consume the bulk of the food and the nonproductive members may receive only the leftovers.

Given these cultural practices which lead to nutritional inequity within the family, any project planned to raise family income to improve nutritional status must be combined with a viable nutrition education program. Increased education may be effective in countering the negative impact of some traditional eating patterns. The ideal education

1/ Valenzuela found that children's nutritional status was lower than that of their parents, the pre-school children consuming fewer calories than any other family members. Battad, using the same Laguna data as Valenzuela, studied the income effect on the nutritional status of pre-schoolers and concluded that pre-schoolers were the most vulnerable group and "unless increases in income are directed to pre-schoolers through specific education or nutrition (supplements), the income effect may be largely lost" (Battad, p. 4). Levinson states that school and supplementary feeding programs in India don't reach many of the poorest pre-school children. Transportation and time constraints do not allow more isolated, poor families to take advantage of these programs for their youngest children. In the same study Levinson, like Battad, observed that the income effect on food consumption was less pronounced for younger children than the population as a whole. Their nutritional and caloric intake does not increase as rapidly as the others. Children's nutritional status was lower than the adults' status even in wealthier families. Levinson cites this as evidence for the need for education programs to augment the benefits derived from increased income.

program would address the specific habits of the target population. However, as stated above, nutritional status increases more rapidly when rising income is combined with higher educational levels. Both increased income and nutrition education is needed for the recipients to procure the maximum benefit from each component.

Accurate information regarding familial food expenditures and consumption is necessary in order to determine the best method for reaching the most vulnerable groups. It is extremely difficult to collect individual food consumption and expenditure data. Examination of consumption habits requires weighing individual portions without interfering with normal eating patterns, checking outside food consumption, and differentiating between seasonal variations. Family members' expenditures for food should also be analyzed in order to identify the primary member who is responsible for the family's food intake. It should be determined whether or not differences in each member's food expenditures create a difference in that member's nutritional status. For example, a working father may spend some of his income on food for himself outside of the home (i.e., in a cafe or bar). As a result, his nutritional intake may be greater than his pre-school child who cannot purchase food and eats only what is provided by the family.

The disaggregated family expenditure information can help planners to design programs which benefit the member or members who use household income to feed the most vulnerable groups. Traditionally, the mother has this responsibility in many societies.

Mother's Income and the Nutritional Status of Vulnerable Family Members

The link between rising income and nutritional status was established earlier in this paper. It was also shown that the recipients of increased nutritional benefits due to rising household income were not necessarily the most vulnerable family members. Therefore, it is necessary to disaggregate household income by source of income generated. If the mother has the primary responsibility to feed the most vulnerable members, the most effective way of increasing those members' nutritional status may be to increase the mother's income. The father may allocate his income and any increments to his income to goods other than food and family needs. Therefore, the father may not be the most efficient intermediary to transfer increments to income to the most vulnerable members of his household.

Several studies have shown that changes in the mother's overall contribution to the family affects child nutrition (Horowitz, Valenzuela, Layo, Safilos-Rothschild, Stavrakis and Marshall and Kumar). Contribution is defined here as the provision of household goods (including food) and services and income earned in cash or kind. Some of these studies demonstrate how families' nutritional status changes (or doesn't change) when income earned by fathers increases and the women are deprived of their traditional role as primary food producers and providers (Stavrakis and Marshall, Horowitz). Others reveal positive benefits to child nutrition achieved by increasing the mother's income.

Empirical proof regarding women's income and overall family contributions is difficult to obtain. There is a lack of accurate socio-economic data on women in developing countries, including India. Most data which does exist focuses on reproduction and childbearing practices rather than productive economic activities. Traditionally, unpaid labor has not been counted as work. Women who work outside the home and earn wage income may still classify themselves as housewives in national surveys. They are then (statistically) considered non-working women. However, the limited empirical assessments which have been performed and the descriptive documents support the hypothesis that mother's income affects child welfare more than father's income.

Positive impact on child welfare of increased mother's income. There are positive examples of the ways mother's income affects child welfare. Three studies have shown that as a mother's income increases the nutritional status of the children rises as well (Valenzuela, Kumar, and King-Quizon). Using data from the Philippines, Valenzuela found that as the mothers' incomes rose, the household nutritional intake increased. As income and education levels increased, the mothers began to make more efficient choices of food based on nutritional content.

King-Quizon, at the request of the Asia Bureau, Office of Development Planning, used the same data to determine the marginal propensity to consume food by the household based on mother's income and the father's income. During a preliminary analysis of the data, she found that mothers spent four times as much of their income on food for the household than did the fathers. ^{1/}

In research which was conducted in Kerala, Kumar found that there was a significant positive impact of children's nutritional status when the mother's income increased. Even though the time the mother spent away from the home had a negative effect, the income effect was greater, leading to a net positive impact on child nutrition. The impact was greater when the mother controlled food production as well as allocation.

Kumar found less of an impact due to father's income and a negative impact on child nutrition when family members other than the mother and father were employed. Kumar explained that when other family members work, the child may receive less because the family size may be larger; the food tended to be eaten by the more productive family members; and the mothers and older members worked and therefore had less time for child care.

Among Kumar's sample of working mothers, 18% were single parents. They were either wives of migrant workers, widows, abandoned, or their husbands were unemployed. They usually had no access to garden plots, therefore, these women were solely responsible for earning the cash needed to support their families.

Negative impacts of decreased mother's household contribution Stavrakis and Marshall effectively summarize a situation in Belize (Central America) in which males' incomes were increased dramatically and women were deprived of access to land. The women gradually lost their traditional productive function within the household. In this example, men grew sugar cane on land upon which the women had previously

^{1/} The Laguna data used by King-Quizon consisted of 537 households earning an average of 50 pesos per week, spending an average of 60% of this income for food. In this preliminary analysis, King-Quizon controlled for age, education and wealth of the mothers and fathers. The full Laguna data bank contains disaggregated nutrition and income data by sex and age of family members. King-Quizon hopes to use this data at a later date to determine the differences between expenditures of the mother and father on the most vulnerable family members (Elizabeth King-Quizon, Yale Economic Growth Center, telephone conversations and private correspondence, June, 1980).

grown subsistence crops, including vegetables and fodder to feed chickens and hogs. As income earned from sugar cane increased, the social prestige and nutritional benefits generated from growing food crops declined. Local foods came to be considered as inferior and consumption of expensive, imported, processed foods increased. Meat, fruit and vegetable shortages occurred. Nutritional status of the children remained low and there was no impact on the marginal diet of the family. Women became dependent on the men to provide cash for food purchases. But, the men spent a large proportion of their increased incomes on vehicles, liquor and prostitutes.

Stavrakis and Marshall found that the children in female-headed households were well-fed. None of the women in these households wished to renew their dependent status on men by remarrying. The researchers also discovered that "the children of the rich did not fare better nutritionally than the children of the poor indicating a link between the status, autonomy, and well-being of the women to the child's nutritional condition" (Stavrakis and Marshall, p. 165).

Uma Lele also discusses the possibility that men in Africa may not spend increments to their income on their families' food. Provision of food, especially of grains and vegetables, are traditionally the woman's responsibility. Lele cites a Kenyan study which determined that in one village "cash crop farmers are no better off nutritionally than subsistence farmers, at least in the short run. The apparent explanation for this fact is that cash farmers preferred to spend their increased income on conspicuous consumer durables e.g., bicycles, radios, and on education for their children. Improved diet was given a relatively low priority" (Kraut and Cremer in Lele, p. 118). ^{1/}

1/ Nici Nelson in her review of the South Asian Literature entitled Why Has Development Neglected Rural Women? cites several authors which verify that women's and men's consumption patterns differ. However, the descriptions are often "vague and impressionistic" (Nelson, p. 58). Nelson has found that men who have migrated from rural villages to towns in Kenya "spent most of their salaries on clothes, daily subsistence, drinking and town women. Their contributions to the rural home did not automatically go up as salaries or earnings increased" (Nelson, p. 60). A study carried out in Mexico determined that "women customarily received the cash for crops and took care of family needs with it (but) the men were reluctant to relinquish their wages. It resulted in greater drinking and increased purchases of radios" (Nash in Nelson, p. 61). In a survey of Indian tea plantation workers, women told researchers that they spent their income on food and the men spent their wages on alcohol (Jain in Nelson, p. 61).

Conclusions Safilos-Rothschild noted that "the poorer the household, the more wives by default shoulder intra-familial decision-making power and economic responsibility for the survival of the children and the family unit" (Safilos-Rothschild, p. 37). Income, particularly mother's incomes, affect the nutritional status of the most vulnerable family members. If the mother's access to income is increased, the nutritional well-being of these family members will be improved. Furthermore, the improvement of nutrition status can increase at a more rapid rate if the mother is educated about health and nutrition issues at the same time income is augmented. Therefore, a nutrition project which is aimed at reducing malnutrition among poor families should consider not only supplementary feeding and education programs. While these are important elements, an integral component of long-term family nutritional well-being is increased mother's income. Therefore, a project designed to provide jobs for women, which will increase their income and their overall contribution to the household, is an appropriate component to the India Integrated Maternal Child Nutrition Project.

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Employment for Women: Possibilities and Problems

In the last section, it was shown that changes in the mother's income affect child nutrition. The poorer the household, the more the women are likely to actively contribute goods and services or wage income to the family. In India, 13.2% of the women were already recorded as working in 1971. There are 3,300 registered women's societies, 1,100 of which are industrial cooperatives. The 24,000 members produce Rs. 5.7 million (\$500,000) worth of goods each year (Dixon, p. 34).

In this section, the incentives and disincentives for Indian women to become employed will be discussed. Successful income-generation schemes will be described and possibilities for the future will be outlined. Finally, the potential for "plugging into" or emulating successful projects in India will be analyzed.

Incentives for Female Employment

Poor women in India work out of economic necessity. Urban women are more likely to work than rural women because more job opportunities and less conservative attitudes exist in cities than in rural areas. Women without husbands (i.e., widowed, abandoned, or women whose husbands are migrants) respond to money incentives more so than do women with husbands. However, even these women or women in higher income groups work in order to buy goods for personal consumption (Layo). Hindu women, the poorest Muslim women, and wives of landless agricultural workers are more likely to work than others (Dixon). The monetary incentives and the need for physical survival overcome conservative cultural barriers which prohibit women from working outside the home.

Non-economic benefits can also be perceived by the women. Often, there is a great desire to meet other women outside the home. In some cases, it may be socially prestigious to have a well-paid job which requires new skills. The community in general can benefit by the newly acquired skills regardless of whether men or women possess them.

Disincentives to Female Employment

There are often obstacles to female employment in traditional societies. Family need, cultural practices such as purdah and the possibility of marital disruption can act as disincentives to female employment. The time a mother spends away from her family may have detrimental effects on child welfare. She has less time to prepare special weaning foods, the child may be weaned earlier, and there may be less time to clean the house which could lead to unsanitary conditions. However, while time away from the home can have a negative impact on child welfare, it was shown in the last section that the benefit from increased income can produce a net positive effect on children's nutritional status.

Purdah can act as a major physical obstacle to female employment. Purdah is more prevalent among Muslims than Hindus and more widely observed in northern India than in southern India. It is also a sign of upward mobility since its observance is practiced among higher caste and wealthier families. Women are withdrawn from the job market in which they are working once the household is prosperous enough to do without the mother's income. In other families, mothers may work but their daughters will be secluded (Dixon). In order to overcome the obstacles associated with purdah, it is necessary to find out exactly what restrictions apply to the women's movement outside the home. The job environment would have to be protected and respectable. Female supervisors, a walled work-place, curtained transportation to the work-place, and respectable work would all be means of reducing criticism of female employment in traditional villages (Dixon).

If a woman begins to bring income or additional income into the family, her status and role within the family hierarchy may change. This change can cause marital instability and family disruption, especially if the husband and wife disagree on what their appropriate roles within the family should be (Ross and Sauhill). However, studies have shown that the probability of marital disruption declines as family income rises (Duncan and Morgan). In order to avoid conflict within the family, the members (particularly the husbands) must fully perceive the material benefits which can be derived from the women's employment.

While there are several obstacles to female employment in traditional Indian societies, there are several ways to reduce family resistance. Families must understand the benefits and disadvantages of employment; protection on the job and acceptable work at fair wages must be granted to the women to preserve their respectability; and flexible hours and days and child care must be provided to allow the women to earn income without creating severe negative impacts on their families' well-being.

Income Generating Schemes and Possibilities

Any income-generation project must be aimed at a specifically identified target group. Projects will vary depending on whether the groups are urban or rural and secluded or free to move and travel openly. Time studies should be done before the project is designed to determine how to incorporate outside employment into everyday activities. Different kinds of employment are possible. Agriculturally-related jobs, such as gardening, food processing, poultry raising, non-agricultural home production, non-traditional industrial production and services and self-employment schemes may be appropriate to a given group of women. The most important aspect of any income-generation project is to consult with the women themselves to find out what they are interested in doing, given their specific time, skills, and marketing and credit constraints.

Whether the jobs are agricultural, or non-agricultural, traditional or non-traditional, each has its advantages and disadvantages. Agricultural jobs for women in India have been declining over the last 20 years (Dixon). Many women are already employed in agriculture at low wages or none at all if the work is done on their own land. However, agriculturally-related jobs can be compatible with child care. Few, if any, modern agricultural techniques need to be applied and the benefits of increased food production and processing can have a direct impact on a child's nutritional status (Kumar). Subsistence activity can be as valuable as income generation if raw materials are produced, markets for agricultural produce are expanded, and self-sufficiency in agricultural and household goods is achieved.

Non-agricultural employment lessens women's dependence on access to the land. New skills can be learned by the women, cash income earned, and social contacts with other women can be expanded. However, non-agricultural production such as handicrafts often compete with factory goods. The women must have access to credit and markets. Quality control must be exercised for any production activity to be successful. Non-productive, non-agricultural labor has other drawbacks. While Indian women do participate in construction work, they are often paid poorly and learn few new skills. Service jobs, such as teaching and nursing, require higher literacy than most rural women ever obtain.

Non-traditional jobs offer new opportunities to women. Industrial production and technical training for non-traditional service jobs (such as plumbing and electricity) prepare women to participate in the modern, formal economic sector. However, it does require that women work outside the home and is therefore less compatible with child care. Credit and market access, child-care centers, and management skills are all necessary for these kind of activities.

Summary of successful projects. Ruth Dixon described a number of different forms of female labor participation in rural South Asia in her book Rural Women at Work. Others have focused on working women in urban centers (O'Regan, Brown, and Youssef). The results of their work is summarized briefly here.

Food production, processing and marketing by rural women with access to land can provide women with both increased income and a nutritional source of food for their families. New entrepreneurial skills can be learned such as marketing, basic accounting and administration, and food storage and processing. There are several advantages to this kind of employment for women. Food-related activities are "typical woman's work;" local agricultural products are used, little capital investment is required, and local, urban and export markets can be developed. Women

have been organized into groups to do on a broader scale those activities which they already perform for their families, i.e., milling and drying grains, pressing oils, grinding spices, gathering animal feed, and collecting animal byproducts for fuel (Dixon).

There are several potential pitfalls for this kind of income-generation scheme. Agricultural production must be diversified in order to avoid seasonal limitations and crop price fluctuations. Since the local market may be limited, extended urban and, perhaps, export markets must be developed. Children can act as intermediaries between the women and male traders if the women work in seclusion but the women then risk losing control over the marketing process. In northern India, markets have been developed for women to market their own produce in a protected "women only" environment. If the products are to be broadly marketed, transportation and fuel, water and storage facilities must be created. Hygienic conditions and product quality must be carefully monitored. The women must have access to credit which is available promptly at needed times during the year. If this support is available to the women, food production and processing can become a viable form of income generation which can be performed at home, increase income, and contribute to the family's nutritional status.

The Lyjjat Papad Industry allows women to process a single food product within the home. Fifteen cooperatives were formed to produce papads for the Lyjjat Papad Industry in Bombay. The cooperatives have 2,700 mostly illiterate members. A central employer provides the dough which must be picked up at a central location each morning. The women return home, roll papads, and return the papads to the center each evening. The product is uniform, of high quality, and marketed throughout India. The central meeting place allows women of different religions and castes to mix. The centers could potentially be used as an education facility for the cooperative members.

The cooperatives each have their own staff and the management committee is then elected by the staff. Staff and committee members must continue to roll papads. Cooperative profits are used for production operations and community projects. A portion of the profits is returned to the members in the form of cookware. Members are required to save a set percentage of each rupee earned. This amount is then matched by the cooperative and the money is deposited into the members' accounts. Members cannot withdraw funds without the management committee's permission, but loans are made available for family illness and other emergencies.

The AMUL dairy cooperative in Gujjerat, while controlled primarily by men, has a few women's cooperatives associated with it. The AMUL dairy is highly successful, selling \$50 million worth of milk products per year in Bombay. The members must bring the milk to a central location to be

weighed and collected. Men and women must stand in line together and religions and castes are mixed. The centers have acted as community meeting places. As in the Lyjjat Papad Industry, these centers could be ideal places to teach women about health, nutrition and family planning, as well as basic literacy and agricultural and entrepreneurial skills.

Handicrafts produced at home are a potential "acceptable" source of income. Cooperatives, such as the Kodomotoli Cooperative in Bangladesh, have been organized to facilitate the marketing of home-based crafts and products of other self-determined activities, such as food production and processing. Cooperative profits are individually credited but placed into a pooled cooperative savings account. Cooperative managers are usually older, married women who are taught organization and accounting techniques as well as health, family planning, and literacy skills in a central location. They bring back the information to the members. In this way, secluded women gain access to outside skills and knowledge. The managers are responsible for obtaining credit and access to markets and for managing the cooperative's accounts.

There are several drawbacks to encouraging handicraft production. The products are generally used by elite groups, not by the local community. No new skills are learned and little quality control is exercised. There is a potential for the women's labor to be exploited by intermediaries and there are often difficulties associated with marketing the products.

Textiles production and garment-making are skills that can be learned and performed in the home. However, many factors must be considered for this kind of production to become profitable. Secure markets and access to credit are the most important considerations. Since local demands may be limited, urban and export markets should be developed. These markets may be particularly difficult to establish as the rural women will be competing with domestic and imported manufactured goods and with male tailors.

Initially, a large investment is required for heavy equipment (sewing machines and looms). A secure work space must be large enough to store the equipment and raw materials. Credit must also be available to purchase and stockpile raw materials. Shortages and price fluctuations of cotton and wool can cause production and marketing problems.

Even if the women already possess the interest and basic skills to produce textiles and garments, additional training will be required to improve basic techniques, to provide design assistance, and to help control the quality of the goods produced.

Small-scale industry can provide opportunities to rural women. In Kerala, a government job program reserved spaces for women in a variety of cooperative enterprises. The women were trained to work in foundries, in an electroplating, galvanising, and anodising unit in a transformer unit, and in an ancillary section of a battery factory (Dixon).

Rural construction projects have already employed many women. Rural women have participated in heavy labor activities such as road building in Sri Lanka, Food for Work projects in India, and forestry development in Maharashtra. Traditionally, women have been paid extremely low wages and working conditions are often intolerable. Any construction project which employs women should be near the women's village so that wage, working and living conditions can be carefully monitored by their communities.

Small-scale production can offer many opportunities to rural women. However, standards must be set whether the goods produced are weaning foods or transformers. Markets must already exist or be developed before production begins. Credit must be readily available at the appropriate times in the production cycle. Quality control must be exercised. Ideally, new uses should be found for local resources and a demand for the products should be present in local markets. The new product should not duplicate goods already on the market or, if they do, the new product should be cheaper and of better quality. Links to other industries and wider markets should be formed. These standards should apply both to rural and urban production. However, a different set of conditions and opportunities for women exist in urban areas.

Urban employment. Urban women are more likely to be employed than rural women. Less conservative attitudes towards working women and more opportunities exist in urban areas than in rural villages (Layo). Vocational training to teach women non-traditional skills and to add to the skills they already possess can increase urban women's self-sufficiency.

Women work in Indian urban centers as street vendors, cart-pullers, junk-smiths, and garment workers. They produce food-stuffs, plastic flowers, wire bags and leaf plates. Women act as private entrepreneurs in many fields. In two cities, Madras and Ahmedabad, they have organized unions and have gained access to low-interest credit and city officials for the first time.

The Working Women's Forum in Madras is similar to the older Self-Employed Women's Association (SEWA) in Ahmedabad. Within 10 months, the Forum had 5,000 members whose incomes averaged less than Rs 3,000/year. Credit access for both the Forum and SEWA acted as the catalyst to organization. The goals of the Forum were to organize small groups of 25 to 50 poor women from the same neighborhood into a federation with

branches throughout Tamil Nadu. The Forum would help members expand their businesses by providing access to credit and social services (business training and day care facilities). It would act as a liaison between the women and the government thereby serving as a political pressure group, working to improve working conditions for self-employed women.

The staff consists mostly of volunteers and the director is a charismatic forceful woman named Jaya Arunachalam. She and her staff have been successful in obtaining credit for members and negotiating successfully for government concessions. The Forum has become such a strong force that local leaders now consult with the Forum to intervene and resolve community problems. Forum decisions are reached at regular meetings of the Governing Body. The neighborhood groups meet monthly and discuss the issues. Their leaders then represent the groups in the Governing Body meetings.

Loans have been the Forum's most successful activity. Loans are made by commercial banks to individuals, but the group reviews each application. The group leader guarantees the loans. The commercial bank is contacted and a representative comes to a Forum meeting of all the loan applicants. Loan feasibility is discussed, the leaders help the members fill out applications, and the members are interviewed by the bank official. The average loan is Rs 100-300 (\$12-36) with an interest rate of 4%. The Forum follows up to ensure that the loans are repaid. The members repay the leaders and the leaders then pay the bank. The banks consider this loan process successful because the repayment rate is high (90%) and their administrative costs are low. SEWA successfully operated its own saving banks which offers its members loans at low interest.

An Integrated Slum Development project in Bangalore included organizing slum dwellers to obtain loans. The women participated far more than the men because the husbands tended to be "drunk and irresponsible." The women took on the financial burden of maintaining their families (Brown, p. 52). The loans were made to self-employed women who maintained businesses similar to those of the members of the Working Women's Forum and SEWA. The repayment rate is high and the women were able to save money and expand their businesses, as they did not have to pay exorbitant interest to the traditional money lenders.

The three programs discussed above provide credit and service to their members. Little technical assistance is given. There is room for expansion - the women who are members of these organizations could be taught basic accounting, administrative and management skills. They are already entrepreneurs and their skills could be enhanced by additional business and literacy training.

Vocational training could also be provided in non-traditional skills. In Latin America, the Overseas Education Fund has successfully trained women to be plumbers, mechanics, and gas station attendants. The women learned not only manual skills but also basic business management techniques.

Successful programs to promote women's employment in both urban and rural areas have been described. The problems associated with different forms of employment were discussed. The most successful employment schemes have been those in which the women organized themselves into groups to produce goods and services that were compatible with their day to day activities.

Cooperatives and Project Development. Dixon lists the positive impact cooperatives can have on women's lives. Cooperation provides a means for women to improve their living standard and that of their families through group action. Membership and participation in a co-op give the women an economic stake in its success. Their participation in the distribution of profits and the use of savings can provide them with a means of social integration within their community. Their status within the family may also be enhanced as they contribute more to the household, acquire decision-making skills, and earn private recognition of the value of "women's work" (Dixon).

There may be negative aspects as well. If elite groups dominate the co-op, the members will not feel the need to participate actively. The sense of identification with the group and the feeling that the group serves the members is an important reason why SEWA and the Working Women's Forum has been so successful. The co-op must be well-managed. The women should be taught basic business skills to operate their own organization so that they can avoid becoming dependent on community elites.

Cooperatives succeed if the members participate not only in producing goods and services but in the decision-making process as well. Other factors must be present. Cooperatives have been most acceptable where the women are used to extended-family ties. Homogeneous groups can be maintained successfully because they tend to be more egalitarian. Caste and religious differences can be avoided if co-existing co-ops are formed based on caste and religion. A single federation could then join the individual co-ops together. Women in traditional regions should be able to work in protected environments with other women. Production and marketing should not require extensive public contact (Dixon).

Creating Employment. Dixon suggests six ways to create employment for rural women, but they can apply equally to urban women:

1. Identify the women in need.
2. Determine what their present activities are and try to increase their productivity.
3. Locate social networks, such as kinship, class and religion, in which women already associate with each other (for example, in religious meetings).
4. Provide sources of credit, technical assistance and training.
5. Provide technology to reduce domestic burdens.
6. Identify and overcome structural obstacles to women's control of the products of their labor.

The cooperative units should be decentralized to prevent male or elite domination and a top-heavy central bureaucracy. The units should be flexible enough to be applicable to each individual village. Simple registration procedures should be developed to allow maximum participation. The management staff must meet a carefully devised criteria (literacy does not necessarily have to be one of these criteria). Managers should be of the same social and economic class as the members. Training should take place on the village level in chaperoned groups to protect the women's integrity.

Home production allows the women to continue their domestic chores, such as child care, food processing and housework. Central workplaces near the women's homes allows them to work together without long disruptions in their household duties. Working conditions and production quality can be monitored. There may be advantages in economies of scale through technical innovation, capital investment and division of labor, depending on the product being produced. A central workplace can also be a focal point for other kinds of education programs, such as nutrition and family planning. It would provide a mechanism for the social integration of women into the formal economic sector.

Brown identified five attributes that were present in all the successful Indian cooperatives which he analyzed:

1. Charismatic, astute leadership.
2. Committed staff who are responsive to client needs.
3. Committed volunteers.

4. Use of government resources, programs and initiatives.
5. Participatory feeling among members and a feeling that the organization responds to their needs.

Conclusions. The incentives and disincentives to female employment in India were discussed. For the poorest women, there are more advantages than disadvantages in being employed. Successful organizations that have enhanced these women's economic status were described. The most successful cooperatives were those that the women organized, participated in and managed themselves. For the most part, they are small indigenous groups that receive little, if any, outside aid. Additional funding could help them expand their services to include technical assistance, adult education and child care, and to reach a wider clientele. These groups can also serve as organizational models for new cooperative endeavors involving Indian women. The next section will provide a list of sources to contact in India which can help in designing small cooperatives for women.

Utilizing Grass-Roots Organizations

In the last section, successful income-generation projects and potential fields for female employment were identified. The most successful endeavors are carried out by small-scale, decentralized organizations managed by strong leaders and staffed by committed volunteers. The staff maintains close, informal contact with the participants and are responsive to beneficiary needs. The community, specifically the women, are active participants in the project. They feel (and are made to feel) a part of the decision-making process. The projects are not forced on the community by the government or an outside agency. The projects are developed, managed, and maintained by the people themselves.

Some of the beneficiaries of these groups may already be participating in CARE's MCH program. A link between the poorest women who are the target population of the India Integrated Maternal Child Nutrition Project and the indigenous grass-roots organizations may already exist. Efforts should be made to locate the groups which are already tied into the CARE system.

The most efficient form of reaching the "poorest of the poor" is to work with the groups that have already formed the initial contacts and earned the trust of the target groups. However, there may be problems associated with "plugging into" indigenous organizations. The indigenous groups will probably accept a linkage to AID only on their own terms. They may be limited in their absorbent capacity and administrative skills. They will vary greatly in their size and their relationship to the government. Each indigenous group must be treated individually.

Their assistance needs will vary. Small groups may "need help in designing projects, testing out delivery mechanisms and developing links with banks and other financial institutions. Larger, more established organizations, such as co-op banks, often need assistance in setting up special units, orienting personnel and developing simple administrative systems. They may also need organizational development assistance and financing for program expansion" (Beardsley, p. 20-21). "Plugging into" indigenous organizations may be difficult. Money and time may be more efficiently allocated, however, by resolving issues that arise with these groups rather than by developing a new organization and project without the grass-roots foundations.

Organizations and People to Contact.

The following groups and people can help the design team locate indigenous groups which are successfully organizing women into income-generation programs.

Dr. Kamala Choudhury
Ford Foundation
55 Lodi Estate
New Delhi 110003 Phone: 619441

Dr. Choudhury is developing a strategy for women's income-generating projects in India for the Ford foundation.

George Varghese
Editor, Voluntary Action
Gandhi Peace Foundation
211 Deen Dayal Upadaya Avenue
Marg 2, New Delhi 110001 Phone: 662366

Voluntary Action is a newsletter dealing with indigenous PVOs. Mr. Varghese has in-depth knowledge of most PVOs in India.

Lakshmi Jain
Chairman, All India Handicrafts Board
West Block, 7 R.K. Avan
New Delhi 110022 and

Devaki Jain
M-1 Kanchenjunga Bldg
18, Barakhamba Road
MD 110001 Phone: Office 698841, Home 227418

These people are consultants to the Association of Voluntary Agencies for Rural Development (AVARD) and are heavily involved in PVO issues.

Dr. Andrea Singh
I-50 Jangpura Extension
New Delhi, 110014 Phone: 694870

Dr. Singh is an outstanding researcher of women's programs in India. She is interested specifically in the problems of poor, urban women and has recently been working with migrants.

Bharatiya Grameen Mahila Sangh
9/104 Jamnagar Hutments
Block 11, Mansingh Road
New Delhi 110011 Phone: 382157

Specific activities sponsored by Central Office include training camps for farm women; exchange of farmers' programmes with visits to observe modern methods; compost demonstration camps, adult literacy projects; family planning mobile units and orientation camps. (APCWD Women's Resource Book, 1979, p. c-33)

Manushi Editorial Collective
A-5 Nizamudin East
New Delhi 110013

This Collective is a radical feminist group which publishes a bi-monthly feminist journal. They will have many ideas on how to communicate with poor urban and rural women. Information regarding the nutrition program and the income-generating scheme could be spread effectively with an appropriate media campaign. This group could be instrumental in determining the best methods for specific groups and geographical locations.

David de Pury
Field Director
314 Mansarovar Bldg.
90 Nehru Place
New Delhi 110019 Phone: Office, 681811; Home, 637628

Mr. de Pury is Oxfam's representative in India and has many ideas on how indigenous PVOs and international PVOs and donors can work together.

Jaya Arunachalam
Working Women's Forum
55 Bhim Sena Garden Road
Madras 600004

The Working Women's Forum in Madras was discussed in the previous section of this paper. It is an excellent program and Mrs. Arunachalem could provide important information about its organization and management.

Loyola Joseph
National Assn. of Educated Self-
Employed Youth (NAESEY)
No. 117 Trade Center, Wallojah Road
Madras 500002 Phone: 845689; and

Lijjat Papad
34 Arauamuthu Garden St.
Egmore, Madras 60008 Phone: 664901; and

Shri Mahila Griha Udyog
Lijjat Papad
3 Kamal Apartments
S.V. Road
Bandra (West) Bombay

Mr. Joseph is the Secretary of the Lijjat Papad Industry which was discussed in the previous section of this paper. Seven thousand women have been organized into cooperatives serving this industry. Joseph is also the Executive Director of NAESY which arranges for young people to become self-employed entrepreneurs. NAESY arranges for bank loans and helps with all aspects, from production to marketing of various businesses. Joseph has recently organized another program called Food for the Rural Poor. It also emphasizes self-employment schemes.

Stree Sewa Mandir
66 Bazlullah Road
Thyayaraja Nagar
Madras 600017

This group trains women in non-traditional skills such as composing, book binding, radio and T.V. repair, secretarial skills, accounting and tailoring. It runs several businesses in these fields and employs primarily women.

Mrs. Jayala Kshmi
Bangalur Layout
13 Cross Road
Bangalore 5

The credit scheme discussed in the previous section is one component in the Bangalur Layout integrated slum development project. The credit scheme which allowed slum residents to successfully set up their own businesses was integrated with plans to provide vocational training, housing, day-care, plumbing, health clinics, and paved streets for the community. Mrs. Jayala Kshmi is a strong, charismatic leader who helped this slum transform itself into a viable community within seven years.

Mrs. Aruna Tara, Organizer
Bhagwatula Charitable Trust and Dirrela
Cooperative Farmer's Service Center, Ltd.
Yellamanchili, Visalthapatnam District
Andhra Pradesh

Mrs. Tara has been organizing programs which provide women with employment in making handicraft articles such as leaf plates, mats, toys and papads.

Mrs. Koely Roy, Executive Director
Calcutta Youth Self-Employment Center (CYSEC)
11 Dr. U.N. Brahmachari St.
Calcutta 700017 Phone: 431983

CYSEC is another successful program for unemployed youth in Calcutta. It provides young people with vocational training, access to credit and follow-up assistance. CYSEC has a new program which will concentrate in rural areas.

Mrs. Ella Bhatt, Executive Director
Self-Employed Women's Association (SEWA)
231 Bramaputra
Ahmedabad

SEWA focuses on providing credit for employed poor women. The Mahila Seva Sahakari Cooperative Bank serves SEWA members. It has 8,000 shareholders and 11,400 accounts. Other services such as managerial training and day-care are available to SEWA members. Like the Working Women's Forum, it has developed into more of a movement than a credit cooperative.

S.R. Prabhu, Deputy General Manager
Canara Bank
J.C. Road
Bangalore 2 Phone: Office - 75320; Home: 604956

The Canara bank has financed cooperatives and projects such as the Bangalore slum development project described above. Mr. Prabhu now retired, is very knowledgeable in methods of providing credit access to poor people.

K. Janardanan Pillai, Secretary
Kerala Gandhi Smarak Nidhi
Gandhi Bhavan
Triandurm 695014 Phone: Office: 3708; Home: 61458

This is a Gandhian group which is successfully implementing cottage industry programs in villages.

Stree Sera Sahakar Sangh
Niyameet
30, E. Ahmekar Nagar
Parel
Bombay 400012

This is a federation of women's industrial cooperatives. The government has given this group contracts for "reserved for women" items.

Annapurna Mandai
"Navnit" Block No. 4
Ram Murthi Road
Dadar, Bombay 400028

This group provides credit to self-employed women and has been involved in organizing women from informal production and service sectors.

Chimanlals Private Limited
Majthia Chambers
276, Dr. D. N. Road
Bombay -- 1

This organization is a group in which women produce hand-made paper and stationery based on traditional designs.

Conclusions. The groups and people described above can provide the design team with information regarding indigenous PVOs. The design team should then be able to determine the feasibility of linking an AID-sponsored women's income-generating component to indigenous PVOs. If the linkage is not feasible and new initiatives must be formulated, the design team could draw upon the experience of these groups and utilize some of their techniques. The most important aspects of any income-generation scheme is developing the project according to the interests of the women and involving the recipients in the organization of the program and decision-making processes.

ASSESSMENT GUIDELINES

The addition of an income-generating component to nutrition projects is a new concept. Little research has been conducted in this field: few empirical tests have been performed and extensive data on the linkage between women's income and nutritional status have not been collected. The impact of this component on the nutritional status of the most vulnerable groups should be closely monitored and evaluated.

Income-generating schemes for both men and women have evoked attention from most donor agencies, including AID. It would therefore be worthwhile to study the effects of women's income generation not only in relation to nutrition, but with regard to family and community well-being in general. Some guidelines for monitoring the results of this component will be provided in this section. These guidelines should not be considered complete. Each income-generation scheme will require a different set of measurement criteria depending on the type of project developed, the specific women involved, and the particular geographic site. However, these suggestions can serve as a general outline to a more detailed monitoring and evaluation plan.

Guidelines. These guidelines should be used to determine the amount of income generated, how it is distributed among family members in the form of cash, who spends the income, what is purchased, and how purchased goods (including food) are distributed within the family. The effects of increased income on women's status in the home and in the community should also be measured. Dixon outlined the issues that need to be addressed in her book Rural Women at Work. Her ideas will be summarized here.

Extensive baseline data should be collected. Control villages should be maintained (i.e., a village in which the nutrition program is implemented without an income-generating project compared to a village of similar characteristics with both the nutrition program and the income-generating component). If maintaining control villages is too costly or villages cannot be adequately matched, individuals and families within a single village should be matched. The effects of the income-generating scheme on one individual and family can then be measured against the status of the individual and family that did not participate in the scheme.

Direct impacts can be deduced by measuring the woman's earned cash income, the number of hours that she works, and the type of work she performs. Her formal and informal education should be taken into consideration. The woman's consumption patterns should be monitored, particularly her consumption of food, housing, clothing and other personal goods. Her access to labor-saving devices, such as water, electricity and transportation, and her control over family wealth such as land, jewelry and cash savings, should be measured.

Social status, while extremely difficult to quantify, should also be accounted for. Dixon suggests that the extent of a woman's input into the decision-making process of the following issues can be used as a measure of a woman's power. A woman with power will be able to influence (1) every day decisions such as the division of labor in the household, the money spent for the household, and the allocation of purchased goods within the family; (2) the timing of births and of marriages of her children; (3) religious observance; (4) land and crop decisions (for example, when to buy or sell land or which crops to grow); (5) money lending or borrowing practices; and (6) segregation and mobility within the home. A woman's power can also be measured by evaluating other family members' opinions of her, by taking note of direct and indirect ways the woman influences family decisions, and by listing her activities and leadership roles within the community as a whole.

The woman may be the best judge of her own power and status. Power must then be defined as the woman's "general feelings of control over the major decisions or events shaping (her life), including control over others and control over self" (Dixon, p. 194). Self-esteem is another facet of social status. "Self-esteem could be tapped by questions relating to women's estimates of the prestige with which they are viewed by others and to their feelings of value or self-worth" (Dixon, p. 195).

While the impact of increased income on the women who earn it is extremely important, the objective of the India Integrated Maternal Child Nutrition Project is to improve the nutritional status of vulnerable family members. This means that the distribution of the increased income and its benefits within the family must be studied before the income-generating component is introduced, and followed carefully throughout the life of the project. The results must then be evaluated to determine whether or not increased female income has changed the intra-familial distribution of food, education, health care and other family needs. All findings should be disaggregated by sex and age. The data should also take into consideration differentiations due to seasonal variation.

Family members should be interviewed separately. Intra-familial distribution and consumption data cannot be based upon the recollection of a single family member. Consumption, especially food consumption, outside the home must be accounted for. The interviewing and measurement process should not disrupt normal eating habits. The researcher should be careful to measure what the distribution actually is rather than what the family member(s) think it should be or what the interviewer wants to hear.

Health and nutrition indicators should reflect changes in the target groups' nutritional status. The results should then be correlated with the income and distribution data.

Conclusions. Given the lack of hard data regarding the relationship between female income and child nutrition, it is imperative that the impact of this component be evaluated. The inclusion of a women's income-generating component to this nutrition project provides an excellent opportunity to study carefully the differences between the way men and women spend their income and how these differences affect family well-being.

The new emphasis on household income as a measurement of economic development is a great improvement upon more macroeconomic measurements such as per capita income. Determining the use of additional income and disaggregating the source of income by sex will help project designers focus on the needs of the primary decision-makers. The decision-maker within the same household may vary depending on the issue. If designers use this information, projects will be more successful in reaching target populations.

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Conclusions

This report has explored the potential impact of including an income-generating component in the India Integrated Maternal Child Nutrition Project. Evidence supports the hypothesis that women's income is correlated with child nutrition. This component will provide an excellent opportunity to test that hypothesis. Income-generating projects which will be acceptable to women in India were described. The people and groups in India who have been involved in or are knowledgeable about these projects have been identified. Guidelines for measuring the impact of this component on the women, their families and their communities were outlined.

Given that increasing women's income leads to improved nutritional status for the children, appropriate income-generating activities must be developed for the mothers. These activities can vary from traditional food production and processing to non-traditional service jobs such as plumbing and radio repair work. The income-generating schemes will vary depending on the location of the project and the needs and interests of the women involved. Different programs will have to be devised for urban and rural beneficiaries and cultural differences must be taken into account.

The people and groups who have been organizing poor women in India are the best resources to contact. They have earned the trust of the people and have intimate knowledge of their needs and capabilities. Their experience in the field can be of invaluable use to the design team. If the nutrition project could utilize the indigenous groups' organizations or emulate their structures, the income-generating component could become an extremely effective program. The component may then meet the needs of the target groups and involve the participants in the decision-making processes of the project.

This innovative approach to resolving the problems of malnutrition deserves careful attention and evaluation. Providing the opportunity to raise household incomes allows AID to help poor families increase their capacity to sustain themselves, develop their own skills, and make independent family welfare decisions. It will reduce the need for poor people to depend on government welfare projects such as supplementary feeding programs. This project encourages familial self-sufficiency and has the potential to improve the quality of life for participating women and their families.

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