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INTRAHOUSEHOLD ALLOCATION OF RESOURCES AND ROLES

An Annotated Bibliography of the Methodological
and Empirical Literature

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Introduction

How to Use the Bibliography

This bibliography is divided into three sections listed in the table of contents, covering analytical frameworks, methodological papers, and empirical studies. Under each main heading, a series of subtopics is identified by letter. In the text, citations are listed alphabetically by author under each main heading. In the right margin, the appropriate letter or letters appear opposite the author's name. Papers dealing with a particular subtopic may be found by scanning the right margin for the letter which identifies that topic. In many cases, articles touched only lightly on a subject, and it was a matter of judgment whether to list them under the subject or not. Generally, the bibliography errs on the side of inclusiveness. Articles which fit under two main headings are listed under both of them. The complete abstract appears in the section of its greatest relevance; in other sections, only the citation is given, and the reader is referred to the number at which the abstract appears.

The main listings of the abstracts are numbered sequentially through all three sections. The Table of Contents shows the abstract numbers included in each section. Citations which appear more than once are numbered only once, based on where the complete abstract is listed.

There are two indexes at the end of this bibliography, one listing authors alphabetically, and one listing regions and, alphabetically within each region, countries discussed in the reference. If one reference has several authors and deals with several countries, these are listed separately. The indexes refer to the references by number.

This bibliography may be revised periodically. The author would like to know of corrections and omissions, as well as whether the present format is useful.

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1

Section I

C

Abdullah, Tahrunnessa A. and Zeidenstein, Sondra A. 1982

Village Women of Bangladesh: Prospects for Change, ILO/WEP Women in Development Series, vol. 14. New York: Pergamon Press. 246 pp. See #206 for complete abstract.

1

3 C

Ahmad, Zubeida 1984

Rural women and their work: Dependence and alternatives for change, International Labour Review 123(1):71-86.

This paper examines the effect of changes in demand for agricultural products and increased cash-cropping on the work status of rural women. The capital intensive nature of cash-crop farming has increased male unemployment and often leads men to migrate for jobs, increasing poverty and forcing women to work for pay in or out of the home. At the same time, cash-cropping has eroded women's access to land-related resources. For example, in Africa poor quality land for subsistence crops may be allocated to women when the husbands are engaged in cash crop farming. Land reform programs discriminate against women by focusing on the male household head. In West Bengal India, women have sought joint title rights to land because men who migrate to cities for work later return to the rural area with a second family.

As a result, women's lack of access to resources limits their control over labor, income and decision-making. Additional constraints are imposed on women when family and social customs limit their mobility, thus reducing training and wage earning possibilities.

2

C

Ahmed, Iftikhar 1978

Technological change and the conditions of rural women: A preliminary assessment. WEP Working Paper #2-22/WP 39. Geneva: ILO.

After surveying available evidence from a wide range of developing countries, the author assesses the nature and impact of technological change on rural women. The paper focuses on changes in their employment and income-earning opportunities and the impact of technological change on the drudgery and burden of work.

3

C

Anderson, Mary B. 1985

Technology transfer: Implications for women. Ch. 3 in Overholt, C. et al., eds., Gender Roles in Development Projects. W. Hartford, CT: Kumarian Press.

The differential effects of new technologies on women are examined using a four part framework of production, consumption, technology characteristics and mechanisms for transfer of the technology. In production, technology may change who performs the activity, the location, the timing and/or the skills needed for the activity. Technology may make a process inaccessible for use by women or certain groups because of social or cultural restraints. Access to and control over knowledge and skills training required to acquire a technology determines who will produce and benefit from the technology.

The effects of technology on consumption also has gender implications because the person who produces something also determines who consumes it. Both physical and non-physical characteristics of a technology that cause differential impacts on sex roles are discussed. Finally the influence of the method of technology transfer on who learns about it and can use it is analyzed.

4

B

Arnould, Eric J. and Netting, Robert McC. 1982

Households: Changing form and function. Current Anthropology 23(5):571-575.

This paper presents the proceedings of a conference on the activities, functions and changes of households. The problems and concepts arising from each of the major orientations of household research and general methodological and definitional difficulties are presented. Cross-sectional and comparative studies explain macro-levels of organization using the household form as an independent variable. Historical studies indicate cultural continuity dominates and is little influenced by exogenous factors. The most popular approach is the use of cross-sectional and processual studies to research adaptation and covariation among households. Historical processual studies hold promise in clarifying distinctions among task and kin components of the household.

5

C

Ashby, Jacqueline A. 1981

New models for agricultural research and extension: The need to integrate women. Ch. 3 in Lewis, B. C., ed., Invisible Farmers: Women and the Crisis in Agriculture. Washington, D.C.: Office of Women in Development, AID. (Out of print.)

This paper argues that new agricultural research and extension activities must be planned to incorporate women. Even if women do not contribute much field labor, they are engaged in household labor that contributes to agricultural production. The sexual division of labor does not always reflect the actual decision-making and farm management authority. In parts of the developing world standard extension programs for women provide little training related to women's production activities (threshing, cleaning and husking of rice, etc.) and thus contribute to declining productivity of women relative to men.

To guide the development of new strategies the author suggests four general questions: Who controls and allocates strategic assets? Who is likely to receive benefits and thus have the incentive to adopt new practices? Who is likely to implement new practices and thus should be targeted for practical training? Who may be penalized by the introduction of an innovation and what compensatory adjustments need to be made?

A

Asok, Mitra 1981

Participation of women in socio-economic development: Indicators as tools for development planning. The case of India. In Women and Development: Indicators of Their Changing Role. Paris: UNESCO. See #220 for complete abstract.

6

A

Barnes, Roberta 1978

The effects of household composition on household expenditure patterns. Paper prepared for the Population Association of America meeting, Atlanta, Georgia.

In this paper the author models effects of household size and composition on consumption patterns and income elasticity. Consumption was examined at three levels: total food consumption, total expenditures, and consumption of food grains. The consumption model included variables for total household income, number of household members in each of seven age/sex categories, total household size, a proxy reflecting household income dynamics,

transformation parameters reflecting hypothesized non-linear relations between consumption and income, and a stochastic disturbance term. The transformation parameters were estimated using a quarter subsample of the data from all rural households in India from 1968-1971.

The greatest impacts on consumption are produced by adult males, then adult females and children aged 5 to 9. Infants and 1-4 year old children have the least effect. Estimated consumption rises at a decreasing rate as household size increases by two or more, except for adult men where diseconomies of scale exist until the addition of a third male.

Income elasticities are low, although households become more sensitive to income changes with increased membership. Income elasticity of total food consumption ranges between .30 and .36 for rising-income households and increases with family size. The range for households with falling or stable income is between .44 and .51. The elasticity of total expenditure is between .55 and .57 and does not appear to be sensitive to demographics. Consumption of food grains is highly inelastic, although households with rising income may decrease expenditures for grains compared to those with stable or falling income.

The author suggests the rise in elasticity of consumption with income may be explained by the habit of saving household income for lean years. Food quality and fertility issues also complicate the analysis.

7

A

Becker, Gary S. 1981

A Treatise on the Family. Cambridge: Harvard University Press.

This book applies household economic model to various aspects of family formation and behavior, including division of labor, choice of family structure (numbers of spouses and children) and others. The household production model argues that households combine goods (purchased or not) and the time of members to produce "utility commodities," that is, such things as prestige, pleasure, health, and children. These commodities are to some degree jointly consumed by all household members. The prices of these commodities must be calculated as shadow prices based on the costs (including time) of production.

The division of labor in households is (the theory holds) based on specialization of members in their most productive activities. Traditional division of labor (women in childcare and domestic work, men in hunting, farm and market work) is based on biological differences and differences in the accumulation of human capital (skills, health). A simplifying assumption of the theory is that human capital accumulation explains all differences in comparative

advantage. Market wage rates which vary by sex alter the relative marginal productivity of men and women in market and domestic work.

The book is primarily a theoretical exposition of the various expected outcomes and of how certain behaviors might be explained by the model. Data are not extensively cited.

8

A

Becker, Gary S. 1975

A theory of marriage. In Schultz, T. W., ed., Economics of the Family. Chicago: University of Chicago Press.

This article applied the "new household economics" approach to the question of why people marry. The theory argues that total output of a married couple is greater than that of both members separately because men's and women's time are not substitutes; jointly, each can specialize in the activities in which he or she is most productive. The theory suggests that increasing women's market wage relative to men's reduces the incentive to marry (by making their time more substitutable). It suggests polygamy is economically rational if such inequality exists among men that the second wife of a well-endowed man increases her productivity more than the first wife of a less well endowed man. The theory does not specify an expected division of total output between mates. The author argues one possibility is division according to the marginal production of individual members (i.e., resources allocated to those who will be most productive). No data are cited. The assumption is that the household has a single well-ordered preference function. The idea of "caring" is introduced to suggest why members are willing to transfer their own resources to each other. "Caring" raises total household output of utility by adding the utility of one's mate's consumption to one's own utility.

9

B

Becker, Gary S. 1965

A theory of the allocation of time, The Economic Journal 75 (2):493-518.

This important article is one of the earliest to suggest that household consumption should be viewed as the production of utility for household members, which means that different combinations of goods and time (the factors of this "production") can yield equal utility. This is the fundamental concept of the "New Home Economics." Time and goods can be traded off against each other. This means that the value of time used in consumption must be included along with the cost of the goods, and that the cost of time used in consumption rises as income foregone (wage rate) rises. Full income of a household thus includes both real income and the time of

household members. The value of time varies by person and by time of day and week.

The author suggests that time allocation between market work and other activities will depend on the relative efficiency of different members in these activities. He suggests that income/expenditure data should be combined with time data.

10

A B

Becker, Gary S. and Lewis, H. Gregg 1973

On the interactions between the quantity and quality of children. Journal of Political Economy 81(2, Part II):S279-288.

This paper argues that the observed negative correlation between quantity and quality of children suggests the shadow price of children increases with greater quality. The income elasticity of demand for child quality is greater than that for quantity. Thus rising income causes an increase in investments in quality which raises the cost of additional children and thus reduces their number. An increase in women's wages will reduce the number but not the quality of children. On the other hand, price elasticity of demand for quantity is greater than for quality of children. With an equal percentage change in price of quantity and quality, the investment in quantity will fall more.

11

A

Becker, Gary S. and Michael, Robert T. 1973

On the new theory of consumer behavior, Swedish J. Econ. 75:378-95.

This article argues that consumer theory definitions of prices and income have little explanatory power for individual household behavior. Although there are systematic effects of age, family size, education and other factors, no good theory of tastes and preferences has yet been proposed. The authors suggest a household production function approach, where goods plus time are used to produce a "commodity," which is some aspect of utility. Full real income is equal to money income plus the time of household members. The prices of the household commodities consumed are computed as money cost, divided by the index of commodity price, including the shadow price of time used for consumption. Substitutes in household consumption are defined as goods which produce the same commodity (e.g., health, satisfaction, etc.).

12

A

Behrman, Jere R.; Pollak, Robert A. and Taubman, Paul 1982

Parental preferences and provision for progeny, Journal of Political Economy 98(1):52-73.

In this paper a general preference model is developed to analyze parental allocations of resources among their children. Implications are tested with a separable earnings-bequest model, using education and earnings data from 914 pairs of fraternal and 1,021 pairs of identical white U.S. male adult twins. Parents adopt a compensating or reinforcing child investment strategy based solely on earnings function properties and their choice of strategy depends on their aversion to inequality.

The preference model is based on the concept that genetic endowments and education determine expected lifetime earnings. Parents influence their children's earnings by investing in education and their preferences are represented as a function of parental consumption, expected lifetime earnings of the i^{th} child, bequest and gifts to this child and the total number of children. Constraints on maximizing utility are: the limit to expected earnings due to endowment, education and other factors, and financial and time constraints.

The investment model in both perfect and imperfect capital markets is used to predict total intrafamily resources devoted to children's education, the distribution of resources among the children and the resulting earnings distribution. The result implies total resources for education is the amount producing marginal returns that is equal to interest rates or to parent's marginal borrowing rates.

A wealth model or a separable earnings-bequest model to represent parents' welfare function are used to illustrate different parameters that determine parental strategy for allocation of resources. In the wealth model, parents determine each child's level of schooling by efficiency and allocate resources using reinforcing, compensating or neutral strategies to achieve equal distributions of wealth. In the separable earnings-bequest model, the parents' strategy depends on their aversion to inequality and on earnings properties. The empirical analysis uses the latter model.

13

B

Bender, Donald R. 1967

A refinement of the concept of household: families, co-residence, and domestic function, American Anthropologist 69:493-504.

This article provides a clear exposition of the conceptual differences among various definitions of the family and household,

stressing that each concept may define a different group of individuals.

"Family" is a kinship group, related by ties of blood and marriage, culturally defined. Co-residence frequently does not define family groups. Domestic functions, which are activities of day-to-day living including child care and food provision, also need not be shared by the family nor by the co-residential group.

Examples are given to demonstrate the independence of kinship, co-residence, and domestic function as factors defining distinct groups of persons.

14

B

Ben-Porath, Yoram 1982

Individuals, families, and income distribution, Population and Development Review 8 (Supplement):1-13.

This article discusses the difficulty in defining the family as a unit for measuring income distribution. The family is commonly defined as the group which engages in joint income generation, pooling and redistribution. But false assumptions are often made in this connection. For example, non-coresidential family members may pool income, while spouses living together may not. Even with a great deal of culture specific information, the definition of the appropriate income unit may be arbitrary.

15

C

Blumberg, Rae Lesser 1984

A general theory of gender stratification. Ch. 2 in Collins, R., ed., Sociological Theory 1984. San Francisco: Jossey Bass (Social & Behavioral Science Series).

It is argued that women's relative power is the most important predictor of their position in a sexual stratification system. Women's economic power at the macrolevel has a greater impact on her power at the microlevel, than the reverse. With increasing economic power women have more influence in labor allocation, and politics and will suffer fewer negative manifestations in other spheres of power.

Women's participation in production is a necessary but insufficient precondition to achieving a relatively high level of economic power. In relatively unstratified preindustrial societies, women's involvement in production is a function of labor supply and demand and the degree of conflict with childcare responsibilities. In more stratified and centrally controlled societies labor demand is a more important determinant than childcare needs in predicting sexual division of labor.

De facto inheritance is generally the most important and direct kinship system for women to gain economic power, and matrilineal descent is therefore most likely to benefit women. Access to economic power is facilitated for women who are in a co-resident group of female kinswomen and have access to domestic property.

16

B

Bould, Sally 1984

Development and the family: Third World women and inequality, International Journal of Sociology and Social Policy 4(4):38-51.

The author argues that the development of an appropriate theory of the family that incorporates the concept of reciprocal economic obligations is necessary for women-in-development or growth-with equity approaches to succeed. Western ideology of the male head as primary provider leads to higher cash value for male labor and denial of women's actual or potential contribution in development. This inhibits the development of new norms of reciprocal economic obligations to regain the balance between husbands and wives under new conditions.

Development tends to cause a relative decline in the family's economic position while favoring individual entrepreneurs. Reduced access to land for subsistence production lessens women's customary contribution to the household, thereby lowering their relative status. Households are forced to purchase commodities in price-inflated international markets. The introduction, into the household economy, of cash, which is usually controlled by men, creates the illusion of a surplus and may be diverted from use for basic necessities.

Providing women with jobs and direct participation in the cash economy ignores family dynamics and the traditional balance between men and women. This could create antagonism between husbands and wives as well as overwork for women. A new division of labor that enhances women's bargaining position while balancing cultural expectations with development pressures is advocated.

17

A

Butz, William P. and Habicht, Jean-Pierre 1976

The effects of nutrition and health on fertility: Hypotheses, evidence and interventions. Ch. 7 in Ridker, R. G., ed., Population and Development. Baltimore: Johns Hopkins University Press.

In this chapter the presumed biological effects of health and nutrition on fecundity and fertility are reviewed and integrated into a predictive model. The opportunity cost of mother's time is

hypothesized to be correlated with level of schooling and residence size. Parents may view quality and quantity of children as substitutes. In rural low-income environments available jobs require little intellectual activity, animals are valuable assets and productive requirements for physical strength are seasonal. Therefore optimal resource allocation gives food to those having highest value of marginal product in production. This maximizes production and purchasing power but may reduce future health and development of children.

B

Butz, William P., and Stan, Peter J. E. 1982

Interhousehold transfers and household structure in Malaysia, Population and Development Review 8 (Supplement):92-115. See #248 for complete abstract.

C

Buvinic, Mayra 1983

Women's issues in third world poverty: A policy analysis. Ch. 2 in Buvinic, M., Lycette, M. A. and McGreevey, W. P., eds., Women and Poverty in the Third World. Baltimore: Johns Hopkins University Press. See #95 for complete abstract.

18

B

Carter, Anthony T. 1984

Household histories. Ch. 3 in Netting, R. McC., Wilk, R. R. and Arnould, E. J., eds., Households: Comparative and Historical Studies of the Domestic Group. Berkeley, CA: University of California Press.

This chapter distinguishes between the household or task-oriented dimension and the familial dimension of domestic groups, and between statistical aspects of household structure and the underlying rules and strategies of household systems. Household structure, which refers to observable patterns of social arrangement, is generated by the household system's response to variable circumstances. The cultural principles of household formation and management that underlie household systems can be divided into rules on recruitment and devolution and strategies to optimize resource use in completing tasks. Longitudinal study of household structure can elucidate rules and strategies. The history of a Maharashtra, India agricultural household is used to illustrate data abstraction and analytical approaches. The impact of changing socioeconomic systems and how strategies are adopted can be traced through household histories and event records.

19

C

Chaney, Elsa; Simmons, Emmy and Staudt, Kathleen 1979

Women in development. Background paper for the U.S. Delegation, World Conference on Agrarian Reform and Rural Development, FAO, Rome. Prepared by AID, Washington, D.C. 32 pp.

This paper presents a general policy approach to integrating women in development. Since access to land and water resources is critical to the productivity of farmers, the legal rights and social customs which determine women's access must be examined. Although women play an active agricultural role in subsistence societies, commercialization is generally biased toward men by giving them control over cash crops or by drawing them away from agriculture which adds to the burden of women. In Kenya it was found that, controlling for access to education and extension, women's output per acre surpassed men's, but the two were equal without the control.

To help close the information gap, the authors recommend concentrating on group extension and increasing the number of female extension agents. It is noted that men and women use separate information networks, which is very important to consider in societies where women are traditionally excluded from productive task. Women will be best integrated by building on accepted roles and by providing income-earning opportunities.

C

Charlton, Sue Ellen M. 1984

Women in Third World Development. Boulder, CO: Westview Press. See #262 for complete abstract.

20

A

Chernichovsky, Dov 1979

The economic theory of the household and impact measurement of nutrition and related health programs. In Klein, R. et al., eds., Evaluating the Impact of Nutrition and Health Programs. New York: Plenum Publishing.

The use of household economic theory in program evaluation, described in this article. The household is defined here as the basic socioeconomic unit that makes most decisions about investment in human beings and consumption. In this framework program use is viewed as a function of the degree that it serves household objectives, the household resources required, and the relative attractiveness of other uses of these resources. Economic analysis can predict program success because it allows the prediction of

program users, program substitutes, its relative attractiveness, and use of household resources.

21

A

Clark, Carol 1981

The use of the household production model to assess the relation of women's market work to child welfare. Paper prepared for the International Center for Research on Women Policy Roundtable, Washington, D.C., December 10.

This paper criticizes some aspects of the household production model as it is applied to analysis of the effects of women's market work. Several studies are cited which show women's market work affects their leisure more than their child care time.

The author argues the household production model overestimates the degree of choice a mother has about how much child welfare to produce. Fixed cash needs in conjunction with low wages may dictate the amount of time at work. Cultural constraints may also limit women's choice of activities. The model does not deal with how the household's utility function is determined.

Compatibility of women's work with child care is based on abstract concepts which may not reflect the best activities for the child.

The model values time in terms of income foregone, but does not deal with the fact that low women's wages and the unpaid nature of child care may cause a misallocation of resources.

22

A

Cloud, Kathleen, and Overholt, Catherine 1982

Women's productivity in agricultural systems: an overview. Paper presented at the International Agricultural Economics Meetings, Jakarta, August 30.

This paper provides a general discussion, with numerous references to the literature, of factors influencing women's productivity in agriculture, and then presents an analytical framework for studying the issue.

The authors suggest that women's productivity must be studied in the context of all women's activities and their alternatives: investments in child quantity and quality (child-rearing and transmission of knowledge and skills), home-based and market productivity in household, agricultural, and wage-earning tasks. Analysis of productivity must be disaggregated by sex within the household unit, here defined as a kinship group having joint decision-making and ownership of resources, which may change over

time and in response to economic conditions. The several studies are discussed in terms of the difficulty of measuring women's productivity when so many activities are not recognized or monetized, much of women's work involves simultaneous activities, labor markets are restricted, and women's access to productive resources (including training) is lower than men's.

A framework is suggested in which all the outputs of women's productive activities are measured; labor input is disaggregated by sex in all categories of production; joint production is acknowledged. The question of how the household utility function is formulated must be addressed. The problems of valuing full income, including leisure, unemployment and non-monetized tasks are discussed.

23

B

Cohen, Ronald 1982

Households, persons, and wider world systems: micro and macro in development theory. Paper presented at the American Anthropological Association 81st Annual Meeting, Washington, DC, Dec. 3-7.

The author presents the household as the smallest unit of analysis and therefore as an indicator of change. He defines the household as the minimal human subsistence unit, not necessarily all those who sleep under one roof. The phenomena which affect household structure can be divided into cyclical, including the domestic cycle and marital and inheritance rules, and non-cyclical or context factors, such as the physical, political and socioeconomic environments and individual variation. Some of the ecological factors that are discussed include demographics, scale differences, centralization of household organization, access to resources, individual and household leadership and a series of development factors.

24

C

Date-Bah, Eugenia 1981

Rural women in Africa and technological change: Some issues. Labour and Society 6(2):149-62.

The author argues that one must focus attention on the context of rural women's lives when introducing technological change. In developing countries the family unit refers not only to the immediate household but also to the extended kin. Appropriate rural technologies should not disrupt the family unit in the course of increasing income and reducing drudgery. Since the activities of men and women, although separate, are often complementary, new methods must introduce complementary improvements as well.

It is also noted that there is considerable differentiation among rural women themselves so technological innovations may have variable impact. The author suggests the use of existing traditional groups to introduce changes may be less expensive and more readily accepted. She also recommends exploiting locally available energy resources to reduce rural women's burden without biasing control of new technologies toward men.

25

A

Datta, Samar K.; Nugent, Jeffrey B. and Wang, Jone-lin 1983

Intrahousehold sources of male-female differences in labor force participation. University of Southern California mimeo. 28 pp.

The purpose of this paper is to develop an analytical framework to explain supply side differences in male and female labor force participation rates in rural and urban developed and less developed countries. The model assumes income is pooled with allocation determined by family structure. It is also assumed that each marriage partner determines his/her own time allocation, so that in extended households each partner has more control over time than over income. Parameter and exogenous variables are chosen to reflect social and economic conditions prevalent in either DCs or LDCs. Private good consumption is defined for each partner as man's and woman's income less total subsistence requirement of the private good for each, times their resource allocation.

The results demonstrate that sex differentials in labor participation rates are not only a function of wage rates and market conditions but also of intra-household relations. These include differences in husband and wife preferences, productivity in public goods, versus Z goods (i.e., commodities such as health and satisfaction which are produced and consumed within the household) and elasticities of substitution between market goods and time. As the elasticity of substitution between male and female time in production of public goods increases, males become more specialized in the labor force and females in 2 goods production.

26

A

de Tray, Dennis 1980

On the microeconomics of family behavior in developing societies. Ch. 4 in Binswanger, H. P. et al., eds., Rural Household Studies in Asia. Singapore: Singapore University Press.

This paper raises the question of the applicability of new household economics to LDC settings. Willis' (1974) model of fertility is then used to predict fertility behavior based on mother's and father's education, household income and extended vs. nuclear structure. Husband's education was found to have a positive effect on fertility

at low income levels and negative at high incomes, while wife's education had a consistently negative impact. Nuclear structure, related to age of household head and rurality, was associated with an unexpected deviation from expected fertility.

27

A

de Tray, Dennis 1973

Child quality and the demand for children. J. Polit. Econ. 81(2) Part II (suppl.):570-95.

This article presents an econometric model of demand for children as a predictor of fertility and discusses its limitations. The model posits demand for children as a demand for "child services," a composite of child number and quality, which are substitutes. A limitation of the model is the incorrect assumption that households make a single, one-time decision about total desired fertility.

The model is tested using U.S. census data.

28

B

Dorjahn, Vernon R. 1977

Temne household size and composition: rural changes over time and rural urban differences, Ethnology 16(2):105-27.

The author describes standard international census and survey definitions of the household as they have been used in research and questions the applicability of these definitions in situations involving (a) informal or consensual marriages, (b) joint or extended family households, and (c) polygamous marriages. The author describes the Temne (of central Sierra Leone) concept of the household which distinguishes between production and consumption units within a single household, and includes reference to single households consisting of two or more married males (extended families) and polygamously married males. For Temne the household is defined as a single production and income unit, with the head of household acting as administrator on the big farm on which most economically active household members work. Within the household there may be several separate consumption units, inhabiting detached house structures. In addition to work on the big farm, individual household members work on small plots, the proceeds of which go only to the consumption unit. The wife of the household head distributes proceeds of the big farm among consumption units. The tendency of productive adults to put more time into their own rather than the communal farm is leading to the breakdown of extended farming units. The author develops a descriptive typology of Temne households including monogamous, polygynous, extended, single-parent, and solitary or unrelated households.

The author describes changes in rural household composition between 1955 and 1963. Single-parent households appeared. Average household size did not change. The most significant rural-urban differences in household composition in 1963 were: larger average household size in rural areas, no extended households in urban areas, greater frequency of monogamous households in urban areas, and single-parent households more frequent in rural areas.

C

Eide, Wenche B. and Steady, Filomina C. 1980

Individual and social energy flows: Bridging nutritional and anthropological thinking about women's work in rural Africa. Ch. 3 in Jerome, N. W., Kandel, R. F., and Pelto, G., eds., Nutritional Anthropology and Contemporary Diet and Culture. New York: Redgrave Publishing Co. See #295 for complete abstract.

29

B

Engberg, Lila A. 1974

Household differentiation and integration as predictors of child welfare in a Ghanaian community. Journal of Marriage and the Family 36(2):389-99.

This study in Ghana attempted to use two composite household measures along with socioeconomic indicators of individual members' status to predict child welfare. One composite measure was household integration, used to measure the degree of unity or harmony in the household. It was comprised of family organization, degree of family stability, degree of husband's authority, and status consistency between spouses. The other was household differentiation, a measure of level of living and modernization, comprised of household possessions, financial assets, social participation, and other household practices. Measures of child welfare were schooling, number of children, home improvements, and morbidity and mortality, all as reported by the mother. Measurement of these variables required six weeks of interviews and participant-observation by five students living in the study area, for a sample size of 118 husbands and their households. Differences in welfare by these measures were not explained by these variables, using multiple regression analysis. The author suggests that the composite measures might be more relevant if applied only to a household subunit of a woman and her children, but this is not tested.

30

A

Epstein, T. Scarlett 1975

The ideal marriage between the economist's macroapproach and the social anthropologist's microapproach to development studies, Economic Development and Cultural Change 24(1):29-46.

The author stresses the importance of a multidisciplinary approach to studying developing societies. Economic models often do not fit because they ignore cultural constraints or behavior where economic, social, political, and kinship roles converge. Two cases are cited where apparent economic irrationality was the result of cultural factors. In Papua New Guinea, a cocoa cooperative received no supply to sell although the price they offered was higher, because men did not want written records of their land's productivity, due to inheritance patterns. This shows the need for economic and anthropological, microlevel studies of projects.

31

A

Evenson, Robert E. 1976

On the new household economics. Journal of Agricultural Economics and Development 6(1):87-103.

This paper discusses the relevance of the "new home economics" (see papers by Becker in this section) to developing countries. The author suggests that the assumption of a single household utility function (i.e., set of consumption preferences) is especially applicable in developing countries where families are dominated by a male head. He argues that households probably do maximize income and are aware of the market value of goods and of their time. Problems with the model are that it assumes fixed family membership, which is often not the case, and that the household production functions for consumption items are probably not independent, so the functions will not be linear.

The author suggests the implications of the model for fertility, treating children as a consumption good whose consumption uses the mother's time intensively.

The study uses regression analysis of data from the 1961 Indian census to test the significance of the cost of women's time for fertility decisions of the household. It finds evidence consistent with the "new household economics" view that the household operates as a firm and that children may be seen as consumer goods to the parents. Measures of household wealth are associated with more children in the household while women's wages (the opportunity cost of raising--i.e., "consuming" children) are negatively associated with the number of children. Regression analysis was also used to test the significance of children's economic contribution on their schooling. The results indicate that children's wages and the

productivity of their family's land (which would increase children's output) are negatively associated with children's school enrollment and positively associated with their labor force participation. Family size is also negatively associated with school enrollment, suggesting the substitution of child "quantity" for child "quality."

A

Fapohunda, Eleanor R. 1978

Characteristics of women workers in Lagos--data for reconsideration by labor market theorists, Labor and Society 3(2):158-171. See #305 for complete abstract.

32

A

Ferber, Marianne A., and Birnbaum, Bonnie G. 1977

The "new home economics": retrospects and prospects. Journal of Consumer Research 4(1):19-28.

The authors criticize the Becker model which holds that individuals work to maximize household income. They argue that women's comparative advantage in home production is due to low market wages, not relative productivity. Research is cited to show that women's work time does not increase men's home production. The concept of diminishing marginal returns suggests that both women and men should engage in some market work and some leisure to maximize satisfaction. The authors argue that the household's utility function results from the relative bargaining power of members with differing utility functions.

33

B

Fischer, John L. 1978

Summary report on the Conference on Women and Food, Women in Development. International Conference on Women and Food, University of Arizona, Tucson, Jan. 9-11. USAID, Washington, D.C.

This brief report states as a conclusion of the conference that the family is the basic income-earning and consumption decision-making unit, and should be the focal point for program efforts. However, this statement was not universally supported; others held that programs need to be directed at individuals.

34

B

Fjellman, Stephen M. 1976

Talking about talking about residence: an Akamba case. American Ethnologist 3(4):671-82.

This article develops a method for identifying variables which can be used to predict the type of residence pattern a particular individual will show. While the method is rather technical, the paper makes the useful suggestion that the types of households in which people reside should be defined in terms of indigenous categories, not those of the outsider. The author mentions the importance of recognizing change over time in household composition and residence pattern.

35

A

Folbre, Nancy 1984

Household production in the Philippines: a non-neoclassical approach. Economic Development and Cultural Change 32(2):303-330.

This article presents a theoretical discussion criticizing the validity of the neoclassical economic assumption of a household having a joint utility function, and uses regression analysis of data from the Laguna (Philippines) household study to test the theory. The results suggest that household utility function reflects relative bargaining power of members.

The Laguna study collected data by interview and direct observation on income and expenditure, food consumption, labor and time use, and interperson and interhousehold exchanges over several years. (See Evenson et al. 1979 [#117] for methods.)

Results of the analysis show an inequitable distribution of work and leisure. Women work more total hours than men, and women's wage labor does not reduce total work hours nor increase male hours of household work. Women's wages in the market were two-thirds of male wages, which might result in specialization in household work, but men's type of work or even unemployment was not related to the amount of male time in child care (about one hour per week). Among children, girls spent more hours than boys in work, and the girls' hours increased with age while boys' hours did not.

Consumption was also inequitably distributed. Adult males consumed more than 100% of the RDA for protein and calories, while women consumed 79% and 87%, respectively. General consumption expenditure for children was equal by sex under age five, after which boys received more, including more direct child care time of mothers.

Intergenerational income transfer occurred in both directions. Children age 25-34 significantly increased parents' income, even if

they were not living at home. The effect was greater in higher income households.

36

A

Folbre, Nancy 1982

Exploitation comes home: a critique of the Marxian theory of family labor. Cambridge Journal of Economics 6:317-329.

This article criticizes both the Marxian and neoclassical analysis of economic dynamics in the household. While material constraints on household production force households to allocate labor and resources efficiently, exploitation of members can occur because of relative differences in bargaining power. Increased labor market opportunities for women not only raise the opportunity cost of their child rearing but also increase their bargaining power. Capitalist development results in fewer children because children in the capitalist labor force are of less direct benefit to their natal households than in subsistence production. Thus observed facts are subject to different interpretations from those of neoclassical or Marxian analysis.

The author suggests a measure of intrahousehold economic exploitation by including labor input into market and household production, and comparing for each member labor value produced with labor value consumed. No empirical application is given.

37

A

Franklin, David L. 1984

Resource allocation decisions of low income rural households: Nutritional implications for agricultural and rural development projects. Prepared for USAID Bureau for Policy Planning and Coordination, Washington, DC. 47 pp.

This paper reviews the literature on nutrition in agriculture and rural development and uses a case from rural Panama to formulate policy recommendations consistent with the AID goal of maximizing the nutritional impact of economic assistance for agricultural and health programs in LDCs. Rural development interventions that are based on mobilizing beneficiaries' resources, especially labor time, underestimate the opportunity costs associated with time allocation. A review of case studies from Malaysia and Sierra Leone indicates that increases in household labor productivity will enhance nutrition more than a price support system.

The Panama study, in which data were collected in 1981 from 30 rural communities participating in some form of nutrition-oriented development activity, is used to model the allocation of time and market goods to nurturing and production activities according to

their relative prices (see abstract #38 for more information). The similarities and differences between this study and Barnum and Squire's (see abstract #224) Malaysia results are then described.

The author concludes that the value of time and the importance of timing in decisions must be recognized and development efforts should enhance the supply of skilled human time. The empirical findings from Panama of a joint effect of positive wage elasticities for food expenditures, negative calorie effects from higher opportunity costs of time and positive effects on nutritional status from higher valued time of mothers imply that mother's increased market participation will produce nutritional benefits if this process is encouraged by information, skills development and technologies to increase productivity of nurturing time.

38

A

Franklin, David L. and Harrell, Marielouise W. 1985

Resource allocation decisions in low-income rural households, Food Policy 10(2):100-108.

The model presented here presumes that time and market goods are the resources to be allocated to nurturing and production activities, according to their relative prices. A detailed description of the specific variables and their proxies is provided. The main hypothesis generated by the model states that as the value of time increases through productivity improvements or better labor market opportunities, the implied output and income effects will increase the household's output and demand for nutritional well-being. It is suggested that human time and food are complements in nurturing.

Data from a cross-sectional survey of 30 rural communities in Veraguas Province, Panama are used to test the model and predict the impact of various interventions on nutritional status, agricultural output and labor supply. Total calorie supply at the household level does not increase with additional births until the children reach school age. Yet nutritional adequacy was not achieved with additional food, as households who received donated foods reduced market food purchase. High support prices and technology increase the food supply but reduce calorie consumption because food acquisition becomes costlier. Increasing women's human capital improves nutritional status substantially and increases output moderately. The authors conclude that an increase in the value of time and labor force participation will reduce demand for food when there are few substitutes for women's time. Specific policy recommendations are then made.

39

B

Friedman, Kathie 1984

Households as income-pooling units. Ch. 3 in Smith, J., Wallerstein, I. and Evers, H.-D., eds., Households and the World Economy. Beverly Hills, CA: Sage Publications.

The relationship between household organization and the composition and structure of the labor force in the world economy is the focus of this discussion. A review of literature on the sociology of the family, women's studies and capitalist economy labor-force formation reveal two anomalies in the global work force: a minority of the population consistently participates in wage-labor, and wages in low-income areas are insufficient to sustain and reproduce the labor force. This implies that income-sharing practices stabilize family structure and help sustain labor force discontinuities and wage differentials. The author conceptualizes the household in terms of the set of relations between people with sharing obligations.

A

Goldschmidt-Clermont, Luisella 1984

The economic value of household production: methodological problems. Paper prepared for HIID Workshop on Conceptualizing the Household, Nov. 2-4, Boston. See #120 for complete abstract.

40

B

Greenhalgh, Susan 1982

Income units: the ethnographic alternative to standardization. Population and Development Review 8(Supplement):70-91.

This article discusses the important issue of how to define the household as an income-earning unit. The author suggests that co-residence is not always synonymous with joint earning and consumption of members; some co-residential groups do not share, and in other cases income sharing occurs among several households.

The case of Taiwan is discussed. The economic family (chia) is the extended kinship group. Subunits (nuclear families) may form and dissolve within the chia. Income sharing within the chia varies with its income. The relevant unit for measuring household welfare is probably the chia, not the nuclear household. Dispersal of chia members to different households has increased over time.

The article focuses on measurement of inequality in income distribution, but has important implications for measurement of household welfare.

41

A

Gronau, Reuben 1977

Leisure, home production and work--the theory of the allocation of time revisited. Journal of Political Economy 85(6):1099-1123.

This theoretical article expands the "new home economics" by introducing the distinction in the model between work at home and leisure. The author suggests that work at home is a substitute for market work (in the production of goods for home consumption), so that market wages will be positively correlated with market work, and inversely correlated with home work. But the effect on leisure depends whether leisure consumption is time-intensive or goods-intensive.

Data from Israeli and United States time budget studies demonstrate that wage rates, employment, marital status, sex, and presence of children affect home work differently from leisure.

The implications for economic gains from marriage and the demand for children are discussed.

42

B

Guyer, Jane I. 1980

Household budgets and women's incomes. Boston University African Studies Center Working Paper no. 28.

This very useful paper discusses the inapplicability of household methods to budget analysis studies in Africa and reports on a study of women's cash budgets in Camerood.

The author holds that the concept of a household as an undifferentiated decision-making unit does not apply in Africa because of the extent of separation of male and female spheres of activity. She cites anthropological and economic studies demonstrating the relative independence of men's and women's incomes and spending decisions in several African settings, while recognizing that within households some resource transfers do take place. She suggests that African households can be viewed as "particularly dense centers in a field of exchange relationships rather than closed units." Household members are interdependent, having complementary functions; these can change over time.

The paper reports a study of the daily cash transactions of 23 women over two months, one during the groundnut harvest (women's crop), and one during the cocoa harvest. In this setting, men are largely responsible for cocoa production for export; women do subsistence cultivation and marketing of food crops. The study found 57% of women's cash is earned; the rest is transfers, mostly from their

husbands. Husbands provide about one third of the cost of food and basic household needs. Unmarried women have lower incomes than married women, because they do not receive these transfers. Women spend 71-76% of their cash on household expenses in both seasons. In a 1964 survey, 31% of total household income (men's and women's) was spent on these items.

Women's incomes are highest during the harvest of men's crops, less because of transfers than because women can earn more from men's spending. Women's incomes have been increasing relative to men's since the 1950s because cocoa prices have declined while the demand for food in urban areas (sold by women) has increased.

43

B

Hammel, E. A. 1984

On the *** of studying household form and function. Ch. 2 in Netting, R. McC., Wilk, R. R. and Arnould, E. J. (eds.), Households: Comparative and Historical Studies of the Domestic Group, Berkeley, CA: University of California Press.

The subject of this chapter is the household as a unit of social analysis and issues of comparability and sensitivity. The author argues the need to balance the comparability achieved by using strict analytic categories versus the greater accuracy and sensitivity gained by adhering to appropriate folk categories. He then develops analytical approaches by thinking downward and upward. To start with theoretical referents, the developmental cycle of domestic groups of a parent population can be used to examine how closely households match expected category proportions. Since demographic factors will induce variability, multiple empirical or simulated observations are needed. Households can also be studied as samples of decisions about structure, which requires finely detailed data and careful adherence to statistical independence. Thinking upward starts with place- and period-specific categories, which can generally be agreed upon, but again requires multiple observations to generalize to theoretical types.

Since the number of social units within villages can be specified only by making certain assumptions, the sensitivity of the analysis is also affected. The impact of several household boundary assumptions is then discussed. Sensitivity can also be tested by evaluating the effects of systematic and random demographic and cultural variability. It is concluded that unambiguous, strictly followed cultural rules have the most impact on observed differences in household form, followed by random effects and actual differences in demographic rates.

Finally the author suggests a definition of the household as the social group larger than the individual which does not fail to control for its members all those resources that any adult member could expect to control for himself.

44

B

Haugerud, Angelique 1982a

Conflict, competition, and cooperation: political economy of the peasant household in Embu, Kenya. American Anthropological Association 81st Annual Meeting, Washington, D.C., December 3-7.

This paper reports an economic anthropological study of a coffee and a cotton-growing zone in eastern Kenya. (See Haugerud 1979, Section II [#128] for methods.)

The paper discusses problems in defining the household for research purposes, and holds that any definition is still subject to problems. One reason is that households are subject to change. In 2.5 years of field work, 20% of households were disrupted due to internal conflict. Conflicts within households resulted in some false reporting by respondents who ignored some other household members.

The paper criticizes the use of the household as the unit of analysis in research because (1) domestic organization is quite variable, so units may not be comparable; (2) the household model hides the processes of negotiation within the household, including determinants of strength and weakness of members; (3) considering the household as a homogeneous unit ignores the varying ways in which resources are acquired.

A

Jones, Christine 1983b

The mobilization of women's labor for cash crop production: a game theoretic approach, American Journal of Agricultural Economics 65(5):1049-1054. See #359 for complete abstract.

C

Kisekka, Mere 1981

The role of women in socio-economic development: indicators as instruments of social analysis. The case of Nigeria and Uganda. Women and Development: Indicators of Their Changing Role. Paris: UNESCO. See #366 for complete abstract.

45

A B

Kumar, Shubh K. 1983

A framework for tracing policy effects on intra-household food distribution, Food and Nutrition Bulletin 5(4):13-15.

The author develops a conceptual framework for the socio-cultural and economic determinants of intrahousehold food distribution. Socio-cultural components include access to physical and human capital and the sexual division of labor. Income generating activities fall into the economic dimension. Policies also affect the household preference function that influences decisions on allocation of household resources. The author argues there is a hierarchy of rights based on ownership of assets and time spent contributing to income among various household members.

46

B

Kuznets, Simon 1978

Size and age structure of family households: exploratory comparisons. Population and Development Review 4(2):187-224.

This conceptually interesting article suggests that conventional measures of income distribution, which measure income of co-residential households, ignores joint decision-making on the use of income by families which do not live together. This overstates income inequality.

Household size is a function of the tendency of adults to live together and the natural rate of increase (i.e., children). Generally, in less developed countries larger households are due to natural increase, while in developed countries, joint living by adults is the dominant factor.

47

A

Kuznets, Simon 1976

Demographic aspects of the size distribution of income: an exploratory essay. Economic Development and Cultural Change 25(1):1-94.

This article discusses conceptual issues in using household income as a measure of relative welfare. First, the unit must be a household, not an individual, but the usual definition of co-residential group may include some unrelated individuals who do not depend on the units' income, and may exclude dependent kin (elderly or young single people) who ought to be included. Life span income is more equally distributed than income measured at one point in time. Households with young and elderly heads have lower incomes than households with middle-aged heads. Income as a measure of welfare should also

account for the degree of variation over time as well as the average. The author holds household income increases with household size, but per person or per consumption unit income declines.

48

B

Kusnic, Michael W. and DaVanzo, Julie 1980

Income inequality and the definition of income: the case of Malaysia. Santa Monica, CA: Rand Report R2416AID, June. Prepared for USAID. 121 pp.

This paper discusses the conceptual issues involved in using income to measure welfare. These include the problem of defining the consumption unit, adjusting for household size (persons or adult-equivalents), and dealing with variation over time. The authors hold that leisure time and home services must be included in the definition of income, but recognize the problems of imputing a value based on wage rates. Data from the Malaysian Family Life Survey are used to test the implications of different definitions of income and household for measures of inequality.

49

A

Lancaster, Kelvin J. 1966

A new approach to consumer theory. Journal of Political Economy 74(2):132-57.

This article explains, in mathematical terms relatively understandable to non-economists, an important aspect underlying the models of the "new household economics." The author suggests that goods consumed and activities performed by household members yield utility by means of their properties, not directly. This is conceptually important in understanding consumption decisions because very different sets of goods can yield similar sets of properties or characteristics; thus things which are not obviously substitutes may act as substitutes in household consumption.

To obtain utility from goods, households must combine them with the time of household members. Consumption technology refers to the ways in which utility is derived from the goods. This may be more or less time-intensive.

The recognition of the importance of time in consumption has important implication for intrahousehold allocation, since members' time may be more or less constrained, and this may affect consumption decisions. This article, however, does not address these issues.

B

Linares, Olga F. 1984

Households among the Diola of Senegal: Should norms enter by the front or the back door? Ch. 16 in Netting, R. Mc.C., Wilks, R. R. and Arnould, E. J., eds., Households: Comparative and Historical Studies of the Domestic Group. Berkeley: University of California Press. See #377 for complete abstract.

50

B

Liu, Paul K. C. 1982

Income inequality over the family development cycle. Population and Development Review 8 (Supplement):53-69.

This article describes how different definitions of the household as an income earning and consumption unit can alter measures of income inequality. In the Chinese system, nuclear households (fang) exist within an extended family (chia). It is the chia which is the income-sharing unit. Income is more equal among chia than among fang. Education is an investment in future chia income since it increases children's earnings and thus the later income of parents.

51

C

Massiah, Joycelin 1981

Participation of women in socio-economic development: Indicators as tools for development planning. The case of the Commonwealth Caribbean. In Women and Development: Indicators of Their Changing Role. Paris: UNESCO.

This chapter proposes a composite index of women's well being that can be used as a basis for including women in policy planning. Using data from the 1970 census in the Commonwealth Caribbean. The author developed an "index of well-being" comprised of measures of women's access to resources, autonomy, and legal status. Autonomy is measured by sources of financial and emotional support and by measure of power. Legal status is measured by participation in certain activities and institutions. Although basic information is available, it should be disaggregated and analyzed along with supplemental qualitative and quantitative data focused on women.

The model, as applied to women headed households in the Caribbean, reveals that one-third of all household heads in the region are women. These women tend to be older and live alone more frequently than men. Household size is the same, but women heads are less educated and less engaged in paid employment. Within the labor force, they are equally involved in work as men, although more frequently in non-agricultural activities. Over one-half of women

headed households receive supplementary income from males. The model allows planners to assess the need for and plan social assistance programs targeted to specific groups of women.

52

B C

Moser, Caroline and Young, Kate 1981

Women of the working poor, Women and the Informal Sector, IDS Bulletin 12(3):54-62.

In general, survival strategies among the poor are based on the household, not the individual. Women commonly dovetail their income-earning activities with that of the male household member.

To better understand the role of women's labor force participation in the accumulation of capital, the author suggests studying the stability of the labor market and patterns of labor demand to determine constraints on household income generating strategies.

It has been argued that women's domestic work is an important determinant of the rate of capital accumulation because housework contributes to the reproduction of labor power. Critics contend however that this assumes the value of labor power always includes the cost of reproducing the working class family. Another argument is that men accept lower wages in the formal sector because their wives will augment the family income.

53

A

Mueller, Eva 1976

The economic value of children in peasant agriculture. Ch. 4 in Ridker, R. G., ed., Population and Development. Baltimore: Johns Hopkins University Press.

Using both the aggregate model and the life cycle model of production and consumption, this paper attempts to show children have a negative economic value in peasant agriculture. That is, they consume more than they produce. A discussion of consumption and production differentials by sex and age is combined with time-input estimates to develop productivity, profiles for males and females. A literature review suggests that agricultural wage rates of women and children are 60 and 50 percent respectively of the male rate.

The resultant production and consumption curves indicate that it is cheaper to support those over 55 years of age than to support children and that a decline in the birthrate would result in increased savings, according to the aggregate model. The life cycle model reveals at what stages children create financial stress and reaches similar conclusions.

To reduce the perceived value of children and thus the birthrate, policies on establishing an old-age pension system, increasing access to banks and government bonds, enhancing women's status and raising the age of marriage are suggested.

54

A

Nerlove, Marc 1974

Household and economy: toward a new theory of population and economic growth. Journal of Political Economy 82 (2, Part II):S200-218.

This article criticizes earlier formulations of the New Household Economics because of inherent circularity: the household's utility function reflects those of all the members, but some members (children, for example) are also arguments in the parents' utility functions. Further, there is evidence that decisions to invest in child quality (e.g., health, education) are not independent of the number and characteristics of the children.

The author stresses that the New Home Economics is a conceptual framework, not a theory of behavior. Its important elements are the idea that utility functions deal with attributes, not goods; that they are a function of household production technology; that time and goods are direct tradeoffs through the labor market. He suggests that intergenerational transfers need to be incorporated into this analytic framework.

55

A

Nugent, Jeffrey B.; Kipham, Kan and Walther, Robin J. 1983

The effects of old-age pensions on household structure, marriage, fertility and resource allocation in rural areas of developing countries. Washington, DC: USAID, October. 458 pp.

A model of household decision-making behavior is developed to examine how the security motive affects household formation and partition, marriage, fertility, and expectations in cultivating and non-cultivating households. An informal intrahousehold insurance system, featuring child-to-parent transfers in old age, encourages members to work as long as they can. Uncertainty about children's loyalty or low rates of return on children may make high fertility necessary.

Introduction of a pay-as-you-go social security system would have a savings, and a fertility, reduction effect. This effect would be minimized in rural areas where intergenerational transfers are more likely to be motivated by non-economic factors, and where cultural norms may encourage members to work to an old age. Since female children are the main providers of food and services to the older

generation, a social security system could allow a reallocation of girls' time to attending school longer or to other activities.

The household behavior model is tested using Malaysian Family Life Survey data, which indicates household structure is strongly influenced by lifecycle position. Higher educational expectations for one's children, leading to extrahousehold employment, and lack of access to financial markets increase demand for household extension as a means of old age support, while wealth and pension systems have the opposite effect. Age at marriage is influenced by educational attainment and degree of household extension, the direction of effect depending on sex and type of household. Women closer to active labor markets have higher fertility because of the expectation that children will migrate and be a less reliable source of old-age support. Women's demand for children is more motivated by the likelihood of old-age support than men's.

The Malaysian data was then compared to similar data from rural India, which indicated that household decisions do not try to maximize a joint utility function. The expectations of sources of support are central to interdependencies of household structure, marriage, resource allocation and fertility decisions.

56

B

Oppong, Christine 1978

Family structures and women's reproductive and productive roles: some conceptual and methodological issues. Paper presented to informal workshop on women's roles and demographic change, International Labor Organization, Population and Labor Policies Branch, Employment and Development Department, Geneva, November.

This paper provides a lengthy discussion of the problems involved in defining households for research and program-planning purposes. The paper consists of an extensive critical review of anthropological and economic typologies which tend to oversimplify households, to dichotomize, and to assume that people belong to only one household at a time and that households operate as a single unit. The author reviews literature on determinants of household structure and suggests the need to look at different units for different purposes. She suggests a conceptual framework for analyzing domestic behavior based on observing who fulfills what specific roles and responsibilities.

B

Pollock, Nancy J. 1970

Breadfruit and breadwinning on Namu Atoll, Marshall Islands. Unpublished Ph.D. dissertation, University of Hawaii. 357 pp. See #424 for complete abstract.

A

Repetto, Robert G. 1976

Direct economic costs and value of children. Ch. 3 in Ridker, R. G. (ed.), Population and Development. Baltimore: Johns Hopkins University Press. See #435 for complete abstract.

57

A

Rosenzweig, Mark R. 1982

Wage structure and sex-based inequality: the family as intermediary. Population and Development Review 8 (Supplement):192-206.

This article suggests a simplified economic model of investment in children, based on differential sex-based wage rates and three age categories: child, parent, and elderly parent. The model suggests that inequality of income may be exacerbated if households invest more in the productivity (e.g., education) of children to whom returns will be highest (i.e., males). The model can be used to predict effects of changed wage rates on schooling decisions.

Another contributor to this decision is the relative substitutability of girls' and boys' time for mother's time. In India, when women's wages rose, girls' school enrollment fell, presumably because girls were replacing their mothers at home.

58

A

Rosenzweig, Mark R. 1977

The demand for children in farm households. Journal of Political Economy 85(1):123-46.

This article modifies household economic theory by recognizing the dual role of children as "consumption goods" and productive laborers within the household. The author suggests that, as returns to children fall and costs rise, fertility will fall. Off-farm work opportunities lower returns to children by reducing the likelihood that children will work on the farm. Increases in the value of the

wife's time also reduce fertility. The value of children is endogenous in the model, because it is affected by the number of children.

The model is tested using aggregate U.S. data. The results differ from those in which children are viewed only as a consumption good.

59

A

Ryder, Norman B. 1973

On Willis, economic theory of fertility behavior. Comment in Schultz, T. W. (ed.), Economics of the Family. Chicago: University of Chicago Press.

The author suggests Willis ignores the unique aspects of the family as an economic system. He views the family as a flow of person-years through time, in which the members are bound by contracts specifying the direction and amount of resource and service flow among the members. Also important to consider are lumpiness of various investments, thresholds in effect of education and kinks in other curves. Data must be collected explicitly to test the hypothesized model of behavior.

60

A

Sawhill, Isabel V. 1980

Economic perspectives on the family. Ch. 5 in Amsden, A. H. (ed.), The Economics of Women and Work, New York: St. Martin's Press.

According to this analysis, the new home economics model has not yet been integrated into policy-oriented research on the family. Economists have become interested in the family because investment in human capital and other non-market phenomena occur in this context. Also family well-being depends largely on the ratio of earners to non-earners, which is determined by marriage, child-bearing and labor force participation decisions.

New home economics has contributed the view of children as either producer or consumer durables, whose value leads parents to invest time and money into child rearing. The economic literature on fertility has established that child bearing is negatively related to the price of the mother's time, which is largely reflected by the mother's wage rate.

The author questions many of the assumptions underlying the economic theory of fertility. She argues that scarce resources are not the only constraint on people's freedom to choose alternatives; the nature of conflict and use of power within the family are also important determinants. The economic view of the family is not dynamic and fails to capture life cycle effects. Policy-oriented

research needs to understand the personal and social consequences of individual decisions on marriage and childbearing and rearing and how these will affect the future.

61

B

Schultz, T. Paul 1982a

Family composition and income inequality. Population and Development Review 8 (Supplement):137-150.

This article discusses the mechanisms by which household income influences household composition. The two separate determinants of household composition are the decision of adults to live together and the number of surviving children per adult; income affects both determinants. Number of children is inversely related to women's wages, but directly to men's wages, and inversely to returns to child schooling. Colombian and Indian census data are used to quantify the effects of income on these two determinants. In both countries, extended family households have lower fertility than nuclear households.

62

A

Schultz, T. Paul 1982b

Women and economics of the family: some concepts and issues. Paper prepared for the Rockefeller Foundation Workshop on Women, Households and Human Capital Development in Low-Income Countries, July 12-14.

This article is a conceptual discussion of how economics deals with intrahousehold allocation issues.

In economic thinking, the household or family coordinates the production and consumption of its members, and allocates its labor at market-clearing rates. Since by convention only market activities are counted, women's production tends to be underestimated; this is currently changing with the increase in time use studies. The intrahousehold allocation model assumes net gains to all household members, or they would not stay in the household. The author criticizes game theoretical and other models as being based on untested assumptions. The author holds that policy-makers cannot easily influence allocation within the household, since households have mechanisms for substitution of resources; he suggests that human capital development is easier to target.

63

A

Smith, Joan; Wallerstein, I. and Evers, Hans-Dieter 1984

Introduction. In Smith, J., Wallerstein, I. and Evers, H.-D. (eds.), Households and the World Economy, Beverly Hills, CA: Sage Publications.

This introduction focuses on the theoretical implications of various conceptualizations of the household. The authors argue that viewing households in an historical context produces the misleading assumption that household form is a response to the economic system. In fact, household function and structure are basic to the economic process. Households are defined as systems that are able to provide labor to capital by combining sufficient wage and non-wage labor resources to guarantee reproduction of the labor supply. Definitions that are based on lineage or kinship components, co-residential or consumption units are inadequate.

The role of domestic, non-wage labor in capitalist processes is seen as integral to the functioning of the system because the system of labor supply reproduction applies to both wage and non-wage sectors. Some of the issues and questions raised by the various chapters on household structures and relationships are summarized.

C

Smucker, Jacqueline Nowak 1981

The role of rural Haitian women in development. USAID Mission, Port-au-Prince, Haiti. 69 pp. See #459 for complete abstract.

C

Spring, Anita 1982

Farmer survey in Karonga: considering the role of women in agriculture. Paper prepared for Women in Agricultural Development Project, Lilongwe, Malawi. See #189 for complete abstract.

64

B

Stark, Oded 1984

Bargaining, altruism and demographic phenomena. Population and Development Review 10(4):679-692.

This paper argues that demographic decisions cannot be explained without considering intrafamilial bargaining and altruism. Parents behave strategically by making human capital investment decisions that ensure their children's future discretionary behavior is compatible with their preferences. When children are not the only

source of old-age security, parents will rely more on returns to other investments. Human capital investments strengthen children's bargaining position in family negotiations and diminish returns to parents' discretionary transfers. A model that relates intrahousehold bargaining power to marketplace opportunities is developed to explain lower fertility rates in nuclear vs. extended families. The determinants of migrant remittances to the family are also discussed.

65

B

Stark, Oded 1981

The asset demand for children during agricultural modernization: notes and commentary. Population and Development Review 7(4):671-75.

This brief article discusses the "Caldwell hypothesis" that economic development causes fertility reduction because in a modern economy children's labor is not needed when young, and their economic contribution in later life is small.

The author suggests that, in the early stages of development, households may want more children because they may, as migrants to the city, provide the cash income which households need to join the modern economy. Investment in education is directly related to parental expectation of support.

The author suggests this new hypothesis needs to be tested empirically.

66

B

Stauth, Georg 1984

Households, modes of living and production systems. Ch. 6 in Smith, J., Wallerstein, I and Evers, H.-D. (eds.), Households and the World Economy. Beverly Hills, CA: Sage Publications.

This chapter discusses the conceptualization of the household in terms of income sharing plus subsistence production. This includes maintenance of shelter, organic existence and the development of a system of socially created and determined economic transactions. The author categorizes how households earn their lifetime income into totally subsistence, totally wage or combination of wage and subsistence. The flexibility of households depends on the capacity to combine subsistence with other sources of income.

67

C

Tiano, Susan 1981

The separation of women's remunerated and household work: theoretical perspectives on "women in development." Michigan State University Working Paper no. 02. 18 pp.

This paper lays the groundwork for a synthetic theory of women's work which draws on Marxian and modernization perspectives. A direction for future theoretical and empirical analyses of women's work in developing societies is suggested based on analysis of the two contrasting views of the separation of women's remunerated and household work and on a framework of information needed to understand women's economic roles.

While modernists and Marxians have contrasting views on the effects of modernization on women's employment opportunities and status, both theories assume that modernization and/or capitalism lead to a separation between the private context of household service and the public context of productive work. Information needed to describe women's work accurately in developing countries includes factors affecting allocation of women into productive roles, the nature of the work and the consequences of women's productive activities.

68

C

Tinker, Irene and Bramsen, Michele Bo 1976

Proceedings of the seminar on women in development (Mexico City, June 15-18, 1975). In Tinker, I. and Bramsen, M. B. (eds.), Women and World Development. Washington, DC: Overseas Development Council.

The proceedings summarize the workshop discussions and recommendations on the role of women in production in developing countries. It is pointed out that development tends to increase the differentiation between men and women and between rich and poor, and that unless it is specifically targeted to the last advantaged group, it will tend to increase the power base of traditional male elites.

Specific recommendations of the participants focused on improving women's social and economic status. Their contribution to production can be made visible by measuring the GNP in terms of energy expended in work (ergs). Marketing of food is a traditional activity of women and they must be taught better methods of food preparation. Planners also need to recognize that rural-urban migration has led to extended-family organization systems, which should be preserved. Women must be involved in all aspects and stages of the development process.

UNECA/FAO no date

The role of women in population dynamics related to food and agriculture and rural development in Africa. United Nations ECA/FAO, Women's Programme Unit.

This paper describes the relations between food production, women's roles, and population in rural Africa. Although women are the primary producers and processors of food crops, program planners assume that the "small farmer" is male. In spite of the major role played by rural women in agricultural production they lack access to the tools of development, including technology, credit, and education. Most agricultural extension and research is directed to men and focuses on cash crops, thereby misdirecting information on techniques for improved food production. Further, increasing cash cropping adds to women's work burdens.

Education and employment are the major factors influencing female fertility, but education's influence on female fertility depends on the ability of women to use it in gainful employment or other community action. "Modern" sector employment correlates with lower fertility, subsistence employment with higher fertility.

The paper proposes the "unit of participation" as a measure of women's labor in various subsistence and early modernization activities. It is defined as the percentage of total labor associated with a particular task that may be attributed to women and expressed as 1 or a fraction. The unit of participation, based on the best available data, will indicate who should receive the benefits of a particular agricultural project.

U.N. Protein Calorie Advisory Group Report 1979

Women in Food Production, Food Handling and Nutrition. Rome: U.N. FAO, June. 202 pp.

This is an extensive report that critically reviews research on women's economic and social roles and determinants of food consumption and nutrition in Africa. It draws on literature from the field of nutrition and diet, anthropology, sociology, and program-related research, with numerous detailed discussions of specific studies. The point is made that the household should not be the unit of analysis for program planning, since many functions relating to food production, preparation, and distribution are the responsibility of specific individuals within the household. New methods of data collection are needed to measure food consumption and nutrition; time allocation studies should be used both to identify productive activities and to calculate energy expenditure. Nutrition and social science techniques need to be combined.

The report criticizes many widely held myths and holds that empirical data are needed to confirm or contradict them. These myths include the detrimental effect of feeding patterns whereby men eat first, the detrimental effect of food taboos, the assumption that farmers are usually men, and the assumption that all household income is equally distributed among household needs.

Conceptual analysis of determinants of nutritional status is presented, and recommendations for program planning are made.

71

B

White, Benjamin 1980

Rural household studies in anthropological perspective, in Binswanger, H-P. et al. (eds.), Rural Household Studies in Asia. Singapore: Singapore University Press.

This thoughtful chapter discusses the development of anthropological approach to the study of households. The author cites several examples (Tiv, Dayak, Taiwanese, Javanese), demonstrating that various functions used to define households (e.g., coresidence, shared consumption, pooled labor) do not define the same units. He suggests that it is fruitless to search for a universal definition or comprehensive typology of the household, but that anthropologists and economists must define the household functions of interest and the groups they define in a particular setting. All societies have a range of household and family types, with groups that share resources and tasks to varying degrees. Further, households go through developmental cycles based on the tension of children approaching adulthood continuing to live under the control of aging parents. This tension creates a tendency for extended-family households to fission. Economic forces (e.g., the need for household labor) can hold households together for longer periods. This dynamic household structure has not been recognized in the early literature.

The point is made that analyzing household behavior as a function of household structure is difficult because households change radically over time. Thus households studied over several years will not be the same households.

Wilk, Richard R. and Netting, Robert McC. 1984

Households: changing forms and functions. Ch. 1 in Netting, R. McC., Wilk, R. R. and Arnould, E. J. (eds.), Households: Comparative and Historical Studies of the Domestic Group. Berkeley, CA: University of California Press.

This chapter lays the groundwork for developing an objective, cross-cultural definition of the household and proposes hypotheses about the relationship between structure and behavior. Households are activity groups of varying densities which can be classified according to their domestic functions of production, reproduction, inheritance, coresidence and distribution.

The spheres of production are adapted to the labor requirements of specific tasks, and it is hypothesized that household size reflects these needs. Individual versus communal inheritance rights affect kinship composition, age structure, size and authority patterns in the household, especially under conditions of scarcity. The authors also hypothesize that marriage rules and preferences are the most direct cultural influence on family demographics and household structure. Physical characteristics of the residence also affect size and composition of households.

Willis, Robert J. 1975

The economic theory of fertility behavior. In Schultz, T. W., ed., Economics of the Family. Chicago: University of Chicago Press.

This theoretical discussion presents a model of fertility based on the concepts of the "new household economics." The author suggests the family is a social institution in which the independent behavior of members is determined by individual characteristics and the economic and social environment. Analyzing fertility is complex, because parents both demand and supply children, and have wide discretion as to their cost. The model assumes a family acts as an individual maximizing total utility of its members.

The utility produced by children is a function of child quantity and quality. Demand for number of children is income-inelastic, while that for child quality is highly elastic. As the value of women's time increases, the cost of children increases in terms of real income foregone; this explains why fertility drops as the value of the wife's time increases. The decisions of women to participate in the labor force and/or to bear and raise more children or invest more time in them are jointly determined by the relative productivity of women's time in these activities.

The mathematical model is presented and discussed in some technical detail.

74

B

Wong, Diana 1984

The limits of using the household as a unit of analysis. Ch. 4 in Smith, J., Wallerstein, I. and Evers, H.-D. (eds.), Households and the World Economy. Beverly Hills, CA: Sage Publications.

This chapter suggests that the unit of household analysis not be limited to the co-residential dwelling group, but should include the units that actively participate in maintaining stability. Household stability as a consumption and reproduction unit requires the acceptance of unequal distribution of goods and of access to resources. This is not always the case, particularly when the household is functioning as an income pooling unit. Thus transfers from other households may be crucial stabilizing forces, especially for women and children. Research should be done on when and why the focus of reproduction becomes centered on the household as an income-pooling unit.

75

C

World Bank 1979

Recognizing the "invisible" woman in development: the World Bank's experience. Washington, D.C.: World Bank. 33 pp.

This pamphlet reviews some of the economic and social factors that limit women's participation in the benefits of economic development in the context of Bank projects.

These factors include the separate roles of women and men in agriculture (with the risk that a development focus on men's cash crops may displace women's food crop production and increase women's work burden), the social determination of women's access to productive resources, and the time constraints on women. The effects of projects should be analyzed for men and women separately.

76

B

Y agisako, Silvia Junko 1979

Family and household: the analysis of domestic groups. Annual Review of Anthropology 8:161-205.

This article reviews ten years of published anthropological literature on the dynamics of the family. The author reviews definitions of households and concludes that while kinship can define

the family, the household is a separate concept to be defined in functional terms. There are no set definitions of household.

The author reviews demographic, economic, and structural explanations for variation in the form of the household, and describes new perspectives in the analysis of families.

She suggests that the commonest definitions of family are nuclear, mother and children and other kinship groups, but states these may not be socially significant or have any functional meaning in a given society.

C

Young, Kate 1980

A methodological approach to analyzing the effects of capitalist agriculture on women's roles and their position within the community. In Women in Rural Development: Critical Issues. Geneva: ILO. See #496 for complete abstract.

77

C

Youssef, Nadia H. and Hetler, Carol B. 1983

Establishing the economic condition of woman-headed households in the third world: a new approach. Ch. 11 in Buvinic, M., Lycette, M. A. and McGreevey, W. P. (eds.), Women and Poverty in the Third World. Baltimore: Johns Hopkins University Press.

This chapter assesses methodological and conceptual obstacles to obtain information on female-headed households in developing countries. Often the official census and national surveys are unavailable, incomplete or inaccurate, due to lack of standardization, adequate definitions, and/or useful formats. The variability in characteristics of female-headed households, both de jure and de facto, should be highlighted in future studies. These areas of research should include the social context of female headship, marital status, access to productive resources, income and wage employment, and household composition.

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Section II

78

A B D

Acharya, Meena, and Bennett, Lynn 1981

The Rural Women of Nepal: An Aggregate Analysis and Summary of Eight Village Studies. Vol. 2, part 9. Centre for Economic Development and Administration, Tribhuvan University, Katmandu, Nepal.

This book describes the methods and summarizes the results of an intensive eight-village study of women's roles in Nepal, which has been published in eight separate volumes.

Eight villages were selected for maximum cultural variation. One researcher lived in each village for the period of the study; data were collected by participant observation, informal guided interviews of key informants, and structured interviews covering demographics, assets, income, production, expenditure, employment, credit, decision-making, and attitudes toward male and female roles. Decision-making was measured by asking senior males about four stages in the process: suggesting, deciding, implementing, and disagreeing. Thirty-five randomly selected households in each village were included in the surveys. Of these, 24 per village were selected for time allocation study by direct observation using the random spot-checking method.

The study found that, accounting for home as well as market production, women's contribution to household income is 15% higher than men's, although cash income is 73% less. The labor burden of women is 10.81 hours/day, compared with 7.51 for men. Work burdens for both sexes were lower in extended households than they were in nuclear households, and burden varied by position in the family. Junior married males worked the longest among males; among females, young daughters-in-law worked the longest hours, and adult unmarried women put in the most hours in paid labor.

Villages were distinguished by the rigidity of the dichotomy between women's and men's spheres of activity. The study found that men predominated in decision-making where the dichotomy was strong, while roles were more equal or women predominated where the dichotomy was weak. Women were more likely to initiate suggestions than to make the final decision. Women were responsible for 40% of household labor allocation decisions; in 47% of households women kept the household cash, and in 39% men kept it. Agricultural decisions by women were commensurate with their time in agricultural production.

This book and the eight separate studies are an enormously rich source of data. Detailed methodological descriptions are given.

Acharya, Meena and Bennett, Lynn 1983

Women and the subsistence sector: economic participation and household decision making in Nepal. World Bank Staff Working Papers #526, Washington, D.C. See #209 for complete abstract.

79

G

Anker, Richard 1983

Female labour force participation in developing countries: A critique of current definitions and data collection methods, International Labour Review 122(6):709-23.

This paper suggests that ambiguous labor activity definitions and the male orientation of survey questionnaires and research leads to underreporting of female labor force participation. A more accurate measure of participation rates may be achieved by using four categories of work--paid, market-oriented, the ILO official definition and extended. A national census should use a simplified activity/time schedule, rather than detailed time-use surveys, to gather labor force activity data.

A survey of 7116 rural Indian women aged 25-50 used a schedule which specified 12 major labor force activities to gather participation rate data. The main activities the sample women performed were: fetching water (89.4% of women), gathering sticks (74.9%), making cow dung cakes (50%), agricultural labor for others (36.6%) and tending animals (36%). Using these data, 93.2% of the surveyed women were considered to be in the extended labor force versus 41.2% in the paid labor force.

80

B E

Anker, Richard 1982

Demographic change and the role of women: A research programme in developing countries. In Anker, R., Buvinic, M. and Youssef, N., eds., Women's Roles and Population Trends in the Third World, International Labor Organization. London: Croom Helm Ltd.

This essay suggests use of various interdisciplinary research approaches to study demographic change and women's roles. The author suggests three methods of inquiry: socio-anthropological data, household surveys and urban labor market analyses. Culture-specific information on family structure and normative sex roles could be gathered by field researchers who write background papers and answer specific questions about the conditions of the area and then conduct household surveys. Anthropologists should then spend time in the area to corroborate survey data and provide qualitative insights.

The author points out that the degree of substitutability in tasks between men, women and children and the impact of economic circumstances in each country should be assessed.

The limitations of labor force surveys and time-use data to evaluate the economic contribution of men and women are discussed. A time perspective can be incorporated by collecting data on historical trends by stratifying households using criteria that will highlight dynamic trends and by researching life cycle changes. For example, one could survey women of all ages to get a cross-sectional perspective of one point in time as well as a dynamic view of the female life cycle. Relevant research questions on fertility and childhood morbidity and mortality and women's roles are put forth.

81

B E

Anker, Richard 1980

Research on women's roles and demographic change: Survey questionnaires for households, women, men and communities with background explanations. World Employment Programme Research Paper. Geneva: ILO. 314 pp.

This lengthy paper describes a series of structured questionnaires that are designed to provide a more accurate and complete picture of the woman's role and position in the family. The design and logic of questionnaires for households, individual men and women and the community are presented. Pretested sections on activity/time use, adult female labor supply and work history, labor participation of all household members and household structure and support network are explained and specific examples are given. The questionnaires use a flexible definition of household composition which encompasses familial processes that are performed in the domestic context but occur in different locations.

Activity/time use data provide more accurate information than traditional labor force surveys on the economically meaningful tasks women perform. This type of information also measures the economic impact of the sexual division of labor and the degree of conflict with childcare tasks. Since the labor participation of one individual may be influenced by the time worked and earnings of another household member, it is useful to evaluate how the number of children and household composition affect the activity pattern of women. Problems and suggestions on collecting these data include lack of precise measures of time, recall error, recording dual activities, seasonal and weekly variation in activities and use of proxies. Sample questionnaires are included.

Barry, Herbert III and Schlegel, Alice 1982

Cross-cultural codes on contributions by women to subsistence, Ethnology 21(2):165-188.

This paper tests the hypothesis that in societies where there is a high level of female contribution to subsistence, the effect is seen for all methods of obtaining food. The method involved separately measuring female contribution to agriculture, domestic animal raising, fishing, hunting and gathering, by applying both the new Standard Sample (SS) and the earlier Ethnographic Atlas (EA) codes to a standard sample of 186 societies. A detailed discussion of the application and relative merits of the codes follows. The advantages of the EA measures are that they are available for the entire sample of 1267 societies (including the 186 in the standard sample), they may be more accurate because the percent female codes are based on each of the five food sources, and they are easier to calculate. The SS measures are superior in the level of detail achieved because they measure percent female contribution for 17 subsistence activities.

The results generally support the prediction that a general attribute of low or high female involvement applies similarly to several food sources. The alternate hypothesis stated that a high percent female contribution in one food source would lead to low contribution in another activity. Thus cultural differences in female participation reflect general societal customs and not specific food source or mode of subsistence biases.

Baster, Nancy 1981

The measurement of women's participation in development: the use of census data. IDS Discussion Paper No. 159, U. of Sussex, England: IDS Publications.

This paper discusses the use and limitations of census data to evaluate women's participation in development. The census is an important source of data on women's marital status and household composition, but inadequate definitions and coverage limit its usefulness for measuring women's status and roles. The author argues that the household, which is the census unit of analysis, may be less relevant to women's roles than the family unit, which is not measured. Census definitions of marriage and household head often undervalue the position of women by ignoring de facto relationships. Women's economic participation is often underestimated because of bias in enumeration of their activities, inadequate census categories to cover women's multiple activities and inappropriate distinctions between economic and non-economic activities.

Census data is considered to be most appropriate for analyzing long term structural changes affecting women's participation. More detailed analyses require additional data. Income data are best analyzed at two levels of disaggregation--by socioeconomic group and by intrahousehold distribution.

B C

Batliwala, Srilatha 1981

Rural energy scarcity and nutrition: a new perspective. Economic and Political Weekly 17(9):329-33. See #228 for complete abstract.

A F

Behrman, Jere R.; Wolfe, Barbara L. and Belli, Humberto 1978

How many? How much? The determinants of demoeconomic roles of women in a developing country metropolis. University of Wisconsin-Madison Center for Demography and Ecology Working Paper no. 78-20. See #230 for complete abstract.

84

A H

Behrman, Jere R.; Wolfe, Barbara L. and Blau, David 1981

Human capital and income distribution in a developing country. Institute for Research on Poverty Discussion Paper No. 656-81, April.

Income and human capital variables at three urbanization levels are analyzed to predict the impact of urbanization on rural regions. Results show that policies directed toward a particular low income group or towards a shortage of a certain human capital variable do not significantly reduce overall urban-rural inequalities in income distribution.

The data were gathered from a random sample of 4,105 women aged 15-45 in a central metropolis, other urban areas and rural areas. women's and men's earnings, transfers and other income were measured separately. Human capital variables were schooling, health, nutritional status and cumulative work experience. Statistical analysis methods are described.

The data reveal that urban men and women earn more than their rural counterparts, although the differential is less for women. In rural areas, the poorest 40% of households receive no income from women's market work. In urban areas, women's earnings equalize slightly the overall income distribution and they improve the relative share of the poorest, at least in the central city. The distribution of men's earnings is more equal than the other three income components. The value of income transfers is inversely associated with level of urbanization. "Other" income is greatest in the central metropolis,

but the proportion of households receiving this income is lower than elsewhere. Total income shows a U-shaped relationship with the degree of urbanization.

Analysis of human capital variables indicates urban workers average more work experience and education than rural workers, but with more variability. Number of sick days for men and women was the same in urban areas, but men had twice as many sick days as women in rural areas. Nutritional status means were 50-60% above international minimums in urban areas but barely above the minimum in rural areas.

The authors used probit equations and OLS regressions to predict the effect of increasing human capital on income. Estimates suggested returns to education were highest for urban women, intermediate for men and lowest for rural women. Past work experience, nutritional status and health were positive correlates to earnings for men and women. Simulation results suggest that if rural schooling were raised to the sex specific urban average, women's earnings and other income would be more unequal but men's earnings and transfers would be more equally distributed. Distribution of rural household income becomes slightly more unequal.

For equalizing income distribution, it would be more efficient to target poorest-income households rather than nutritionally deprived households. Increasing rural schooling, health and nutrition to urban levels leads to more equal distribution of men's and women's earnings and transfers but total rural income becomes less equalized. Specific human capital improvements in all regions has a positive effect on the poorest and on women's earnings in all areas, a positive impact on men's earnings and transfers in rural areas and on other income in central metro areas but worsens distribution of other income in rural areas.

85

B

Benerfa, Lourdes 1982

Accounting for women's work. Ch. 5 in Benerfa, L. (ed.), Women and Development. New York: Praeger.

This article discusses the fact that conventional measures of labor force participation are inaccurate because they tend to count only paid work and work that produces exchange value, thus underestimating unpaid household work that produces use value. This underestimation particularly affects women.

Secondary data, such as census information, are unreliable also because often only the self-reported "primary activity" is counted. Thus women who engage in productive work but consider themselves housewives will not be counted as economically active.

The author discusses how social relations within households affect

the division of labor by defining access to means of production. This shows that public and private spheres are closely connected.

The author suggests that future studies recognize economic activities that add to human welfare irrespective of market status. Measurement should include both number of hours spent in use-value production and information about the composition and duration of specific tasks.

86

B

Beneria, Lourdes 1981

Conceptualizing the labor force: The underestimation of women's economic activities. In Nelson, N., ed. African Women in the Development Process. Totowa, N.J.: F. Cass and Co. 144 pp.

The focus of this chapter is on the widespread ideological and statistical undervaluation of women's work. Most data are underestimates of women's economic participation, reflecting the bias in the League of Nations 1938 assumption that household members who help the family head are classified as unpaid family workers but when they perform domestic work they are not defined as workers. Thus, when censuses classify workers according to their main occupation, females are underreported as workers. Also women's market related activities that are performed at home are categorized as domestic work. The author argues that both Marxist and orthodox economist' definitions of active labor are incomplete because they exclude use value production, albeit for different reasons.

Women's participation in unpaid production has complicated analyses of household economics, but recently both Marxist and orthodox economic analyses have tried to incorporate domestic labor into the large economy. A further step would be to separate the household as a group of individual members from the collective household unit. These last two considerations counteract the ideological undervaluation of women's work and should also be applied to statistical work. The author suggests that calculating an estimate of average hours household members spend in use value production overcomes difficulties in distinguishing between economic and non-economic activity and will lead to a more adequate analysis of women's position in society.

87

A D

Berry, Sara S. 1984

Households, decision making and rural development: Do we need to know more? HIID Development Discussion Paper no. 167. 22 pp.

The argument presented here is that studies of households and decision-making often fail to consider all the relevant macro- and micro-processes involved. The relationship of production strategies

to consumption patterns depends on the social and environmental context of the individual's position. Decision-making models are restrictive in that they fail to allow for changes in preferences and attitudes and thus do not explain how options are determined and choices are made or change over time. For example, production decisions that are categorized as risk averse or profit maximizing do not account for different obligations to feed family members, provide cash for unusual expenses or maintain extra-household relationships.

The author argues further that new home economics and farming systems research treat households as monolithic decision-making units which obscures intrahousehold bargaining and conflict and the social exchange dimension. Macro processes such as restructuring of the labor market, technical options or relative price changes may shift bargaining power, authority patterns and mutual expectations on both intra- and inter-household levels.

Arguments for disaggregating data on households and for doing comprehensive research on rural household behavior are presented, using data from Nigeria and Indonesia by several authors. Finally, a strategy to study individual allocation and acquisition using the household as the basis is presented. The emphasis should shift to longitudinal analysis of patterns between resource acquisition and allocation strategies and comparisons of individual's behavior and the context.

Birdsall, Nancy 1980

Measuring time use and nonmarket exchange. In McGreevey, W. P., ed., Third-World Poverty: New Strategies for Measuring Development Progress. Lexington, MA: Lexington Books, D. C. Heath Company.

This chapter provides a succinct and thorough discussion of how time-use data contribute to the assessment of poverty, particularly in less-developed countries. Time use data permit measurement of non-monetized labor in the market and in home-production, making it possible to measure the "full income" (monetized and not) of a household. Problems of evaluating non-market work are discussed.

Methods of collecting time use data, including: recall, prompted recall, structured observation, long-term participant observation, and respondent-kept diaries (considered unsuitable for LDC settings) are summarized. Cultural differences in the accuracy of recall data are noted.

The author suggests that further methodological work is needed to identify all the advantages and disadvantages of each method of data collection, and of analysis, and notes that from the administrative/logistical perspective, time use studies do not differ significantly from any other type of survey.

Blumberg, Rae Lesser 1979

Females, farming and food: Rural development and women's participation in agricultural production systems. Commissioned by Women in Development, USAID, Washington, DC. 76 pp.

This paper attempts to document that when women are ignored in development priorities, the result is poorer nutrition, pro-natalist pressures and greater concentration of resources among the male elite. Women are not typically perceived as producers, although their unit of participation in almost all food system activities is well over half. Yet recent agricultural development has tended to increase women's work while reducing their control over resources, which impairs the family's well-being and women's relative equality.

In Africa, since it was found that women could perform almost all agricultural operations unaided, men have been recruited to work in the mines and other modern export enterprises, thus dominating the money economy. Women have formed more flexible networks of sharing among families. In addition, women lost out to men when land tenure rights became individualized. One result has been the decreasing variety and quality of available foodstuffs which substantiates the idea that nutrition has suffered with women's increasing marginalization. Development must incorporate women's role as producers, support their control over property and consider their quality of life.

In Asia, hired workers constitute a large proportion of the female agricultural labor force. The prevalent patterns of land tenure and landlordism require that entire families work together, allowing plantations to avoid paying the women. Agricultural technology has also tended to disproportionately displace female workers. Similar effects have been demonstrated in Latin America, where resettlement plans focus on cash crops for men. In the Middle East, heavily male international migration has led to increased agricultural and economic participation.

Limitations of data on women's economic roles are caused by male reluctance to report the occupations of females, official definitions that ignore the nonmonetized sector, and are otherwise inadequate, use of land-based enumeration of work that undervalues women's production, seasonal data collection that may miss women's involvement and lack of information on control of resources. The last factor is a crucial determinant of women's position and suggestions for specific data needs on participation in production, and relative degree of control of production inputs and outputs are presented.

90

B

Boulding, Elise 1983

Measures of women's work in the Third World: problems and suggestions. Ch. 14 in Buvinic, M., Lycette, M. A., and McGreevey, W. P. (eds.), Women and Poverty in the Third World. Baltimore: Johns Hopkins University Press.

This article discusses the fact that conventional definitions of the labor force underestimate the work of women and children, and proposes that home production, including agriculture, crafts, services, and barter, be included as a category in studies of employment.

91

B

Boulier, Brian 1982

An evaluation of time budget studies as complements to conventional labor force surveys. The Philippines Review of Economics and Business 19:43-56.

An evaluation of time budget analysis and a comparison of various data collection methods are presented. Time use data from a household survey in Laguna, Philippines were used. The second day of two two-day observations, conducted 3 and 6 months after the original survey, on a subsample of 98 households were used to compare results from retrospective questionnaires with direct observations. Open-ended intervals were used to allow recording of simultaneous activities but the problem of intensity of effort was not addressed. Work time was defined to include income-producing home production, non-income producing home production, and market work. Home production data are from women and other income-earning data are from men.

The comparison of retrospective questionnaires with direct observation revealed that income earning time of fathers from retrospective data exceeded estimates by observation. The two estimates were similar for mothers. Home production time for women, as measured retrospectively, is 15% higher, and child care time is 30% lower, than measured by observation. The retrospective questionnaire underestimates children's income-earning time by 33% as compared to observation. However, differences in sample households and in collection dates make the comparison questionable.

92

E

Burch, Thomas K. 1980

The index of overall headship: A simple measure of household complexity standardized for age and sex, Demography 17(1):25-37.

This paper develops and tests an age-standardized measure of household complexity to indicate the tendency of adults to head their own or to share households. The index of overall headship = actual number of households in a population divided by the sum of assumed maximum headship rate for women in a certain age range times the number of women in that age range and the sum of the same figures for men.

Results using the U.N. Population Division's age-sex specific headship rates based on 43 censuses from 33 countries indicate the index of overall headship is a relatively good predictor of the directly standardized ratio of adults per household. The lower age limits used to define the adult population are appropriate for nations with early marriage and labor force entry, but they inflate ratios of adults per household and deflate overall headship rates. The issues of categories of adults in extended or complex households and the impact of population composition are discussed.

93

E F

Burch, Thomas K., and Gendell, Murray 1970

Extended family structure and fertility: some conceptual and methodological issues. Journal of Marriage and the Family 32(2):227-236.

This article discusses the hypothesis, common in literature on fertility, that women living in extended households have higher fertility. The authors hold that empirical evidence does not support this hypothesis and suggest methodological refinements are needed to study the question. These include the need to define the household more carefully, distinguishing between co-residence and kin group; and the need to keep the time reference of fertility (current or cumulative) congruent with that of family structure.

94

G

Butz, William 1981

Why collect retrospective data? Santa Monica, CA: Rand Paper Series, December.

This brief paper compares retrospective data collection with longitudinal panel data. Both can document characteristics, behavior, and changes in the same individuals over time.

Retrospective data differ from panel data in that they have no information on attrited (through death and migration) respondents; sample selection may be based on initial or terminal characteristics; quality of data is questionable, and worse with longer recall periods. Interviewing for retrospective data is more complex, but survey management is simpler than for a panel study.

The author makes the point that there are not adequate statistical or even conceptual models for dealing with data from either kind of survey that covers long time periods. He suggests that retrospective data may be a substitute for prospective surveys in some cases.

95

B G

Buvinic, Mayra 1983

Women's issues in third world poverty: A policy analysis. Ch. 2 in Buvinic, M., Lycette, M. A. and McGreevey, W. P., eds., Women and Poverty in the Third World. Baltimore: Johns Hopkins University Press.

This detailed analysis of recent progress in women's participation in economic development, explores the changes in conceptual and analytical approaches to research in this area. Quantitative arguments are needed to convince policymakers that the equity-oriented approach underestimates women's productive role. An alternative approach that focuses on women as participants rather than beneficiaries highlights women's share of poverty.

Although a role for women's issues in development policy has become accepted, implementation strategies must remain technically simple and politically safe. Since institutional mechanisms, economic resources and political power to support women remain inadequate, the author suggests policy and methodological approaches, including development of socio-economic indicators to measure women's absolute and relative poverty. Both the household unit and women's individual market behavior should be used as reference points to measure women's economic situation. Time-use surveys can identify inefficient home production activities that could be improved through credit and/or technology. Simple, focused projects should be designed as women-only interventions to minimize chance of men monopolizing them. Development agencies should provide incentives and support units for implementing women-oriented projects.

Buvinic, Mayra, and Youssef, Nadia H. 1978

Women-headed households: the ignored factor in development planning. Report submitted to USAID Office of Women in Development, Washington, D.C., March.

This lengthy report is a rich source of information on the causes and circumstances of female-headed households in developing countries. Numerous empirical studies are cited in detail, and census data from various countries are analyzed for indications of the prevalence of female headship. The authors explain the importance of this phenomenon for targeting development aid appropriately. They stress that the assumption that traditional societies automatically protect women is not supported empirically. Studies must recognize that ideal behavior often departs from what really happens.

The authors distinguish between de facto and legally recognized women-headed households. De facto female headship results from migration, desertion, and polygamy. Census data tend to understate the proportion of women-headed households, partly because of the cultural bias in reporting "head of household." The figure is now estimated to be between 25 and 33% of all households worldwide. This figure varies widely by country and region.

Various types of female-headed households in different regions are described, based on empirical studies, in terms of their age, composition, and strategies for survival. Women and children in female-headed households are more likely to work outside the home.

In Latin America and the Caribbean, consensual unions are common and less stable than legal marriage; in much of Asia, the large age difference between husbands and wives results in widespread early widowhood. Divorce is common in a number of societies in Africa, but men are more likely to remarry these women.

Problems of measuring the prevalence of female-headed households are discussed. A table divides countries into groups by proportion of probable female-headed households.

B

Cain, Mead; Khanam, Syeda Rokeya; and Nahar, Shamsun 1979

Class, patriarchy, and women's work in Bangladesh. Population and Development Review 5(3):405-438. See #250 for complete abstract.

Cain, Mead; Khorshed, A. B. M. and Mozumder, Alam 1981

Labour market reproductive behavior in rural south Asia. Ch. 9 in Rodgers, G. and Standing, G., eds., Child Work, Poverty and Underdevelopment. Geneva: ILO.

This paper focuses on the independent role of labor market structure in mediating the significance of child labor for fertility behavior. In markets which yield a family wage, the net earnings of a child will not affect household welfare. In sex-segregated labor markets, there is increased demand for children because women are more economically dependent on men. Level of employment and wage uncertainty affects fertility incentives as well.

Using time use data and labor surveys from Char Gopalpur, Bangladesh, the authors develop a model to estimate wage rates as a function of the laborer's age, employer's landholdings and dummy variables for peak labor demand, distance from home to work, and sex. They conclude there is a floor to real wages, which may postpone the time when children cease to be net contributors to the household economy, thus affecting fertility decisions. Sex-segregated markets increase fertility incentives because parents need to produce two children on average to yield one potential wage earner.

Canlas, Dante B. 1978

A quantitative study of fertility and wife's employment in the Philippines: 1973, The Philippine Economic Journal 36 17(1-2):88-121.

The analysis presented here uses a household fertility model based on Becker to evaluate the effect of education and income on fertility and wife's labor force participation. Multiple regression analysis is performed using a subsample of 682 urban and 1,660 rural households from the stratified random sample for the 1973 Philippine National Demographic Survey.

Results indicate there is an education threshold such that more schooling below this point has a pronatalist effect reducing the likelihood of wife's employment. Beyond the threshold, increased schooling has a negative effect of number of children and a positive effect on wife's employment due to increased earning capacity. It is concluded, however, that this economic framework is insufficient to explain certain observations, as it is still unclear whether at low income or education levels relative prices are major influences on desired family size and wife's labor force participation.

Carlioni, Alice Stewart 1984

The impact of maternal employment and income on the nutritional status of children in rural areas of developing countries: what is known, what is not known and where the gaps are. New York: United Nations, Administrative Committee on Coordination--Subcommittee on Nutrition.

The nutritionists' and development experts' views of the impact of rural women's income-earning work on children's nutrition are compared in this paper. Nutritionists focus on differences in childcare and feeding practices whereas women in development experts concentrate on the division of labor and women's control of income to explain variations in child nutritional status. The author suggests that examining the underlying economic factors and characteristics of households where women earn off-farm income would be a useful alternative.

A year-long study of time allocation, income earning activities and child nutritional status in rural Kerala revealed that differences in farm income explained most of the variations in nutrition among children of wage-earning and non-earning mothers. In the group whose mothers engaged in wage labor, wage income was a stronger influence than farm income. The length of father's employment was positively associated, while length of mother's employment was negatively associated with children's nutritional status. The impact of seasonal differences in income and employment status are also discussed. The remainder of the paper focuses on region specific information needs to understand how men's employment status affects determinants of children's nutritional status.

Chambers, Robert 1980

Rural poverty unperceived: Problems and remedies. World Bank Staff Working Paper #400, Washington, D.C. 46 pp.

The thesis presented here is that the nature and extent of rural poverty is underperceived due to cognitive and physical biases. Poor households are isolated in spatial, social, knowledge and access terms. Many adopt a low profile strategy to demonstrate they pose no threat to their patrons. These factors tend to reinforce existent biases.

Time and fuel shortages and limited access to remote areas leads to an urban bias in understanding poverty. Researchers tend to be directed to project areas and to the rural elite who are less poor and more influential. The wet season, which exacerbates malnutrition, morbidity and mortality among the vulnerable poor, also reduces accessibility to poor, remote areas, making them less likely to be studied.

To assess poverty and identify the poorest people the author recommends use of key integrating indicators, key informants and combinations of group appraisal. Poverty-focused research should concentrate on family case studies to better understand the rationale of people's survival strategies.

101

G

Chambers, Robert; Longhurst, Richard; Bradley, David and Feacham, Richard 1979

Seasonal dimensions to rural poverty: Analysis and practical implications. IDS Discussion Paper, U. of Sussex, Feb. 27 pp.

Poverty is worst especially for women and children during wet seasons when there are food shortages, high food prices, high demand for agricultural labor and increased exposure to infection. This conclusion is based on brief case studies from tropical rural areas in Africa, India and Bangladesh which indicate women work longer hours in the field during the wet season and still must perform household duties.

This additional work adversely affects women's health and reduces childcare quality. The authors recommend organizing communal childcare and provision of food supplies for vulnerable groups. Adverse effects of seasonality would also be less acute if urban/rural biases in resource allocation were reduced and land reform were undertaken.

102

C

Chaudhury, Rafiqul Huda 1983

Determinants of intrafamilial distribution of food and nutrient intake in a rural area of Bangladesh. Monograph (draft), Bangladesh Institute of Development Economics, Dacca, February.

This paper reports results of a 12-month survey of 108 households (572 individuals) in a village in Bangladesh. Data were obtained by observation, food weighing, and interview on food consumption, cost, source, and intrafamily allocation; on time use by all members over age 5. The latter was used to calculate caloric needs of household members adjusted for both body weight and actual activity level.

The study found that caloric adequacy in these terms was not determined simply by sex, but also by age and position in the household. Women aged 15-30 are least likely to meet their caloric needs, possibly because they are new wives not yet established in the household, and possibly because many in the group are pregnant or lactating. Among older adults and children aged 1-3, females met their needs more than men.

In larger households, caloric adequacy is greater for all males under 30; over 30, it is greater for women. In the lean season, though, caloric adequacy is higher for males in almost all age groups. Among households that produce their own food, all members receive more food.

Household caloric adequacy does not predict caloric adequacy of individual members.

C

Chen, Lincoln C.; Huq, Emdadul; and D'Souza, Stan 1981

Sex bias in the family allocation of food and health care in rural Bangladesh. Population and Development Review 7(1):55-70. See #264 for complete abstract.

103

A E

Chen, Yung-Ping and Chu, Kwang-Wen 1982

Household expenditure patterns: The effect of age of family head, Journal of Family Issues 3(2):233-47.

The objective of the study reported in this article was to investigate how consumer spending patterns vary during different stages of the family life cycle. Cross-sectional data from the 1973 U.S. survey of consumer expenditures were analyzed, using age of family head as the main indicator for family life cycle stage. Results indicate that expenditure differences with respect to age of family head show three general patterns. For aged groups, food is the largest budget item, although when family disposable income is held constant the aged spend a smaller proportion of expenditures on food than most other age groups. Young households devote relatively more of their expenditures to clothing, shelter and household operations than other groups. The authors conclude that life cycle stage is a determinant of consumption patterns.

104

A E F

Cochrane, Susan H.; O'Hara, Donald J. and Leslie, Joanne 1980

The effects of education on health. World Bank Staff Working Paper #405. Washington, D.C. 92 pp.

Analysis of the effects of education on health from three perspectives are reviewed in this paper. The first uses cross-national aggregate data to examine the relationship between a country's life expectancy or mortality and per capita income. Bivariate analyses are summarized and show that literacy is more

closely related to mortality and life expectancy than is per capita income.

The second perspective operates from the framework that education increases productivity and wages and ultimately health. Considering education as a variable in the joint household utility function does not account for differences in health goals mothers and fathers may have. Other determinants of health are identified as wage and full income, supply price of health and demand for health. The presumed direction of correlation is discussed.

The third perspective examines intra-country evidence on parental education and child health at the individual level, which indicates a positive correlation between the two variables in developing countries.

The magnitude of education coefficients are difficult to compare directly in multivariate studies, due to the problems in separating out effects from variations in measurements. Microlevel coefficients are considered to be more accurate, ceteris paribus, than aggregate-level studies of the effects of education on infant and child mortality. Finally, variation in the slopes of regression equation are analyzed to reveal that high illiteracy levels result in larger education effects on child mortality whereas greater government per capita expenditures on health lessen the effect of education.

F

Coreil, Jeannine 1983

Allocation of family resources for health care in rural Haiti, Social Science Medicine 17(11):709-19. See #275 for complete abstract.

105

A

Deaton, Angus 1982

Inequality and needs: Some experimental results for Sri Lanka, Population and Development Review 8 (Suppl.):35-52.

The author argues that welfare is not fully reflected by per capita or household income or expenditures and he introduces some correction factors. Using cross-sectional household consumption behavior data to assign "adult equivalent" values to household members does not change overall measures of inequality but does change individual households' relative ranking in the sample. Income distribution can be corrected by a money metric utility factor, which is the level of expenditure of a reference household required to give it the same behavior as some selected household *h*. Although this correction changes the distribution of households by relative income level, alternative corrections are equally plausible.

106

B

Deere, Carmen Diana 1982

The division of labor by sex in agriculture: a Peruvian case study. Economic Development and Cultural Change 30(4):795-812.

This article describes problems of estimating women's contribution to agricultural production in Cajamarca Province, Peru. Census data found a sharp decrease in women's agricultural participation from 1930 to 1970. The explanation was that early census surveys asked for descriptions of activities contributing to the household economy, while later surveys simply asked for principal occupation, so that, given cultural norms, women described themselves as housewives. Also, the period of reference was shorter in later surveys, so that unpaid family work that was reported was less likely to be counted in the later years, especially since the census occurs during the agricultural slack season.

The author discusses women's agricultural participation by economic class. Women do more such work, a higher proportion of the total, and a greater variety of tasks in poorer farm households that are more dependent on family labor.

107

B

Deere, Carmen Diana, and Leon de Leal, Magdalena 1979

Measuring women's work and class position. Studies in Family Planning 10(11/12):370-74.

This article discusses several methodological problems in measuring women's economic participation by sample survey and suggests some solutions.

The unit of analysis is commonly the household, but the unit of production and reproduction may not be coterminous. Questionnaires should be designed to capture activities of both the consumption and production units; this requires previous participant observation to know the dimensions of these units. Similarly, the variety of types of activities must be known, to measure time labor force participation.

Two methods of measuring time use are compared: recall based on activity list, and a schematic to chart days of participation and individuals involved in each task. The latter method yielded a higher estimate of women's agricultural labor. A third method suggested is to ask, for each activity, for a subjective estimate of frequency of participation.

Sample design issues are also briefly discussed.

108

B F

de la Luz Silva, Maria 1981

Urban poverty and child work: Elements for the analysis of child work in Chile. Ch. 6 in Rodgers, G. and Standing, G., eds., Child Work, Poverty and Underdevelopment. Geneva: ILO.

This chapter discusses concepts, classifications and economic characteristics relevant to child work in Chile. Minors may legally enter into an employment contract at the age of 14 if they have parental permission and have fulfilled legal minimum school attendance. The concept of minor implies that children under a certain age are incapable of work responsibilities and that technological progress widens the gap between the family's ability to educate and the requirements of the productive system. Child work is evidence of the family's inability to reproduce the labor force.

In Chile the steep rise in unemployment coupled with a plunge in real incomes over the last few years has led to an increase in child work. The influx of women into the labor market has increased the exploitation of children who take over household responsibilities and perform unpaid work for their parents. The specific forms of child work--conventional paid, conventional unpaid, unconventional unpaid--depend on their parents' position in the productive structure and their ability to meet family needs.

109

C

den Hartog, A. P. 1982

Unequal distribution of food within the household (a somewhat neglected aspect of food behavior), Nutrition Newsletter 10(4):8-17.

This is one of the earliest papers to point out that economic development will not necessarily lead to an improvement in food availability at the intra-household level. Proportionately unequal distribution of food within the household goes unrecognized because most food consumption surveys present data as average consumption per person per day. The author suggests a channel theory of farming and buying to help understand food supply and movement at the household level in rural communities.

A discussion of social factors that contribute to unequal food distribution follows. These include the social and economic position of members in their household and in society, concepts about foods and the social functions of food.

DeWalt, Kathleen H. 1983

Nutritional Strategies and Agricultural Change in a Mexican Community.
Ann Arbor, MI: UMI Research Press. 232 pp. See #284 for complete abstract.

110

B G

Dixon, Ruth B. 1982a

Women, men, and agriculture: Counting workers in the third world.
Dept. of Sociology, University of California at Davis, draft. 30 pp.

This paper discusses how variable definitions of economic activity affect census results and fail to capture the responsiveness of women's employment patterns to cultural and structural conditions. Unpaid family workers are considered to be economically active if they work at least one-third of a work day, while no minimum time is set for wage earners. The use of different time reference periods, units of analysis and definitions of work, as well as seasonal fluctuations make various methods non-comparable for estimating average femaleness of agriculture. Although the activity rates for men are almost identical, the population census records 22% female participation vs. 36% by the agriculture holding method. The FAO uses the latter method while the ILO uses the former.

111

F

Dube, Leela 1981

The economic roles of children in India: Methodological issues. Ch. 7 in Rodgers, G. and Standing, G., eds., Child Work, Poverty and Underdevelopment. Geneva: ILO.

Some of the methodological problems in studying the economic roles of children are reviewed in this chapter. The lack of uniformity in the use of age and other categories limit the usefulness of quantitative data. Rites of passage and approximate age are the usual criteria for identifying a person at a particular life stage; however, this ignores the continuity of personality stressed in some cultures and leads to broad and vague categories. Demographic census data also neglect the details of children's work participation.

Studying the household as a residential unit, a resource owning unit and as a unit for employment allows the researcher to differentiate children's roles in these contexts. Children's time use can be researched through a combination of charts, observations and interviews.

D

Dulansey, Maryanne and Austin, James E. 1985

Small scale enterprise and women. Ch. 4 in Overholt, C. et al., eds., Gender Roles in Development Projects. W. Hartford, CT: Kumarian Press.

This is a guide to analyzing small scale enterprise (SSE) projects so that enhanced women's participation and welfare are incorporated into the design. SSE projects are particularly important for women because they provide more flexible and less restrictive employment opportunities, can be built on skills and knowledge women acquire at home, and ease the transition from a declining agricultural economy. The categories of social norms, institutional structures, legal aspects and economic and political factors are identified as barriers to access for women. Examples of the potential negative impact many project goals can have on women are presented.

Two rules of project design for women are that the intervention must not worsen women's situation and they should help women with the total range of task and concerns they face. To make women visible in development, the authors use a Participation Profile. The framework includes questions on organization, personnel, production, marketing and finance.

B C F

Engle, Patricia L. 1983

The effect of maternal employment on children's welfare in rural Guatemala. In Wagner, D. A., ed., Child Development and International Development: Research-Policy Interfaces, NDCD no. 20. San Francisco: Jossey-Bass. See #297 for complete abstract.

B

Engle, Patricia L., and Butz, William P. 1981

Methodological issues in collecting time use data in developing countries. Paper presented at the Society for Research on Child Development Symposium, April 5.

This relatively brief paper discusses the importance of time use studies, especially for quantifying the economic contribution of women, whose work may not be monetized. Data on time use are collected by observation (whole day or random time periods); recall (24-hour sequence, or by activities presented in a list), and by diary (generally not used in LDCs). Important measurement issues are reliability from one observer to the next, validity--especially of recall--and data quality. For coding, having appropriate categories is important, and the coding system must be able to handle joint or concurrent activities.

114

A B C

Ensminger, Jean 1980

Household economy among the Orma: methodological issues in the collection of quantitative data among pastoralists. Discussion paper for Conference on Ecological Stress in Eastern Africa sponsored by Northwestern University and the National Museums of Kenya, Nairobi, June 15-17.

This paper describes in detail the methods used to collect data for a study of decision-making among a semi-nomadic pastoral group in Kenya. The study involved more than a year of participant-observation and informal interviewing by the author as well as formal surveys by hired enumerators.

Recognizing the importance of interhousehold as well as intrahousehold exchanges, the author included three whole villages in her sample, to capture these exchanges. The study followed transhumant households in their different locations. The author states that these methods may not be applicable to other nomads, since this group does not travel far and has fixed locations.

Income expenditure information was collected from a single baseline survey and a household budget survey of all income and expenditure repeated semi-monthly, except semi-weekly during harvest. The questionnaire covered 31 types of expenditure and 8 types of income in a list developed based on participant observation.

Food consumption data were obtained through interviews conducted every five days with each person in the household who cooks or milks cattle. Period of recall was one day for food consumption, five days for sale, gifts, and consumption of ghee. Food gifts were recorded by type, quantity, and relationship of donor or recipient. Quantities were measured in the respondent's own utensils.

Time use was measured by periodic direct observation of actual activity performed by each household member (once every ten days), and by self report (every five days), of time spent in each of 23 work-related activities during the past five days. The activity list was developed based on systematic random visiting during the period of participant observation.

115

A

Ensminger, Jean n.d.

The effects of increasing Orma participation in the cash economy. Draft. Washington University in St. Louis, MO. 11 pp.

This paper presents the pastoral Galole Orma as a control case for comparison with other pastoral areas that have undergone planned development. This method is suggested as being more appropriate than pre-post evaluations because it allows one to assess the degree to which market effects create some undesirable outcomes, in the absence of formal development projects.

About half of the Galole Orma are settled and strongly integrated into the market economy, and the rest remain more nomadic and self-sufficient. The settled households increasingly depend on the sale of cattle and purchase of grain to meet daily food needs. The milk yields of cows among the nomads tend to be at least twice those of settled village cows. The study concludes that sedentarization and commercialization of the Galole production system have increased inequality in the distribution of wealth.

116

B

Evenson, Robert E. 1983

The allocation of women's time: An international comparison. Behavior Science Research 17(384):196-215.

This paper compares methods and results of 40 time allocation studies and reviews the effects of exogenous factors on time allocation. Although the data collection techniques varied, all of the studies categorized time as market work, household work or leisure and used detailed sets of activity definitions to account for work. Discussion of results focused on the time use of housewives versus employed women. The latter spent 7-8 hours/day on market work and 3-4 hours/day on household work, or about half as much time on child care, food preparation and household maintenance as did housewives. It was also noted that men's leisure relative to women's falls as GNP per capita rises and as female labor force participation increases.

An economic analysis of time allocation examines how households respond to exogenous changes. An increase in non-wage income, husband's wages or self-employment income opportunities have positive income effects, while an increase in women's wages will have no effect on housewives but strong double substitution effects (household and leisure time) for working women. The effects of home capital, schooling, costs associated with market work, and children are also discussed.

Evenson, Robert E.; Popkin, Barry M.; and King-Quizon, Elizabeth 1980

Nutrition, work, and demographic behavior in rural Philippine households: A synopsis of several Laguna household studies. Ch. 11 in Binswanger, H-P. et al. (eds.), Rural Household Studies in Asia, Singapore: Singapore University Press.

This paper discusses the methods used to collect data for one round of a multipurpose study of households in Laguna, Philippines focusing on fertility, health, time allocation, and home and market production of various household members. Data were collected on 99 households using survey methods.

Income and expenditure data were collected by recall of seven days prior to interview, covering market work and home production. Six types of activities were specifically included, but the authors believe home produced and consumed goods were underreported.

Dietary data were obtained from a 24 hour recall and a food record which mothers were asked to keep. Food allocation to different members was measured at these times, two months apart, but the authors question the accuracy of the reports.

Time use data were collected by direct observation and recall. Observers stayed in households all day and recorded time spent on a list of 30 activities. Simultaneous activities were recorded separately. Recall was used to get information on activities away from home.

Health/nutrition status was measured by weight for height of children and recall of perceived health problems in the previous month.

Time budget results showed men who spent less time in market production spent more time on home production (child care, food preparation) and leisure. Women who spent more time in market production reduced leisure. Food preparation time was reduced only if market time exceeded six hours.

Gillespie, Vivian Havens 1979

Rural women's time use. Studies in Family Planning 10(11/12):383-84.

This empirical study used direct observation to obtain time budget information for women in rural Nicaragua. The article discusses the benefits of this research method.

Direct observation obtains data on the time it takes to do tasks and who does them; this information cannot be obtained by recall methods. In interviews, respondents tend to report cultural norms rather than

actual behavior. Further, direct observation gives researchers a fuller understanding of the subjects; and may suggest new lines of research.

The study observed three types of women: housewives, potters, and factory workers. About half the factory workers lived with parents who performed the household maintenance work.

The study obtained food consumption data by observation. It found that husbands and children are served their meals before women, and that special foods (eggs, meat) are given to men or older male children.

119

B

Gillespie, Vivian H. 1977

A modified time budget methodology for gathering base-line data on the roles and responsibilities of rural women in Nicaragua. Paper prepared for Women in Development, USAID, Washington, DC. 95 pp.

A lengthy description of the methodology developed to collect information on the roles and responsibilities of rural Nicaraguan women is presented here. Three methods were used: time budgets of 117 women and 20 men, personal interviews asking specific demographic and economic questions, and tape recorded open-ended interviews with a subsample of women. The main survey instrument consisted of the time budget observation sheet, a summary activity sheet, an activity description sheet, a dwelling plan and house construction sheet and the demographic and economic information sheet.

The data reveal that women from the pottery and rug-making localities spent less time in food processing and relied more on parents or in-laws for household and child care task than did the women from other villages. Sociodemographic data are also summarized and the author notes that a survey should also be conducted during the peak agricultural season to determine changes in time use and responsibilities.

120

H

Goldschmidt-Clermont, Luisella 1984

The economic value of household production: methodological problems. Paper prepared for HIID Workshop on Conceptualizing the Household, Nov. 2-4, Boston.

This paper discusses methodological problems in determining the economic value of household production. It is pointed out that the categorization of activities is arbitrary; for example, meal preparation is an income generating activity among the Hausa of Nigeria but is not usually considered as such. Household production

can be measured in terms of physical units, which refer to labor input or household output figures, or monetary units. Valuation methods include wage-based, value-added and exchange vs. use value techniques. An alternative approach analyzes household work by groups of tasks and looks for market equivalents to household outputs to impute a price. The author considers the new home economics model to be inadequate for several reasons, including the idea that perfect substitution of non-market for market work ignores labor market and household constraints. Only the comparisons between absolute numbers of hours devoted to household production may be significant.

D

Gordon, Elisabeth 1981

An analysis of the impact of labor migration on the lives of women in Lesotho. In Nelson, N. (ed.), African Women in the Development Process. Totowa, N.J.: F. Cass & Co. See #319 for complete abstract.

121

A B G

Grootaert, Christian 1982

The conceptual basis of measures of household welfare and their implied data requirements. Living Standards Measurement Study (LSMS) Working Paper #19, The World Bank, Washington, DC. 40 pp.

This paper describes three main approaches to measuring welfare and provides general data collection recommendations. Welfare is derived from the consumption of goods and can be seen as a function of the physiological characteristics of the recipient and his/her environment. A true index of household welfare measures production outputs and input, time, net accumulation of wealth and wages of each member. A second technique measures total household expenditures as a function of a total expenditures index deflated by a price index and index of household size and composition. The full income concept as a measure of welfare calculates all income and values to services derived from household endowments and assets. Differences in development can be assessed by the ratio of monetary to nonmonetary income.

Various approaches to modeling labor market participation in the household context and measuring asset accumulation are discussed. Household survey issues regarding expenditure information, suitable respondents, tracking variables, and the time dimension are also addressed.

Gross, Daniel R. 1984

Time allocation: a tool for the study of cultural behavior, Annual Review of Anthropology 13:519-558.

The various uses of time allocation studies and specific methodological and technical issues are presented with numerous references in this article. Time allocation research has highlighted women's previously invisible labor contributions by measuring work involved in childcare, food preparation and other domestic tasks. A review of the literature shows a strong emphasis on women's activities, sex roles, domestic labor and the functioning of the household. For example, Chayanon's study (1966) suggested that peasant families maintain production at a culturally prescribed level through a declining rate of production per member as children begin to participate. Time allocation studies have also been useful in the study of intrahousehold factors affecting nutritional status.

Specific techniques and problems regarding the sampling universe, sampling units, observation intervals, sampling duration and frequency, coding, direct vs. indirect observation, privacy and ethics are systematically discussed.

Haaga, John 1986

The accuracy of retrospective data from the Malaysian family life survey. Rand Corporation Note N-2157-AID. 55 pp.

This paper discusses prospective versus retrospective longitudinal data, with specific attention paid to the issue of accuracy in retrospective data from the Malaysian Family Life Survey. Questions on birth and contraceptive use yield underreporting and mistiming errors, which may be systematically biased. Data on single events seem to be more accurate than data on duration, which have peak value problems. For example, the question on how long breastfeeding was maintained showed peaks at 6, 12, 18 and 24 months. Inaccuracy is also a function of the type of respondent; rural women are more accurate than others if the effects of race and education are controlled.

Haaga, John and Mason, John 1985

Intra-family food distribution and nutritional surveillance in developing countries. Cornell Nutritional Surveillance Program Working Paper no. 44, Ithaca, NY. 26 pp.

This paper assesses the priority of intra-household maldistribution of food for public health and development policy and the use of nutrition surveillance to better define and monitor the problem. Studies directly measuring food intake of individuals show variable patterns of age- and sex-based discrimination in food allocation, the severity of discrimination often being affected by income. One interesting study (Harbert and Scandizzo, 1982) in Chile found that energy intake was actually biased toward children when snacks were included in the intake measurement. Other studies evaluating health outcomes, the impact of household size and composition on food expenditures, and intrahousehold decisions on allocation of other resources indicate that family food distribution is a complex problem, whose significance is still not well known. The authors conclude that direct measures of individual intake are needed to study intrahousehold food distribution and that it is not clear that preschoolers are always the losers when maldistribution exists.

The paper describes possible secondary analyses of existing data sets to overcome methodological problems associated with RDA baselines and individual variations in requirements. These include deriving age-sex specific elasticities of food expenditures relative to total expenditures, re-analyzing data using alternate forms of the dependent variable and comparing characteristics of families who discriminate against children to those who favor them in food allocation. Even with such secondary analysis, the study of this problem still requires a process of longitudinal micro-studies, leading to representative surveys and then to surveillance, with intervention trials along the way.

A E F

Hackenburg, Robert; Murphy, Arthur D. and Selby, Henry A. 1984

The urban household in dependent development. Ch. 8 in Netting, R. McC., Wilk, R. R. and Arnould, E. J. (eds.), Households: Comparative and Historical Studies of the Domestic Group. Berkeley, CA: University of California Press. See #329 for complete abstract.

125

A B C E

Hamilton, Sahni; Popkin, Barry and Spicer, Deborah 1984

Women and Nutrition in Third World Countries, South Hadley, MA: Bergin & Garvey Publishers.

This book documents the current state of maternal nutrition research and practices in developing countries, discussing nutritional assessment techniques, determinants and consequences of women's nutritional status. Women's access to and autonomy in the use of her own or total household income and assets are expected to be major determinants of her diet. The authors also discuss the issues of time allocation, household size, parity and structure, decision-making power, life cycle and demographic effects, as well as seasonal factors, education and information and cultural determinants of women's nutritional status.

E

Hammel, E. A. 1984

On the *** of studying household form and function. Ch. 2 in Netting, R. McC., Wilk, R. R. and Arnould, E. J. (eds.), Households: Comparative and Historical Studies of the Domestic Group, Berkeley, CA: University of California Press. See #43 for complete abstract.

126

D

Harrington, Judith A. 1983

Nutritional stress and economic responsibility: a study of Nigerian women. Ch. 7 in Buvinic, M., Lycette, M. A., and McGreevey, W. P. (eds.), Women and Poverty in the Third World. Baltimore: Johns Hopkins University Press.

This study measures the economic and physical burdens (due to household maintenance responsibility and to pregnancy and lactation) of three groups of women in Nigeria: Yoruba, Benin, and Kano. Data were obtained from large-scale random sample surveys which interviewed all adult (over 15) members of each sample household. A 20% subsample received a more detailed questionnaire.

The study uses an "index of economics" which uses women's responses to a series of questions on who paid for basic household needs. Each item was scored 100 if the woman paid, 0 if anyone else paid, and 50 if the expense was shared.

The author discusses some problems with the index. It measures specific categories of expenditure rather than the total budget; it does not reflect different degree of partial contribution; women may not accurately report the situation. A further problem (not

mentioned) is that the actual decision to make it may not rest in the same person. Also, the index takes no account of possible change in economic responsibility if members' capacity to pay changes.

A nutritional stress index was developed which was the total months spent lactating or pregnant as a percentage of total reproductive life (months since first birth).

127

G

Hasan, Yousef 1982

Working through local female investigators: experiences in a broad survey. In Islam, S. (ed.), Exploring the Other Half: Field Research with Rural Women in Bangladesh, Dacca: Women for Women (BRAC printers).

This chapter discusses the use of local women interviewers for a survey conducted in 8 unions of rural Bangladesh by the Foundation for Research on Educational Planning Development. The objective of the survey was to collect data on children's needs, which required information from women and household heads, and it was decided to recruit and train local women interviewers.

The problems faced by the male field investigators included: the absence of matriculate women in certain areas, the unwillingness of suitable women to work because of social taboos and the difficulty in finding socially acceptable locations for training and data collection. Local women interviewers had no problems staying in villages for long periods and with local dialects, but faced difficulties due to local factionalism. It is concluded that the researcher's approach and communication style must be appropriate to the villages under study in order to yield quality data.

128

A B C

Haugerud, Angelique 1979

Methodological issues in a study of resource allocation decisions among Embu farmers. Working paper no. 357, Institution for Development Studies, University of Nairobi, Kenya, July.

This paper discusses the methods used and their rationale in an economic anthropological study of resource allocation in a coffee and cotton growing zone of rural Kenya. (See Haugerud 1981a and 1981b, Section III [#335, #336] for results.)

The author argues that survey techniques must be combined with participant observation to obtain meaningful information. Economic models must include the social and cultural constraints on decision making and on the range of choices open to households, and the

multiple objectives of many economic decisions. In LDCs some market relations are culturally determined by age, sex, and status.

In the present study, the author spent 2.5 years in participant observation which permitted development of questionnaires with the local names for things and adapted to local conditions.

Data were collected on income, expenditure, agricultural practices, time use, and food consumption. Interviews were conducted weekly on production, consumption, gifts in and out, and time allocation. Food consumption data were obtained from every woman who cooked. Time use data were obtained by recall, but checked by direct observation of household members at random and purposely selected times.

B F H

Ho, Teresa J. 1979

Time costs of child rearing in the rural Philippines, Population and Development Review 5(4):643-662. See #342 for complete abstract.

D

Hollerbach, Paula E. 1980

Power in families, communication and fertility decision-making. Center for Policy Studies Working Paper no. 53, The Population Council, New York. See #344 for complete abstract.

C

Horowitz, Grace 1980

Intrafamily distribution of food and other resources. Report to the Nutrition Economics Group, OICU, USDA, Washington, D.C. July. See #346 for complete abstract.

129

B F

Hull, Terence 1981

Perspectives and data requirements for the study of children's work. Ch. 2 in Rodgers, G. and Standing, G. (eds.), Child Work, Poverty and Underemployment. Geneva: ILO.

A research strategy and various concepts important for the study of child work are discussed in this chapter. Important themes to explore include: (1) the impact of work on child welfare, and socialization, (2) inter-relationship of schooling and employment, (3) children's productive contribution to the family and society, (4) the

socioeconomic determinants of children's workforce participation, and (5) patterns of exploitation. The next research steps are to define the basic concepts and the unit of analysis. Appropriate data collection techniques are then discussed.

The author suggests using the broadest age limits when collecting data and making the decision to narrow the definition during analysis. Issues of classification of activities, appropriate statistics and reporting methods as well as concept validation are also reviewed.

130

C

Hull, Valerie 1982

Dietary taboos in Java: myths, mysteries and methodology. Mimeo from the Department of Demography, Australian National University. 28 pp.

This paper discusses the literature on dietary beliefs in Java. Most work is based on questionnaires, not direct observation, so the data describe normative, not actual behavior. The author stresses the importance of collecting information on actual dietary patterns and changes in pregnancy, lactation, and at other times in the life cycle. She cites two studies which give conflicting evidence about the preferential distribution of food to children, and states her own observation that children are preferentially treated in Java.

131

B G

International Center for Research on Women 1980

The productivity of women in developing countries: measurement issues and recommendations. Paper prepared for Women in Development Office, USAID, Washington, DC. 43 pp.

This paper discusses the problem of underreporting of women's economically productive activities, explains why it is important to recognize the economic contributions of women in planning development projects, and makes recommendations for improving data on women's work. Numerous studies are cited that demonstrate the importance of women's home and market production, and the tendency of women's work to be underreported in surveys.

An awareness of women's productive roles is important because of equity considerations (women's needs may not be met by male-oriented programs), the increasing prevalence of women-headed households, and the major contribution of women's work to overall production.

A major issue is recognizing and appropriately evaluating home production. Problems of assigning value to non-traded goods and services are discussed, and different ways of dealing with the issue in the literature are described. Time studies are proposed as the

most accurate tool for measuring production, despite problems of simultaneous activities, variable intensity of tasks, and lack of interchangeability of time units. Another issue is the underestimation of informal sector and seasonal activity which affects both men and women.

The point is made that analysis of household behavior ignores the different behaviors and preferences of members. Flaws in the "new household economics" model are discussed.

A series of specific recommendations for data collection is presented.

132

B E G

Jelŋn, Elisabeth 1982b

Women and the urban labour market. Ch. 10 in Anker, R., Buvinic, M. and Youssef, N. (eds.), Women's Roles and Population Trends in the Third World, London: Croom Helm Ltd.

This chapter argues that an improvement in urban women's position must involve a shift in their position in the household. The author links women's position within the household and household composition to the sexual division of labor and the relationship between domestic and market production. Of particular significance are the discussion on the need for empirical research at the household level, methodological considerations for future research, and the specific case of women-headed households.

The availability of women for work outside the house is related to their domestic responsibilities and their earning potential. The impact of domestic work depends on the structure and division of maintenance and labor force reproduction tasks, given a particularly household composition. Time budget studies are useful at the micro level, but they fail to capture the social and cultural context of the division of labor. The study of women's activities as determined by their position in the household requires a characterization of the variety of households according to class and their change over time. Such research must first reconceptualize "work" and "non work" and explicitly define how the household mediates women's position in the labor market.

Johnson, Allen 1980

The limits of formalism in agricultural decision research. Ch. 2 in Barlet, P. F. (ed.), Agricultural Decision Making: Anthropological Contributions to Rural Development. New York: Academic Press.

The author reviews the success of formal models in predicting food-related decisions in non-Western economies and then presents a modified formal analysis of the Machiguenga, a subsistence Indian community in the Peruvian Amazon region. The analysis assumes the diet is a problem of production, not consumption, in order to predict what is the most satisfying diet that can be obtained, taking dissatisfaction of production into account.

The model's predictions are compared to actual data over 13 months from a representative sample of 105 adults and children. It is observed that manioc, a calorie-rich staple crop, is overproduced as a reserve food for emergencies. The Machiguenga prefer hunting, gathering and fishing to gardening. Thus nutritional value, food diversity and work dissatisfaction must be taken into account in order to predict food-related decisions. The author stresses the need to shift from formalist theory to holistic ethnographic research and more empirical data.

Johnson, Allen 1975

Time allocation in a Machiguenga community. Ethnology 14(2):301-310.

This important and widely cited article details a method for collecting data on time use and reports results of this method used in a study of Peruvian Amazonian Indians.

Data were collected on a sample of 13 households containing 105 members from June 1972 through August 1973.

The method entailed spot checks of activities of all household members at various times throughout the day and on different days of the week. Predefined categories of activity were not used. Observers described whatever activities were taking place at the time of the visit before household members became aware of their presence. Activities of members not present were recorded based on interviews with those present. Activities were recorded in longhand and then coded on computer cards in the field. The households sampled, times, and days of the visits were randomly selected. Times of observation were limited to between 6 a.m. and 7 p.m.

The study found significant differences in types of productive work performed by men and women, but no significant difference in the amount of time spent in idle (vs. productive) activity.

135

C D E

Katona-Apte, Judit 1983

The significance of intra-household food distribution in food programmes, Food and Nutrition Bulletin 5(4):35-41.

This paper presents a model of food flow within the household, and explains the pathways of nutritional effect and benefits from food programs. Households are defined as a group of individuals who share a domestic unit that pools its resources, especially food. Examples of various food distribution systems that determine the individual allotment are discussed, and factors that alter the system are noted. Food program nutrition benefits are either targeted or untargeted. The nutritional effect may be direct, through improving the quality of the acquired food at the household level, or at the individual level if the program is targeted. A program has an indirect effect if its income transfer potential alters the household's ability to acquire food. Questions about household behavior that are useful for evaluating the effect of different program types are reviewed.

136

C

Kennedy, Eileen 1983

Determinants of family and preschooler food consumption, Food and Nutrition Bulletin 5(4):22-29.

Existing data sets from Thailand, Malaysia, Sudan and Mexico are used to analyze the determinants of household and preschoolers' caloric intake. Data from the first three countries indicate that caloric intake increases with income; however, some high income households still have inadequate caloric consumption. Anthropometric measurements on preschoolers in the Mexican and Malaysian project studies showed that chronic malnutrition was the main problem, yet household incomes were not significantly associated with children's Z-scores for weight for age and height (using NCHS 1976 Growth Standards), derived to represent nutritional status. Increments in income and participation in the milk subsidy program in Mexico City increased family caloric intake, but did not necessarily improve the intake of preschoolers. Thus, income and family caloric consumption are inadequate indicators of household or children's nutritional status respectively. The author suggests that family oriented nutrition programs may not be the most effective means of achieving nutritional goals for specific members.

B

King, Elizabeth and Evenson, Robert E. 1983

Time allocation and home production in Philippine rural households. Ch. 3 in Buvinic, M., Lycette, M. A. and McGreevey, W. P., eds., Women and Poverty in the Third World. Baltimore: Johns Hopkins University Press. See #365 for complete abstract.

B

King-Quizon, Elizabeth 1978

Time allocation and home production in rural Philippine households, The Philippine Economic Journal 36 17(1-2):185-202. See #364 for complete abstract.

A B C

Kumar, Shubh K. 1978

Role of the household economy in determining child nutrition at low income levels: a case study in Kerala. Ithaca: Cornell University, Department of Agricultural Economics, Occasional Paper #95, November. See #370 for complete abstract.

137

D

Leacock, Eleanor 1978

Women's status in egalitarian society: implications for social evolution. Current Anthropology 19(2):247-255.

This article reviews some of the empirical and theoretical literature on women's autonomy in various cultures. The author suggests that much research tends to overstate women's loss of autonomy with modernization because of the researchers' own bias. The notion of female autonomy is difficult to operationalize because it tends to force polarization of authority where this may be inappropriate.

138

B

Leon de Leal, Magdalena 1984

Measuring women's work: Methodological and conceptual issues in Latin America. Research on Rural Women: Feminist Methodological Questions, IDS Bulletin 15(1):12-17.

This paper reviews methodological issues of census and household survey measurements of women's economic activity. Problems include

lack of comparable data collection methods, inadequate reference periods that ignore seasonality and disagreement on what minimum activity period constitutes active economic participation.

To improve the quality of census data the author suggests using the household as the basis for analysis and broadening the number and scope of questions. Household surveys should include both permanent ongoing and occasional data. Number and age of children, their school attendance, how many months/year a woman works, and her labor history, should always be collected. Occasional data should include age, sex, occupation and income of other household members.

139

D

Liu, William T.; Hutchinson, Ira W. and Hong, Lawrence K. 1973

Conjugal power and decision making. A methodological note on cross-cultural study of the family, American Journal of Sociology 79(1):84-98.

This paper presents the hypothesis that the support the extended kinship structure extends to conjugal partners influences intrahousehold power and decision-making patterns. The author argues that both survey and observational approaches to measuring conjugal power fail to account for the effects of external variables on decision-making in the nuclear family, which is especially important for making valid cross-cultural comparisons. This is demonstrated using 1969 data from the revealed difference method (not described) administered to 18 Hong Kong families for 108 deliberations and 45 Cebuano families in the Philippines for 405 deliberations.

Both Hong Kong and Philippine families have strong extended kinship ties, although small, nuclear families predominate. In both cultures husbands are dominant in decision-making, although the power differential is smaller in Cebu than in Hong Kong families. The revealed difference data shows the unilateral kinship system in Hong Kong strengthens the husband-dominance and role segregation found there. In Cebu bilateral kinship lineage has undermined the patriarchal norm, resulting in a dominance pattern that is almost equally divided between the spouses. The Cebuano wife is able to obtain domestic assistance from her husband because support from her extended kin augments her power within the family.

Longhurst, Richard 1984

The energy trap: Work, nutrition and child malnutrition in northern Nigeria. Cornell International Nutrition Monograph Series #13. 101 pp.

The central argument presented here is that poor people are caught in an "energy trap"; the high energy expenditure they require to maintain subsistence leaves little time and energy to accumulate capital. A combination of primary and secondary data on the Dayi in Northern Nigeria are used to evaluate the distribution and determinants of energy expenditure and the nutritional status of children. The paper then discusses the role of household assets and income, demographics and seasonal factors in the energy trap concept.

The primary data on household demographics, assets, income, farm management and farm labor allocation were collected every 2 months from male heads. Women were interviewed in 4 rounds regarding marriage, fertility, education, their work and children's health. The nutritional status of children under five was determined using anthropometric criteria and 24 hour food consumption recalls by the mothers. Information on field size and crops and market prices for all food commodities was also collected. The households were stratified along economic lines into net buyers or net sellers of farm labor. The net farm labor buyer group was richer, worked fewer farm hours and received higher average returns from both farm and non-farm work.

In northern Nigeria gandu is practiced, where farm work and provision of family food is arranged between father and son or between brothers. Married women of childbearing age are secluded, engaging in domestic tasks and sometimes in-home income generating activities. Women contribute less than 1% of hours to household farm labor although they are often hired to pick cotton. Migration occurs mainly in the 10-19 age group, with men migrating seasonally and women returning to their mother for first births. Polygamy and divorce are common practices.

The analysis of data on the distribution of energy expenditure suggests that poor household heads had less intake than rich heads. In the family energy intake, males were favored over females and adolescent over infants and children. On average, the cultivating poor just meet their grain needs. This calculation is based on converting cash from crop sales into grain-energy equivalents by using average year-round sorghum prices. Net labor buyers have a 1.5 ratio and net sellers a .91 ratio for gross energy available from cash crops and grain versus household energy needs.

The nutritional status of rich and poor children was similar; the relatively poor status of rich children was attributed to their later birth orders and, in polygamous households, to increased exposure to infections. Energy intake for both groups of children was the same,

although the upper class households were able to fulfill requirements better. Family size was positively correlated to childhood protein-energy malnutrition for children 2-5 years, where competition for resources was strong. This relationship did not exist for children under two years of age, for whom medical history, immunizations and birth order were significant determinants.

The distribution of energy expenditure and intake was assessed primarily for male household heads. The value of assets was negatively related to the head's energy expenditure, but significant only for net sellers, and most significant at peak periods. Cash return for effort was positively correlated to the effort of net sellers of labor and negatively to that of net buyers. A negative relationship between energy intake per consumption unit and family size was found. Energy expenditure was highest for the poor during the preharvest period.

C

Marchione, T. J. 1980

Factors associated with malnutrition in the children of western Jamaica, Ch. 9 in Jerome, N. W., Kandel, R. F. and Pelto, G., eds., Nutritional Anthropology. New York: Redgrave Publishing Co. See #385 for complete abstract.

141

A B D E G

Longhurst, Richard 1981

Research methodology and rural economy in northern Nigeria, Rapid Rural Appraisal, IDS Bulletin 12(4):23-31.

This article suggest methods to improve the speed and cost-effectiveness of rural research, based on the author's experience in Nigeria. Prioritizing data, stratification using one-time proxies for income, asset holdings, purchasing power or structural measures of economic status, and other techniques to allow rapid project appraisal are discussed. The author suggests secondary data are useful for verifying information, providing insights into shortcut methods, as well as for minimizing the need for frequent interviews.

The salience of an event or how well some information is remembered (registered vs. non-registered) and the time to complete an activity (single point vs. continuous) are characteristics of data that determine how quickly and accurately it can be collected. Fertilizer application is single-point registered while manure application is single-point non-registered. Hired labor is continuous registered, whereas family labor is continuous non-registered. It is also important to have a reliable core of data which can be used to evaluate the accuracy and usefulness of other collected information.

For example, landholdings and areas measured by the researcher can be used to verify labor inputs, crop yields, storage and crop sales data.

Income should be based on annual figures to account for seasonal variation, but can be estimated at one visit by breaking income down into specific components. Asset information can be approximated quickly by asking about selected assets that represent the major components of holdings and then valued by applying the local resale price. House score based on house type, number of rooms, and type of walls and roof is a good proxy for levels of economic well-being. A proxy for purchasing power is harder to develop but can be derived from sales of the principal cash crop.

The author also recommends that researchers read all relevant documents before starting field work. Appraisal teams should include impromptu sessions along with planned interviews. Cropping and major event calendars, information on sources of inputs and the sexual division of labor and health and nutrition measures are important indicators to help focus and understand the research.

142

A B D

McKee, Katherine 1983

The potential contributions of household analysis to farming systems research. Presented at joint Rockefeller and Ford Foundations Conference, Aleppo, Syria. May 24-26. Unpublished, Ford Foundation, New York.

This paper provides a useful framework for analyzing the effects of new agricultural technologies on household allocation of labor, decision-making and resource control, and economic and non-economic incentive structures. Introduction of new techniques tends to emphasize labor peaks for specific family members at different times in the agricultural year, which may alter relative labor productivity and inputs in the household. Flexibility of sexual and age division of labor is limited over the short run, but with time balance can be regained by reallocation of labor.

Decision-making power among family members does not necessarily correspond to labor allocation patterns. To achieve acceptance for a new technology, it is important to understand who the relevant decision-maker is as well as whose labor and cash will be affected. The benefits and costs of an intervention also tend to be viewed differently by individual family members. Thus, farming systems research would benefit from careful household analysis, and the author makes several methodological suggestions for achieving this.

McMillan, Della 1984

The role of longitudinal case studies in evaluation of household effects of large-scale development planning. In Guyer, J. I. and Peters, P. E., eds., Conceptualizing the Household: Issues of Theory Method and Application. Charlottesville, Va.: Teleprint Publishing.

The author has integrated case studies of a few households into a larger economic survey conducted from 1978-1980 to study the effects of the Volta Valley Authority (AVV) 1974 large-scale planned settlement and agricultural extension program on household organization and production. The case study involved sequential year long resident observation of about 30 households each in the home village of Damesa and an AVV resettlement village. It included a farm management survey on production and income. These data were compared to the portion of the AVV Statistical Service project evaluation that covered the same resettlement cluster. This survey data included 97 households stratified by stage of farm development.

The case study revealed that intrahousehold relationships changed in settler families because they had small households, little money and they had to do hard field clearing work. By the end the settlers had accumulated stores of grain, and their families had grown due to immigration. In 1979 settlers' cash income from cotton and other crop sales was seven times the recorded figures for home villagers. The AVV Survey was not able to gather accurate economic data because settlers were reluctant to talk to officials regarding family production and trade practices. As all the interviewers were male and only male household heads were surveyed, little information on women's activities was gathered. The case study avoided these problems by focusing on a small number of families using a non-AVV woman researcher and male interviewer.

The researcher also showed that in the settlers' home village, women farm and receive the income from 15-20% of the total land to which the household has access and they participate in trade and raising livestock. Since the AVV resettlement land policies and extension services did not consider women's roles, the male household head now makes cash gifts to family members and has assumed responsibilities for many expenses previously borne by women. The traditional system of harvest gifts of 100-200 kg of corn from the husband's friends to his wife has been reinstated in settler villages. A restudy of the same resettled population in 1983 showed the introduction of private grain fields for women and growing numbers of women taking an active role in livestock was occurring. The grain produced by women was not used for family food, but sold after harvest.

McSweeney, Brenda Gail 1979

Collection and analysis of data on rural women's time use, Studies in Family Planning 10:379-83.

This article describes in detail the methods employed to study rural women's, men's and children's time use in Upper Volta and reports results on the sexual division of labor in minutes per task. The study was also used to evaluate the impact of a women's education project and the introduction of labor-saving technologies (see abstract #389).

Data were collected by group interviews, personal and demographic questionnaires of all women in the 12 target and control villages and detailed surveys on resources, time allocation and impact of technological change on time use of a random sample of 30 women and the women leaders in each village. Parallel questions were asked of sample women's husbands and village elders and chiefs. Time budget data were collected at three different times of the year by direct observation of the sample women for the first 14 waking hours of the day. Similar data were collected for five men in each village of one of the three zones, and single observations on five girls and boys of different ages to determine phasing into workloads.

A comparison of observation and recall data found that recall failed to account for 44% of women's work.

The study found that women spend more hours working than men, beginning at age 7. Women spend twice as much time on production/supply/distribution tasks as on household tasks of cooking, cleaning and childcare. Age of adult women did not affect their time use. However, women with co-wives worked fewer hours and spent more time in leisure (3 hours, compared with 1.75) than monogamous wives. There was a significant sexual division of labor, with women responsible for food processing, household work and childcare, and many agricultural tasks and men responsible for craft work, community obligations, and some agricultural work, particularly harvesting.

The work reported here is also described in the author's 1979 Ph.D. thesis at Tufts' Fletcher School of Law and Diplomacy entitled "The Negative Impact of Development on Women Reconsidered: A Study of the Women's Education Project in Upper Volta."

145

A B

Mencher, Joan P.; Saradmoni, K.; and Panicker, Janaki 1979

Women in rice cultivation: some research tools. Studies in Family Planning 10(11/12):408-12.

This article describes data collection methods used in a study of rural women's time allocation and income use in India.

A set of charts was developed which could be filled out by illiterate women. The time use chart showed simple pictures representing different activities, and two schematic pictures of the sun to indicate morning and afternoon. Women were asked to mark the box for each activity they performed in a given day. The income chart showed simple pictures of household members (man, woman, younger man and woman, girl and boy) with spaces to mark for each rupee earned by each member; or one unit of payment in kind (standard units are used).

The charts were supplemented with visits by literate but not highly educated women data collectors who met with respondents and reviewed the charts.

Tests showed respondents had no problem understanding and using the charts.

146

B

Messer, Ellen forthcoming

The relevance of time allocation analyses for nutritional anthropology. For inclusion in Pelto, G., Pelto, P. and Messer, E. (eds.), Methods of Nutritional Anthropology. United Nations University suppl. to Food and Nutrition Bulletin.

This chapter analyzes the use of time and activity data for nutritional studies to illuminate linkages between social organizations, time use and health and nutritional status. To develop culturally appropriate categories and social units for study preliminary data are needed on demographics, health, income activities, time and income allocation decisions, social organization for food procurement and preparation, consumption patterns and seasonal variation.

The strengths and weaknesses of direct observation, recall or diary methods for measuring time allocation are then discussed. Random spot observations are used to characterize activities of specific age, sex and occupational groups but are time consuming and unreliable unless a large number of observations is made. Day-long observations provide accurate records of sequence and duration of activities, allowing intra- and interhousehold comparisons. Recall

methods may underestimate children's productivity but can be checked by observation. The diary method can only be used in literate, time conscious populations but may allow recording data for a large number of days. Social, time and activity units should all be used to analyze and interpret data.

147

B E G

Messer, Ellen 1983

The household focus in nutritional anthropology: an overview, Food and Nutrition Bulletin 5(4):2-12.

This useful paper cites many specific examples in its discussion of the strengths and weaknesses of household studies conducted by nutritionists and anthropologists. Anthropological studies examine how the sexual division of labor, women's economic participation, intrahousehold power distribution and support networks affect household organization and consumption. The use of symbolic, cognitive ethnoscientific and ecological studies in understanding various components of household and food-related analysis are discussed. The impacts of social organization of production at the household level and of women's work on nutrition are important factors to evaluate the consequences of development.

A better understanding of household dynamics in development may be achieved by combining nutritional and anthropological approaches and focusing on eating units, food budget units, child-rearing units and social networks, all of which may be different.

148

B

Messer, Ellen and Bloch, Marianne N. 1983

Women's and children's activity profiles in Senegal and Mexico: A comparison of time allocation and time allocation methods. Michigan State University Working Paper #42, Dec.

This paper evaluates time allocation study methods by comparing data from spot observations in Senegal by Bloch to Messer's day-long observations in Mexico. The authors argue any method used to record interactions of the mother-child dyad must be reasonably complete, reliable and cross-culturally comparable, while minimizing inter-recorder bias.

Bloch's study in Senegal examined variations in time and type of activities with children by mother's level and type of economic participation. It used randomized unobtrusive spot observations over the 3-month agricultural season of 47 mothers and their 92 children under the age of 7. Women in this community allocated 43% of their time to personal care, 11% to primary child care, 30% to household maintenance and 17% to economic activities. Women with younger

children had less developed support networks and spent more time on activities inside the household.

Messer, working in a modernizing Mexican community, used 4 day-long observations in each of 20 households, selected on the basis of numbers and ages of children and occupations. In addition to measuring the time spent on all activities of the principal woman and children's participation, the method recorded food intake of each household member and food budgets. Qualitative data on the way tasks were organized rather than quantitative time data was more useful in differentiating between organization patterns of better and less well nourished households. Time devoted to childcare, either primary or secondary, varied from 10-50% depending on the household and the day.

Both methods uncovered a lack of consistency in women's time allocation within and across households. Relative merits and weaknesses of spot versus day-long observations are discussed. The influence of household organization on time allocation must be largely described rather than calculated.

149

B

Minge-Klevana, Wanda 1980

Does labor time decrease with industrialization?: a survey of time allocation studies. Current Anthropology 21(3):279-298.

This article provides a good review of the methods used in labor time studies and discusses the consequences of methodological differences. The author suggests that studies must define the family, labor, time spent, and the intensity of labor performed.

The question whether labor time has decreased with industrialization is addressed.

150

A

Mitchell, J. C. 1949

The collection and treatment of family budgets in primitive communities as a field problem. Rhodes-Livingstone Institute Journal 8(8):50-56.

This article provides a general discussion of the problems of collecting data on incomes and expenditures. The author suggests working with a list of commodities which might enter household budgets, and asking about expenditure on these items. However, the problems of accuracy and statistical representativeness are acknowledged.

151

A

Moore, Mick 1981

Beyond the tarmac road: a guide for rural poverty watchers, Rapid Rural Appraisal, IDS Bulletin 12(4):47-49.

The author argues that studies of rural poverty may suffer from "roadside bias" if researchers limit themselves to accessible areas. Based on field research in Sri Lanka, households in core areas or accessible by car or jeep are not as poor as those in the periphery. Dispersed settlement is the norm, with each household preferring to live in its own homestead. House type is a good proxy for income level, with the simplest criterion being the type of flooring. Earth floor homes, which are not seen from the road, ranged from 14% to 41% in two locales.

152

B

Morice, Alain 1981

The exploitation of children in the informal sector. In Rogers, G. and Standing, G., eds., Child Work, Poverty and Underdevelopment. Geneva: ILO.

This chapter raises a number of theoretical and methodological issues in the study of children's work and proposes to define work not only by the activity but also by its economic and social context. Rural to urban migration and premature school leaving has led to a plentiful labor supply, increasing competition for jobs and reducing bargaining power.

The author suggests the study of migration patterns, family structure, decision-making, child characteristics, working conditions, morbidity and concealed juvenile activities to assess the impact of government policies on child labor. A method of focused study of a small group of children using non-directive interviews and an anthropological approach is recommended.

153

A

Mueller, Eva 1983

Measuring women's poverty in developing countries. Ch. 13 in Buvinic, M., Lycette, M. A., and McGreevey, W. P. (eds.), Women and Poverty in the Third World. Baltimore: John Hopkins University Press.

This article discusses the problems of measuring women's economic status. The author suggests that microlevel data are needed on employment, networks of support, and social attitudes. These data must be gathered through personal interviews.

Unpaid household work and "secondary" wage labor of women are commonly not included in measures of income; information on these may be obtained by time allocation studies. Transfer payments are often important to women's income. Amount and reliability of transfers must be measured.

The author suggests that psychological testing be used to measure women's own perceptions of their personal efficacy and work attitudes. Problems of implementing such studies are not discussed.

154

B

Mueller, Eva 1982

The allocation of women's time and its relation to fertility. Ch. 3 in Anker, R., Buvinic, M. and Youssef, N., eds., Women's Roles and Population Trends in the Third World. ILO. London: Croom Helm, Ltd.

Educational, demographic and economic determinants of women's time use are analyzed within the framework of the economic theory of fertility, a component of the New Household Economics model. The author argues that to understand the complex effects of income, prices and assets on time use, researchers should measure intervening variables, such as the characteristics of market work for females and the social attitudes towards women's work. The concept of "income relative to needs" is a more powerful predictor of women's labor force participation than that of total household income.

The theory predicts that more education will increase work time and decrease non-market time, due to achievement of greater productivity and wages. Education also decreases women's time in housework because of increased efficiency, increased demand for leisure and/or the increased likelihood of having servants.

The most relevant demographic factors affecting women's time uses are related to household composition, including sex, age and number of children, children's time use, adult household members, and compatibility of childcare with market work. The most important factor is the sexual division of labor which limits women's options and allows wages for women to be maintained at 40-70% of men's wages. This reduces female labor force participation and decreases the opportunity cost of childcare, thereby having positive effects on fertility.

An infant increases total household time on childcare by 4-1/2 hours a day, whereas increasing numbers of children increase women's market work and decrease housework and childcare time. In developing countries, it is inferred that the demand for leisure time is more elastic than demands for income and household services.

155

A B

Mueller, Eva 1978

The women's issue in measuring household economic status and behavior in developing countries. Paper prepared for the International Center for Research on Women's Conference on Women in Poverty: What Do We Know? Washington, D.C., April 30-May 2.

This paper discusses the data which, under the ideal circumstances, would be needed to analyze the causes and consequences of women's poverty in developing countries, acknowledging that no study would have the resources to obtain it all.

Information is needed which is amenable to multivariate analysis, which includes women in all classes and lifecycle stages, and which documents employment, support systems, and attitudes of and toward women.

Employment data must cover seasonal variation, market and non-market work, and compatibility of work with other tasks. Time use studies are needed for this.

Measures of support systems must include not just amounts and values, but the nature of transactions and their dependability.

Measurement of personal sense of power requires psychological techniques.

In addition, parallel data on men would help in the analysis.

156

B

Nelson, Linda 1980

Household time: A cross-cultural example. Ch. 7 in Berk, S. F., ed., Women and Household Labor, vol. 5. Beverly Hills, CA: Sage Publications.

This article includes a literature review of household time studies and a description of a household activities study of 19 homemakers in a rural Costa Rican community. The limitations of task-oriented, time-oriented and chronological diary approaches to recording activities are discussed. The author argues that duration, sequence and importance of events are important components of time use measurements. She suggests using the activity pattern concept, which reflects the ordering of tasks that is characteristic of a person or group of persons during a specific time span. The behavioral dimension can be derived from direct observation and the ideational activity dimension represents what people say they will do.

Nugent, Jeffrey B.; Kiphani, Kan and Walther, Robin J. 1983

The effects of old-age pensions on household structure, marriage, fertility and resource allocation in rural areas of developing countries. Washington, DC: USAID, October. 458 pp. See #55 for complete abstract.

157

H

Opong, Christine, and Church, Katie 1981

A field guide to research on seven roles of women: focused biographies. Working paper no. 106, Population and Labor Policies Programme. Geneva: ILO.

This paper suggests an approach to analyzing unstructured interviewed data on women's roles and behavior. Seven roles are identified: parental, occupational, conjugal, domestic, kin, community, and individual. Each role has three aspects: behavior, expectations, and role conflict. Each aspect is divided into various categories: activities, time use, knowledge, resources, power, and relationships. A lengthy list of questions relating to each category is provided. An example of its use in analyzing some interviews with Ghanaian women is provided.

This framework appears to provide a basis for exhaustive description rather than systematic analysis.

158

G

Overholt, Catherine; Anderson, Mary B.; Cloud, Kathleen and Austin, James 1985

Women in development: A framework for project analysis. Ch. 1 in Overholt, C., Anderson, M. B., Cloud, K. and Austin, J., eds., Gender Roles in Development Projects. W. Hartford, CT: Kumarian Press.

A framework for project cycle analysis that incorporates group activity and individual access and control profiles for the target population as well as an analysis of factors that influence activities, access and control is introduced. The activity profile delineates economic activities, categorized as production of goods and services or reproduction and maintenance of human resources, by age, gender, ethnicity or class for each target group. The access and control profile describes the flow of resources and benefits by differentiating between access and control and between resource use and benefits derived for each individual. The analysis of factors affecting these profiles can be categorized by economic conditions, institutional structures, demographic and sociocultural factors,

community norms, legal parameters, training and education, and internal and external political events.

The actual project cycle analysis requires asking what activities and how access and control will be affected by the project. This analytical framework must be applied on a case-by-case basis; conclusions cannot be transferred across projects or cultures. Good project design requires data on the work women perform and their prestige and power.

159

A D

Pahl, Jan 1980

Patterns of money management within marriage. Journal of Social Policy 9(3):313-35.

This article distinguishes three types of pattern of money allocation within marriage: the whole wage system (husband turns whole wage over to wife), the allowance system (husband provides fixed allowance to wife, who has specific responsibilities for household purchases), and pooling. The author suggests that both life cycle stage and income level of the household influence the mechanism used, but states that causal relationships are not yet known. She makes the point that the assumption that income is equitably shared among household members may underestimate the incidence of poverty which may exist if some household members are deprived.

160

A B D

Palmer, Ingrid 1981

Women's issues and project appraisal, Rapid Rural Appraisal, IDS Bulletin 12(4):32-39.

For rapid rural appraisal, a qualitative, holistic approach, rather than use of empirical questionnaires for evaluation of the situation for women is advocated. Although data collected for other purposes which can indicate women's status and decision-making power are useful, most information on women's issues should be non-quantitative and obtained from the women themselves. They should be asked questions on time allocation, degree of freedom to organize themselves in their own way, available resources and their views of development. Since agricultural modernization may lead to an even heavier workload for women, depending on their class, it is important to get information on health issues and seasonal factors from medical workers. Women interviewers must be used when questioning women and it is best to get seasonal and age cross-sections during rapid rural appraisal visits.

161

C

Pelto, Gretel 1983a

The effect of food availability and infant feeding practices on the nutritional status of children 0-23 months: A progress report. International Nutrition Communication Service Consultant Report. Newton, MA: Education Development Center.

The author describes a framework of questions developed to identify nutritional status variables for a research project in four northern Cameroon villages. The major variable--food availability--is divided into lack of food in the region and lack of means to buy food. Questions about land and crops, food storage and food acquisition are used to assess household food availability. Questions on food preparation, food consumption, and food ideology are also described. Methodological considerations in evaluating socioeconomic status indicators such as cash income and education are presented.

Following divorce, a nursing child accompanies its mother when she returns to her natal home while a weaned child may remain in the father's compound. Such shifts can affect nutritional status when they represent significant changes in resources or caretakers.

162

C

Pelto, Gretel 1983b

Intrahousehold food distribution patterns. Paper presented at the Western Hemisphere Nutrition Congress VII, Miami, Florida, August.

This brief paper discusses the importance of understanding intrahousehold food allocation for nutritional epidemiology. The author notes that most studies of food allocation are indirect, based on household-level measures of consumption. Several studies of individual food consumption are summarized; they demonstrate that discrimination against women and girls, and against children in food consumption adjusted for need occurs in some settings (e.g., Bangladesh, Mexico, Philippines). Methodological problems are noted: studies often ignore food consumed away from home; studies which adjust intake for nutrient need may be misleading if caloric requirements are adjusted downward for individuals already suffering from retarded growth.

Further research needs on the dynamics of food distribution in the household, and on the development of appropriate data-gathering methods, are identified.

163

C

Pelto, Gretel 1981

Methodological issues in nutritional anthropology. Report of a workshop, Food and Nutrition Bulletin 3(4):21-28.

This article reports the discussion and recommendations of a workshop on methodological issues in nutritional anthropology. The problems of transforming qualitative descriptive knowledge into quantifiable observations for statistical analysis and the need for anthropologists to collect data at the household or individual level while operating at the community level were emphasized. People act and adapt in response to resources and constraints of the social and biological environment.

Recommendations for research design included greater utilization of multiple research focuses within the same project, integration of qualitative and quantitative data, better sampling procedures, and increased utilization of longitudinal and prospective research designs. Improvements in measurement could be achieved through emic techniques, research on observer effect on food intake and recall errors, and identification of relevant social and environmental conditions and cycles. Development of new analytical techniques for describing cultural patterns of food use and for use with existing statistical techniques are also suggested.

164

C

Pelto, Gretel H.; Jerome, Norge W. and Kandel, Randy F. 1980

Methodological issues in nutritional anthropology. Ch. 2 in Jerome, N. W., Kandel, R. F. and Pelto, G. H. (eds.), Nutritional Anthropology: Contemporary Approaches to Diet and Culture. Pleasantville, NY: Redgrave Publishing Co.

In this chapter methodological issues and strategies for evaluating individual nutritional status in different societies are discussed. An initial period of participant-observation and informal interviewing is recommended to gather information on food use patterns, local language and background factors that may influence the research. The structured interview is a useful means of studying family structure and composition's effect on organization of food production, distribution and consumption. In operationalizing variables and in further data analysis the use of range variation rather than mean values is recommended.

165

B

Peluso, Nancy Lee 1979

Collecting data on women's employment in rural Java. Studies in Family Planning 10 (11/12):374-78.

This paper describes the research methods used to obtain information women's economic roles. The research was conducted in three stages. First, participant observation of 80 households allowed the author to understand enough to formulate meaningful questions for later stages. For each household there were five full days of participant observation and weekly follow-up visits for six months. The second stage was a household survey covering women's occupation, division of labor and decision-making in the household, and time allocation. The third stage was a survey of market women. The author holds that all stages were essential, the first to provide overall insight and the others to provide statistically supported data.

Results of the survey are not discussed.

166

C

Pinstrup-Anderson, Per 1983

Estimating the nutritional impact of food policies: A note on the analytical approach, Food and Nutrition Bulletin 5(4):16-21.

This paper describes a framework for examining how food and nutrition programs affect nutrition. The three main factors are: (1) the ability of households with malnourished members to acquire food, (2) household food acquisition behaviors, and (3) intrahousehold food distribution. Demand parameters, which can be estimated by income group, help explain the relationship between changes in household food acquisition ability and consumption. Policies affect behavior through changes in household composition, intra-household income and budget control and women's time allocation. The degree of penetration a program or policy achieves is measured progressively by impact on total food availability, then on ability of households with malnourished members to acquire food and finally on intake estimates for malnourished individuals.

167

C

Pett, Mark M. and Rosenzweig, Mark R. 1984

Health and nutrient consumption across and within farm households. University of Minnesota, May. 27 pp.

This paper models the effect of price changes on individual nutrient consumption and health and it assesses conditions which allow inferences on health status to be drawn from commonly available

household aggregate consumption data. The authors use data from the 1978 National Socio-Economic Survey of Indonesia to estimate relationships among food prices, household nutrient consumption and incidence of illness among adults in farm households. The sample total of 2347 households was restricted to those with a male head and spouse only. Descriptions of the data and statistical analysis procedures are included.

A household model incorporating health production is set up where the household utility function consists of health status of household member i , leisure and consumption of food k and non-food by i . Demand equations for each food or nutrient consumed and for non-food health inputs for each family member are functions of all goods prices. In farm households where household and farm-allocative decisions are separated, input prices affect household decisions only through their effect on farm profits.

The model predicts that health effects of changes in food price depend on the relative magnitude of price effect on individual nutrients, the relative importance of these nutrients for health and their intrahousehold distribution. A 10% increase in farm wage caused a 1.6% increase in household per capita iron consumption and a 3.4% increase in fat. Increases in prices of food high in a particular nutrient cause a decline in consumption. The model suggests that a 10% decline in the vegetable oil price reduces probability of illness by 4.2%. Similar effects are seen with a decrease in vegetable or an increase in sugar or grain prices. Decreases in milk prices increase the availability of all nutrients, but price is unrelated to illness incidence among heads and wives.

168

B D

Piwoz, Ellen Gail and Viteri, Fernando E. 1984

Studying health and nutrition behavior by examining household decision-making, intra-household resource distribution and the role of women in these processes, Food and Nutrition Bulletin 7(4):1-37.

This paper reviews the literature on the conceptual basis and value of studying intrahousehold versus aggregate household behavior. Intrahousehold resource and time allocation, income generating and budgeting practices, the determinants of individual health care and distribution of food and childcare responsibilities within the home are important variables to consider. The authors note that the outcome of decision-making may not reveal elements of family interaction that influence intra-household resource allocation practices. To motivate behavioral change broad-based, multi-targeted educational messages are recommended.

The study of household dynamics should occur on community and specific household levels. Community level assessments indicate trends in decision-making and distribution and help identify problems and elements of household production, socialization and consumption

which perpetuate them. In the household, the focus is on the decision-making power of the women, who are the primary socializers in health and nutrition matters. Education and income generation and control are key determinants of women's resource control and power. Further research on the specific role and constraints posed by education on women's status are suggested.

Variables that affect intrahousehold food distribution patterns include environment, economics, culture, perceived biological needs, physiological need, individual preference, and social organization. Direct observation is needed to assess actual food distribution processes, including how individual needs are perceived and assessed, home monitoring of food distribution and how distribution adjusts to scarcity.

169

F

Ridker, Ronald G. 1976

Perspectives on population policy and research. Ch. 1 in Ridker, R. G. (ed.), Population and Development. Baltimore: Johns Hopkins University Press.

This chapter introduces the socio-economic determinants of fertility and appropriate population policies, which are addressed by essays contained in the book. The socioeconomic variable having the strongest negative association with fertility is education, through altering parents' desire for more children and affecting children's subsequent fertility. Suggestions on increasing school attendance and fostering attitude changes are presented.

The influences of income and its distribution, child mortality and female labor force participation are also discussed. Fertility may decline when work and childbearing are thought to be incompatible and women gain decision-making power. However, a positive relationship may exist due to strong income effects; substitutes for mother's time can be more easily found in larger families and some jobs allow women to bring children to work.

170

B F

Rodgers, Gerry and Standing, Guy 1981

The economics of children: Issues for analysis. Ch. 1 in Rodgers, G. and Standing, G. (eds.), Child Work, Poverty and Underdevelopment. Geneva: ILO.

In this introductory chapter a typology of child activities is presented and structural socioeconomic determinants of child employment are discussed. The categories of activities were defined as domestic work, non-domestic/non-monetary work, tied labor, wage labor, marginal economic activities, schooling, idleness and

unemployment, recreation and leisure, and reproductive or physiological activities. The authors suggest that non-domestic, non-monetary work be subdivided into subsistence versus market oriented.

Children's roles differ in capitalist and pre-capitalist modes of production. In agrarian societies children perform time-intensive tasks and are often exploited through debt bondage. In industrializing economies women and children usually perform domestic and agricultural work, as employment opportunities are geared to men. Increasing landlessness that occurs with capitalism forces children into the labor market.

The study of child activity patterns should include the social and cultural framework and the determinants of families' decisions to invest in child quality or quantity. Child work is seen as having negative implications for health when food is scarce and for education, although it positively influences fertility. Child employment also enhances labor force stratification, maintenance of low wages and socioeconomic inequality. Large scale time allocation surveys with complementary data on work intensity, productivity and structural context within which the child works are needed. Child employment policies should be directed toward legislating age, wage and working conditions, control of marginal and delinquent activities, and schooling and training.

171

B F H

Rosenzweig, Mark R. 1981

Household and non-household activities of youths: Issues of modeling, data and estimation strategies. Ch. 8 in Rodgers, G. and Standing, G. (eds.), Child Work, Poverty and Underdevelopment. Geneva: ILO.

A model, based on the neoclassical household utility function, is used to examine the effects of changes in wages and labor market conditions on children's employment. This is achieved by estimating the ratio of the utility-constant child wage effect on female market time to the utility-constant "own" child wage effect. Hypotheses are best tested using joint estimates with single equation methods of household demand equations for fertility, labor supply and schooling.

The model is applied using data from 4,000 rural Indian households in the third round of a three year national survey which covered geographic location, participation in "green revolution" technologies and household activities. At every age boys participate more in wage labor and in school than girls and earn more in the market. The model indicates that a 10% increase in child wage increases their labor participation by 5%, and reduces boys' school attendance more than girls. A 10% increase in women's wage increases her participation by 1% while reducing girls' participation and school attendance. Where "green revolution" technologies are in place, girls' work declines

60-70% and school attendance is 38-40% higher while boys work 30% less and attendance rates are 26-30% higher.

172

F H

Rosenzweig, Mark R. and Wolpin, Kenneth I. 1982

Governmental interventions and household behavior in a developing country: Anticipating the unanticipated consequences of social programs. J. of Development Economics 10:209-225.

The impact of government efforts to limit population growth and augment child survival and schooling in a developing country are estimated by viewing government initiatives as attempts to change price structures faced by households in making allocation decisions. This approach integrates program assessment into an economic model of household choice. The four program and facility variables are family planning coverage, existence of medical facilities, principal water sources and distribution of schools. The model assumes that parents determine the quality (measured by survival and schooling) of their children, and that parents perceive child quantity and quality as substitutes in consumption.

Data from the rural Indian household survey are matched with district level census data on health and family planning programs. The final sample included 1137 women, 15-44 years old for whom pregnancy and mortality histories were collected. Variable measures and data collection methods are described.

Linear estimations of program effectiveness are all positive and suggest the cross-effects of the programs are important. The results indicate rural Indian households view family size and investments per child as substitutes but schooling and health components of child investment as complements. It appears that farm households invest more in schooling than rural no-farm households, regardless of farm size. This suggests that health and schooling are positively related to income, although the gross-income effect on fertility is weakly negative. Educated parents invest more in schooling, but do not appear to have fewer births or higher survival ratio. Programs were not found to have a differential effect by education group. Medical services, family planning and improvement of water sources were mutually reinforcing means of decreasing population growth and increasing survival and schooling.

173

D

Safilios-Rothschild, Constantina 1984

The role of the family in development. Appendix 2.1 in Charlton, S. E. M. Women in Third World Development. Boulder, CO: Westview Press.

Data that takes kin networking and the flexibility of the family unit into account are needed to understand how family members contribute to households. Household income should be disaggregated to assess individuals income use and intrahousehold resource allocation, to allow planners to determine program impact on individuals and to show the significance of children's economic contribution.

Adult males, then male children as potential providers, have greater access to food, health facilities and education. A 17-village study in the Punjab showed that nutrition was determined mainly by sex; girls were breast-fed for a shorter time and were given less supplementary and solid food than boys.

In India and rural Bangladesh, wives' market income is twice as high in poor as in richer households and their contribution to the household is at least as great as their husbands'. In sub-Saharan Africa women play a major agricultural role and have more power in resource allocation, especially in matrilineal societies.

D

Safilios-Rothschild, Constantina no date

Female power, autonomy and domestic decision-making as it relates to the division of labor. Mimeo from the University of California, Santa Barbara. Commissioned by the Employment and Development Dept., ILO (Geneva). See #444 for complete abstract.

174

D

Safilios-Rothschild, Constantina 1982

Female power, autonomy and demographic change in the Third World. Ch. 5 in Anker, R., Buvinic, M. and Youssef, N. (eds.), Women's Role and Population Trends in the Third World. London: Croom Helm Ltd.

The use of indicators for comparing women's status at the macro level with women's power at the micro level is advocated in this chapter. Status refers to women's overall position in society, whereas power is the woman's ability to control and change the behavior of others. The author recommends designing research to include societies where women have high, medium and low status and various levels of power in order to determine empirically how status can be translated into power at the household level.

Women can derive power from men, even in societies where their status is low, through their reproductive role. In some cases, women with high social status can overcome sex stratification and achieve power by using resources derived from male relatives. In traditional patriarchal societies there is no ideological support for women's independence and women cannot translate work earnings into power.

If women derive sufficient status and power from their associations with men, they may be allowed to translate productive activities into economic power. In matrilineal kinship systems women have more power because they are economically more active and there is greater marital instability. Women's power in the household can be indicated by level of economic and household decision-making control, ability to control household structure, degree of discrepancy between women's and men's wages and ratio of time spent in income-earning activities versus leisure, and percentage of own and children's expenses paid by the mother.

175

F

Safilios-Rothschild, Constantina 1981

Access of rural girls to primary education in the Third World: State of the art, obstacles and policy recommendations. Ch. 5 in Lewis, B. C. (ed.), Invisible Farmers: Women and Crisis in Agriculture. Office of WID, AID, Washington, DC. (Out of print.)

In this chapter the causes and consequences of sex-differentiated access to schooling in developing countries are analyzed. Rural women have consistently lower literacy rates than rural men and urban women. Girls' attrition from primary school is generally for non-scholastic reasons. In most developing countries, girls begin to have household and childcare responsibilities at a very early age and they spend considerably more time than boys on such tasks, which seriously interferes with school attendance and performance. In rural Java, girls 6-8 years spend 1.7 hours/day on childcare while boys only spend 1.2 hours. Rural Nepalese girls of the same age spend over 8 times as many hours in childcare as boys and only one-fifth the number of hours in school.

In many cultures the education of boys is a higher priority because the sons are expected to support the parents in their old age. Illiterate mothers seem to contribute to all children's illiteracy, but a more significant barrier for rural girls is poverty. This is a particularly powerful factor when combined with traditional value which devalue women's education and with low female status in general. The more limited the financial resources to pay for schooling costs, the less the likelihood girls will receive any formal education.

Safilios-Rothschild, Constantina 1970

The study of family power structure: a review, 1960-1969. Journal of Marriage and the Family 32(4):539-52.

This article provides a thorough review and thoughtful critique of studies of power structure in the household. First, the author suggests that terms relating to power, authority, influence, and decision-making have been used interchangeably in the literature, but in fact these are separate, related but not identical concepts. Power is a multidimensional concept that is measured indirectly in terms of behavioral outcome. However, power can be thought of on many levels, from who wins a particular disagreement to who determines the nature of winning.

Most studies of power have concentrated on decision-making. A problem with these studies is that the choice of which decisions to investigate will affect results. Studies vary widely in the nature of the decisions chosen and their specificity or generality. Therefore comparisons across studies are not valid. Overall "power scores" based on numbers of decisions made can also not be compared, since the composition of the score will be different in each case. Further, such scores do not account for the relative importance and frequency of different decisions, but weight them all the same.

Most studies rely on the wife's responses alone, yet in several cases where both husband and wife were interviewed, discrepancy between husbands' and wives' responses ranged from 15-30% to 55-76%. Generally women attribute more power to themselves, while men perceive decision-making as more egalitarian. Use of children's responses is also invalid, since children's perceptions of decision-making are affected by age and sex.

A methodological controversy is whether decision-making can be studied by survey or requires observation. Survey methods are often criticized, but this paper argues that questionnaire responses are not any less accurate than observed behavior. Studies have shown that behavior varies based on the sex of the observer: wives were more actively involved in decision-making when the observer was female. A number of aspects of decision-making are not amenable to study: for example, careful timing of decision, effects of repetition, strategies of giving in to build up 'capital' for later.

The author holds that theories of family power are limited in scope and focus on a few determining variables rather than an integrated system.

177

D

Safilios-Rothschild, Constantina 1969

Family sociology or wives' family sociology?: a cross-cultural examination of decision-making. Journal of Marriage and the Family 31(2):290-301.

This article reports results of two studies of decision-making among spouses, one in Athens, Greece and one in Detroit, Michigan. In Athens, from 250 randomly chosen couples, 133 wives and 177 husbands were asked whose opinion prevailed in eight decisions. In Detroit, 160 couples with a child under age 6 were asked the same questions as well as 14 others. In Detroit, there was husband-wife agreement less than half the time. Results were similar in Athens. This raises the problem of interpreting the differences in response.

The author suggests there are problems constructing a power score based on responses to these questions. Scores generally do not account for relative importance of decisions, frequency, differential perception by the spouses. The more general was the question asked, the less the husband-wife agreement on who made the decision.

The author concludes with some recommendations for studying family power: develop the list of decisions from respondents; include perceptions of importance and frequency; analyze husbands' and wives' responses separately; include cultural prescriptions of behavior in the analysis.

178

A B

Sajogyo, Pudjiwati, et al. 1979

Studying rural women in West Java. Studies in Family Planning 10(11/12):364-70.

This very useful article discusses methods used in a study of the role of women in rural household economies in Java. The study collected data on division of labor (paid and unpaid), household income, expenditure, and consumption, production technology used, decision-making role of women, interhousehold relationships, and aspirations of rural women.

Research design was structured around measurement of time allocation of all household members, by means of repeated interviews over a 12-month period. The research relied on a short reference period to preserve accuracy. Information was obtained by structured interview and observation and by informal interviews, case studies, and participant-observation. To avoid distortion in the direction of cultural norms, questions focused on specific recent events rather than general practices.

The sample consisted of 120 households in two villages. Households were visited by the same interviewer monthly; the questionnaires were administered at separate times to avoid fatigue. Time allocation, income, and consumption were measured using a 24-hour and a one-month reference period. Decision-making was measured by informal interview.

Analysis showed that 24-hour recall resulted in a 30 to 60% higher measure of time spent in income-earning activities than 30-day recall. This has serious implications for accuracy of survey data.

The authors point out that even with a small sample, the amount of detailed data collected was enormous and hard to manage. They stress the advantage of having qualitative data about the culture and community.

179

B F

Schildkrout, Enid 1981

The employment of children in Kano (Nigeria). Ch. 3 in Rodgers, G. and Standing, G. (eds.), Child Work, Poverty and Underdevelopment. Geneva: ILO.

Results of a study on child employment in northern Nigeria and the conceptual issues underlying children's economic roles are discussed. Both qualitative and quantitative data were collected from a stratified sample of 112 children in two Kano neighborhoods via semi-structured interviews and ten day activity diaries. All married women live in purdah (seclusion) and depend on children to carry out cash economy activities. Children's obligations also extend beyond immediate household members and they often are bound to formal apprenticeships and traditional Qur'anic schools. In one neighborhood two-thirds of the 52 primary school aged children attended Western and Qur'anic schools. In the second area only one of 25 girls versus 24 of 32 boys attended both. Mothers' income was three times greater in this second neighborhood, while husbands' income in the two neighborhoods did not differ.

In Kano, women often have greater control over labor within the family than men, who are responsible for providing food and clothing for their dependents. Women cook one meal a day and purchase the others with money from the husband. The income women earn through have their children sell the food they prepare is used to purchase supplementary food and clothing, for children's marriage expenses, gifts, business capital and security in case of divorce. For females, marital status rather than remuneration is the criterion for deciding whether or not to work.

The author argues that societal level research is needed to provide the economic and cultural context for children's activities. The ecological setting, as well as socioeconomic factors such as mode of production, labor force structure, technology, and socioeconomic

structure must be examined. Parental economic status is the most important determinant of child's activities.

180

C G

Schofield, Sue 1979

Availability of Micro-Level Data by Type, Ch. 3 in Development and the Problems of Village Nutrition, Montclair, NJ: Allanheld, Osmun & Co., pp. 25-43.

This chapter focuses on the measurement and analysis of intra-household food distribution and nutritional status differences. Uses and limitations of food consumption, nutritional status and physical status surveys are discussed. Intra-household food distribution problems will still occur even if new technologies increase food availability because of cultural and demographic determinants. These include family size, culturally determined status differences, food allocation methods and meal sharing, eating habits and food beliefs. Women contribute to food availability in terms of choice, quality and quantity of meals and labor inputs into agriculture. Their decision-making and time allocation patterns are critical determinants of food distribution.

181

F

Schultz, T. Paul 1984

Studying the impact of household economic and community variables on child mortality. In Mosely, W. H. and Chen, L. C., Child Survival--Strategies for Research, a supplement to Population and Development Review 10:215-236.

The purpose of this paper is to show that direct associations between health inputs and an individual's health are statistically biased by the heterogeneity of individual health endowments. A health production function is developed to explain the relationship between child mortality and morbidity and the independent variables of biological and environmental inputs to a child's health, economic endowments, regional economic constraints and family preferences.

A micro-economic approach to household behavior is then used to help specify the variables. Sex wage differentials are suggested as the basis for time allocation decisions. Women's education is closely correlated to her wages and thus provides a rough measure of market wage opportunities and the shadow value of individuals' time.

Endogenous choices and behavior regarding education preferences, fertility or child health are represented by the woman's characteristics. Price-type variables to estimate demand relationships can be extracted from census or consumer expenditure surveys. Information on household ownership of production factors and

geographical environment as they influence household demand should be incorporated. Data on health inputs that affect resources available for child care and consumption needs are also needed to estimate the structural model.

Empirical analysis of the model was carried out using U.S. birth data.

182

D

Schultz, T. Paul 1982

Women's work and their status: rural Indian evidence of labour market and environment effects on sex differences in childhood mortality. Ch. 9 in Anker, R., Buvinic, M. and Youssef, N. (eds.), Women's Roles and Population Trends in the Third World, London: Croom Helm LTD.

This paper argues that childhood sex-specific survival differences are a good indicator of male and female status within the family. India is used as a case study to determine whether social interventions to strengthen women's position have consequences for the economic and demographic behavior within households. India was chosen because it has comparable data on economic activity from states, districts and households and because life expectancy for males is greater than females. The research methodology is discussed in detail.

The author hypothesizes that the allocation of more consumption and investment resources to girls relative to boys should decrease the male to female difference in survival rate. In addition, he posits an increase in material wealth levels will encourage parents to consider sex-neutral consumption attributes more than the sex-based production attributes of children.

A statistical framework showing how labor force behavior affects the welfare and survival of boys and girls is tested using data on a district sample from the 1961 Indian census and a household level sample from the National Council of Applied Economic Research 1969-70 survey. Only households with at least one girl and boy could be used, which biased the sample to older parents with higher fertility rates. The final working sample included 455 landed and 379 landless couples. The evidence as a whole confirms the relationship between sex specific mortality and the extent of women's labor force participation across households and districts in India. Land ownership and education effects are weak. However, increases in wealth or income differentially improve women's survival rates, if productivity is held constant. Movement from rural to urban districts remains associated with increased survival for girls relative to boys.

Selowsky, Marcelo 1983

Women's access to schooling and the value added of the educational system: an application to higher education. Ch. 9 in Buvinic, M., Lycette, M. A. and McGreevey, W. P. (eds.), Women and Poverty in the Third World. Baltimore: Johns Hopkins University Press.

A conceptual framework linking higher education students' ability level with the value added of education through the earnings function is presented in this chapter. The effects of both a marginal increment and complete equalization in female participation in higher education are then discussed. The framework makes the assumption that wages are a function of years of schooling and ability with no discrimination by sex and the only cost of schooling being foregone income.

The results suggest that a marginal increase in female participation in higher education will have the greatest effect in regions with a currently high female/male secondary grad ratio, such as Asia, including Singapore and Malaysia. In regions with a low ratio, the impact of a marginal change would be less because of the small number of women with access to secondary education.

Selowsky, Marcelo and Taylor, Lance 1973

The economics of malnourished children: an example of disinvestment in human capital, Economic Development and Cultural Change 22(1):17-30.

To measure economic costs and benefits of alleviating infant malnutrition in Santiago, Chile, the authors attempt to measure empirically the effect of malnutrition on adult productivity. The underlying hypothesis is that early malnutrition causes intelligence loss, leading to less schooling and poorer employment opportunities. The analysis is based on preschool ability being a function of the index of malnutrition, weight relative to standards and background variables such as parents' socioeconomic status. Ability changes over time due to accumulated schooling and another set of background variables, whereas desire for more schooling depends on initial ability as well as the background variables.

Longitudinal data and IQ tests on 28 malnourished, 7 normal children and their mothers indicate that regression of IQ on different weight variables show unstable and insignificant coefficients until the third semester of life. Using the Berkeley growth study results to estimate hypothetical childhood IQs for 31 employed and 60 unemployed construction workers, the authors tried then to infer the adult earning potential of the malnourished study children. The results are integrated to estimate the shadow price of a supplementary nutrition program during the first two years of life. Gains of 50%

in adult income, not including the benefits of increased schooling due to higher initial abilities, lower disease incidence and improved income distribution due to increased productivity, are predicted.

185

C

Sharman, Anne 1980

Dietary choice and resource allocation by household and household members. Paper presented at the American Anthropological Association 79th Annual Meeting, Washington, DC, December.

This paper reports results of a three-year participant-observation study of 40 urban, black, low-income households in the U.S., focusing on dietary pattern and food consumption. The author holds that, in this population, individual characteristics and personal history affect diet more than categories such as race and income class. Significant variation in number of meals and type of food was found among members of single households.

186

B D

Simmons, Emmy B. 1976

Economic research on women in rural development in northern Nigeria. OLC Paper no. 10. Washington, DC: American Council on Education. 32 pp.

A detailed description of micro-level research method development and some results from a project on women's participation in and benefits from development in Nigeria is provided by this paper. The Rural Economy Research Unit conducted a farm management survey of 120 rural households in 1966/67, followed by a consumption survey and a study of the food grain marketing system in 1970/71. Revelations that cash expenditures for ready-to-eat foods were a significant component of household spending patterns and that village women manufactured and sold these foods led to additional research on the economics of these women's enterprise in Zaria province. (For results see abstract #454.)

The researchers found it very difficult to determine the magnitude and causes of women's business gains and losses. The initial consumption survey avoided direct inquiries about money, which limited women's ability to specify quantities and summarize with averages. Additional modifications to the survey instrument proved unsatisfactory, which led to use of open-ended discussions and occupation-specific interview forms with a smaller sample that covered the activities of the previous day and week.

General findings indicated that women sought independent financial resources to pay for personal needs, dowries, some food, gifts to female friends and for security. Married women are required to have

an occupation to be considered respectable adults, and 85% engaged in food-processing. The consumption survey found the average household consisted of three adult women who often shared household tasks, although in 40% of the households one woman did all the cooking. Men usually shop for ingredients and often do the laundry.

The variability in women's work patterns accounted for the income disparity found but made it difficult to compare actual to potential returns to employment. The author concludes that future development of productive opportunities for women will depend primarily on external conditions.

187

D E

Smith, Stanley K. 1981

Determinants of female labor force participation and family size in Mexico City. Economic Development and Cultural Change 30(1):129-152.

The primary objective of this study is to investigate variables affecting decisions on family size and female labor force participation in Mexico City. The data were drawn from a 1971 multi-staged, stratified clustered probability sample of married women in the metropolitan area. The sample size was 798 women (86% response rate), all of whom were living with their husbands at the time of the interview. Four measures of family size were used; number of live births, current and expected family size, and change in expected family size since marriage. Of the economic variables affecting household decision-making, only husband's and wife's potential wages are considered. Potential wages are estimated by regressing the natural log of current monthly income for full-time workers on a set of background characteristics and applying the resultant coefficients to the background characteristics of all persons.

The wife's potential wage is found to have a significant negative effect on work that can be done simultaneously with childcare, a significant positive effect on work that cannot be (i.e., in the modern sector), and a significant negative effect on family size. Thus household decision-making regarding female labor force participation and fertility in less developed countries is a three-way choice, and policies designed to affect fertility rates through female employment must also take the nature of the work into account.

188

C

Smith, Victor, E.; Strauss, John; Schmidt, Peter and Whelan, William
1980

Non price factors affecting household food consumption in Sierra Leone.
Michigan State University Dept. of Agricultural Economics Working Paper
#12.

This paper evaluates how non-price factors affect food consumption among rural households in Sierra Leone. The combined household-firm model is used to test the hypothesis that decisions concerning food consumption form part of a unified decision-making process which governs production, extent of market dependence and use of household labor decisions. Data on individual food consumption for 140 households in the African Rural Employment Survey is combined with consumption expenditure information collected from a subsample of 43 households from 24 sites in the farm production survey for an analysis of the effects of 10 non-price variables on consumption of rice, other cereals, cassava, palm oil, groundnuts and alcoholic beverages.

A positive relationship between income and food consumption was found, except for the consumption of alcohol, which was constant across all income levels. Farm orientation, and population density had no significant impact on consumption, although there were marked regional and ethnic differences. The highest levels of rice consumption were found among households which spent 49% of labor in upland rice production and contained fewer than three wives, although the relationship between number of wives and consumption was not consistent. For the sample as a whole, when the percent of output from specified sources rises, the consumption of rice and cassava falls and that of palm oil rises.

189

A B G

Spring, Anita 1982

Farmer survey in Karonga: considering the role of women in agriculture. Paper prepared for Women in Agricultural Development Project, Lilongwe, Malawi.

This paper looks at resource constraints for Karonga farmers and discusses the methods and activities associated with preparing the farmer survey, which covered 144 households in the Lilongwe Rural Development Project. The survey revealed that women are involved in all aspects of farming, and no crop was sex specific. Women do seem to have greater opportunities in rice, rather than maize and cotton production, because they are offered land, credit and extension advice in this area. Women do make important contributions to cash-crop production in Karonga; however, the lack of sex-differentiated data prevents quantification of their input and

thus their need for credit and technical training is generally ignored.

190

G

Stubbs, Jean 1984

Some thoughts on the life story method in labour history and research on rural women. *Research on Rural Women: Feminist Methodological Questions* issue, IDS Bulletin 15(1):34-37.

The author discusses her research on the formal sector in the Cuban tobacco processing industry. Open-ended interviews with tobacco workers and their families were used to complement information from archival documents and census statistics. Specific recommendations and limitations concerning the collection of life history data are discussed.

191

B

Szalai, Alexander et al. (eds.) 1972

The Use of Time: Daily Activities of Urban and Suburban Populations in Twelve Countries. The Hague: Mouton & Co. 868 pp.

This book discusses an extensive comparative time-use survey across twelve countries (Belgium, Bulgaria, Czechoslovakia, East and West Germany, France, Hungary, Peru, USA, USSR and Yugoslavia). Definitions, survey population criteria and considerations for performing a multi-national time-use survey are reviewed. Three implied strategic decisions are required--the time span to consider, recording activities chronologically or probing, and the use of self-reported or observational recording methods. The use of a pretest to examine validity of time-use methods and how time-budget data can be used to make inferences about decision-making processes are discussed.

Separate chapters are devoted to analysis of a specific type of time allocation, such as leisure, childcare, or the time husbands and wives spend together. Some chapters focus on two or three countries selected on conceptual grounds. A detailed statistical appendix and bibliography are also included.

192

F H

Tekçe, Belgin and Shorter, Frederic C. 1984

Determinants of child mortality: a study of squatter settlements in Jordan. In Mosley, W. H. and Chen, L. C. (eds.), Child Survival: Strategies for Research (a supplement to Population and Development Review 10), pp. 257-280.

This article reports analytical methods employed to study how existing living conditions and family behavior operate as determinants of child health and mortality in five squatter settlements of Amman, Jordan. The study examined mother's education, quality of housing, household income and occupation of household head, as well as sex of the child. The assumption of additionality, whereby the effects of each variable are separated and added, leads to the use of multiple classification analysis (MCA). Such analysis makes no assumptions about the form of the relationships among the dependent and independent variables, and uses data economically. The MCA indicates mother's education has the most effect, followed by housing quality, head's occupation and household income.

Family behavior variables are viewed as intermediate mechanisms and the analysis reveals that male children are brought to the hospital more often and stay on breastmilk longer than females. Mother's education reduces mean duration of breastfeeding, significantly more for girls than for boys. Determinants of overall growth are sex of child, housing quality and mother's education.

E

Tienda, Marta and Angel, Ronald 1981

Female headship and extended household composition: comparisons of Hispanics, Blacks and Nonhispanic Whites. Center for Demography and Ecology Working Paper no. 81-8, University of Wisconsin-Madison. 20 pp. See #474 for complete abstract.

193

A C D

Tripp, Robert B. 1981

Farmers and traders: some economic determinants of nutritional status in northern Ghana. Journal of Tropical Pediatrics 27(1):15-22.

This article reports results of an investigation of factors resulting in good nutritional status of children in a subsistence farming and trading region of Ghana. Data on economic activities and social structure were collected by participant observation and interview. Anthropometric measurements were obtained on 187 children from 124 farming units.

In this area, men farm, and work for wages in the dry season. Women farm, do food preparation and child care, and trade. Women and men agree that women usually spend their profit from trade on family food.

The study found that women's trading had the most significant impact on economic status and on nutritional status of children, because it increased income without greatly reducing time availability. The author concludes that women's income is more directly related to children's nutritional status than men's income.

194

B

UN Economic and Social Council--Statistical Commission 1979

Progress report on the development of statistics of time-use. Report of the Secretary General, Twentieth Session, Feb. 20-Mar. 2, 1979.

This report provides summary information on time-use surveys in eight countries, including Bangladesh and Botswana, and discusses uses and methodological issues. Areas of focus relevant to the study of households include women's role in the household, amount and use of leisure time, use of human resources within the household and the patterns of housework and childcare. The diary method can be biased if the interviewer prompts by activity lists rather than chronologically. Data collection by recall of more than 24 hours loses detail. Methods of ensuring representative populations, time periods and classification methods are also discussed, as are priorities in data analysis.

G

UN Protein-Calorie Advisory Group Report 1979

Women in Food Production, Food Handling and Nutrition. Rome: UNFAO. 202 pp. See #70 for complete abstract.

B

UNECA/FAO no date

The role of women in population dynamics related to food and agriculture and rural development in Africa. United Nations ECA/FAO, Women's Programme Unit. See #69 for complete abstract.

195

C

USDA Nutrition Economics Group 1983

Intra-family food distribution: review of the literature and policy implications. Washington, D.C.: Office of International Cooperation and Development, Technical Assistance Division, USDA, March. 105 pp.

This useful paper describes in some detail the methods and results of four nutrition surveys in Liberia; Morinda, India; Tamil Nadu; India, and Nigeria. Methodological problems common to the surveys are discussed: lack of information on food consumed away from home, data on all household members, and patterns related to income level. Especially, information is needed on the reasons underlying patterns of food distribution within families. Examples of such possible reasons include social and religiously based sex and age bias, role of community standards, changing economic roles of household members (especially women), attitudes toward members seen as unproductive, roles of different household members in deciding on patterns of distribution, roles in the decision to sell or consume food.

196

C

Van Esterik, Penny 1983

Integrating ethnographic and survey research: a review of the ethnographic component of a study of infant feeding practices in developing countries. Population Council International Programs Working Paper no. 17, New York. 37 pp.

A project to incorporate an ethnographic field component into a four country study of infant feeding practices is described. Ethnographic work is useful in helping define and set research priorities, as well as for generating hypotheses. However, the direct contact between observer and observed reduces objectivity and generalizability.

The ethnographics guided the collection of survey data by providing information and recommendations on questionnaire administration, semantic and terminological issues and the substantive context. A discussion of the implementation of the ethnographic field work and linkage with the marketing and household survey data components then follows. The areas of ethnographic coverage included infant feeding practices, kin relations, mother's activities and community level influences. No results are reported.

C D E

Van Esterik, Penny 1984

Intra-family food distribution: its relevance for maternal and child nutrition. Cornell Nutritional Surveillance Program Working Paper no. 31. 103 pp. See #485 for complete abstract.

197

B

Von-Harder, Gundrun Martius 1982

Field research on women in the Comilla district, Bangladesh. In Islam, S. (ed.), Exploring the Other Half: Field Research with Rural Women in Bangladesh. Dacca: BRAC Printers.

This essay discusses the aims and methods of field research on the economic roles of women in agriculture, conducted from 1974 and 1975 in the Comilla district of Bangladesh. A basic survey of all 497 households in four villages, selected to represent a range of demographic farming systems and other characteristics, was conducted in order to classify the households by economic status. This information was also used to guide the interviews with the women in these villages. No results were reported.

The general purpose of the study was to make the unseen work of women visible to decision-makers and planners. The research was guided by the theses that development must also be directed to women, their status must be equalized to men's and that class differences in the treatment of women also affect development strategies.

198

B E

Walker, Kathryn E. and Woods, Margaret E. 1976

Time Use: A Measure of Household Production of Family Goods and Services. Washington, DC: Center for the Family of the American Home Economics Association.

This book provides a detailed description of the methods used to quantify the non-market production of U.S. households. Household production is defined here as the purposeful activities performed in individual households to create the goods and services that make the functioning of the family unit possible. This can be measured both in terms of time (input) and of goods produced (output). The main hypothesis is that family composition, as represented by the number and ages of children in a family, is the principal variable determining the amount of household work to be done and can be used as the estimator of the total time that will be spent to perform the work.

A random sample of 1,296 households in Syracuse, New York were grouped in 32 family composition categories. Only husband-wife households with or without children were included. Time use, recorded as primary or secondary, was collected via 24 hour recall in interviews and time record charts. Data collection and analysis issues for children, economic status and wife's employment factors are discussed.

A separate rank correlation of time use for wives, husbands and teenagers is calculated, according to the five major categories of: all food preparation, allhouse care, all family care, all clothing care, and marketing and management. The major variables examined in this study were number of children, age of youngest child, family type, employment of wives, husbands' hours of employment, house type, location of residence and socioeconomic status, and education of wives and husbands.

199

C F

Ware, Helen 1984

Effects of maternal education, women's roles, and child care on child mortality. In Mosley, W. H. and Chen, L. C. (eds.), Child Survival--Strategies for Research (suppl. to Population & Development Review 10), pp. 191-214.

This essay presents approaches to studying the relationship between maternal education and child mortality. The impact of female education on the balance of power in the family, household income, prospective education of the children, maternal nutrition, or on sex preferences in childcare require different types of data to evaluate the relationships. Ideally a survey designed to address these issues would be undertaken in an area where strong educational differentials in mortality exist. Two random samples of births to currently married women 20-29 years of age, either with no education or a minimum education would be followed up at one, six and twelve months after birth to monitor changes in feeding, childcare and sanitation. Household economic status could be measured by recording all sources of income or all the resources demonstrably available to the household.

200

E

Watts, Harold W., and Skidmore, Felicity 1978

Household structure: necessary changes in categorization and data collection. Paper prepared for Conference on Issues in Federal Statistical Needs Relating to Women. Bethesda, Md., April.

This brief article suggests that statistical reporting needs to be revised to accommodate recent increases in the labor force participation of women, in sole earners who are female, and in one-person households. The authors suggest that the U.S. Census and Current Population Survey use the individual as the unit of analysis, and indicate household and family membership as attributes of the individual. Such a system would permit charting of inter-household ties of responsibility (e.g., in divorce) and would permit an individual to be associated differently with a family and a household.

(While proposed for the United States, this system has possibly even greater applicability to developing nations.)

201

C

Wheeler, David n.d.

Do the poor need nutrition education? Some methodological issues and suggestive evidence from Kinshasa, Zaire. Boston University African Studies Center Working Paper NS no. 2.

This interesting paper examines the optimality of urban diets in Zaire by evaluating the extrafamilial purchasing and intrafamilial allocation behavior of poor families. Data from the Institute for Economic Research comprehensive household survey in Kinshasa from 1969-70 are used. The technical and sociological difficulties in using the sophisticated linear programming technique to establish a standard of rationality for this sample led the author to compare consumer preference rankings with an optimality ranking which rates foods in terms of nutrient output. An econometric approach is used to evaluate the impact of urbanization and ethnicity on nutritional practices of the poor.

The analysis reveals that the urban poor overvalue animal protein foods, but otherwise their preference ranking appears rational. Comparisons between groups indicate that poor families show a more appropriate increase in nutrient consumption with increasing income than their wealthier ethnic counterparts. Contrary to common assertions, the impact of family feeding patterns on infants 0-2 years old did not appear to be negative, and the patterns of allocation were stable across income and ethnic groups. The author concludes that education to shift dietary preferences toward vegetable protein sauces may be needed, but intrafamily practices are already appropriate.

202

B D

White, Benjamin 1984

Measuring time allocation, decision-making and agrarian changes affecting rural women: examples from recent research in Indonesia. Research on Rural Women: Feminist Methodological Questions, IDS Bulletin 15(1):18-33.

This article reviews various data collection techniques which have been used to measure rural women's work in time allocation studies and describes a 1972-73 study of production and reproduction in Java to highlight the benefit of combining quantitative measurements with qualitative insights. The Java study visited 44 households every sixth day for one year and used 24 hour and 30 day recall as well as one year checklists to collect information on time allocation, division of labor, decision-making and production activities. The 30

day recall missed 40-57% of working hours in direct production and one-third of all working hours versus the 24 hour recall. To measure decision-making and relative participation informal discussions and case studies were used rather than direct questioning. Sixty farmers were asked to describe the system of recruitment and payments as a way of obtaining quantitative retrospective data on the changes that had occurred.

203

B F D

Youssef, Nadia H. 1982

The interrelationship between the division of labour in the household, women's roles and their impact on fertility. Ch. 8 in Anker, R., Buvinic, M. and Youssef, N. (eds.), Women's Roles and Population Trends in the Third World. London: Croom Helm Ltd.

The effect of the sexual division of labor on fertility is examined by focusing the literature review on how specific labor patterns can generate a resource and power base for women. Three major determinants of labor allocation patterns for rural women are discussed: the level of agricultural complexity and differentiation, social hierarchy of the community and the purpose and scale of the economic activity being performed. The factors which increase the value and differentiation of economic activity performed by women, allow her power within the community and family to be enhanced. In response to the question whether women's productive undertakings determine her commitment to a reproductive role or the reverse, the author proposes that fertility behavior reflects the value women place on children as substitutes for the work load allocated to them. It is hypothesized that women of the upper and middle peasantry class will have higher fertility than the landless and wage laborer classes, due to their decreasing value in production and reinforcement of women's home activities and reproductive values. It is necessary to incorporate the husband-wife relationship into any theory on the relationship between women's status and fertility behavior. Women are presumed to have greater family decision-making power in societies where the division of labor is not highly sex-differentiated and women have greater control over income.

E F

Zeitlin, Marian F.; Mansour, Mohammed and Boghani, Meera 1983

State of the art paper on positive deviance in nutrition. Paper prepared for UNICEF (WHO/UNICEF Joint Nutrition Support Programme) at Tufts University School of Nutrition, Medford, MA. 188 pp. See #497 for complete abstract.

Youssef, Nadia H. 1979

Women's employment and fertility: demographic transition or economic needs of mothers? Prepared at the International Center for Research on Women for USAID/PPC, Aug. 31. 43 pp.

This paper argues that women's employment as a means of reducing fertility is less useful in developing countries than identifying women in particular strata who would be receptive to limiting family size. However, employment and income generation programs should be promoted as a means of providing women with an economic identity and a source of power and status, regardless of demographic considerations. The author discusses methodological problems found in studies of the employment-fertility relationship and suggests focusing on the combined interaction between socioeconomic strata, type of employment and fertility behavior. The fact that women's employment has not consistently lowered fertility means it should be targeted to specific sub-groups under specific conditions to be effective. Target groups and possible intervention programs are suggested.

Section III

205

D

Abbott, Susan 1976

Full-time farmers and week-end wives: An analysis of altering conjugal roles, Journal of Marriage and the Family 38(1):165-74.

This paper examines the patterns of decision-making and resource control in households of rural Kikayu, Kenya, where patrilineal descent and residence are the cultural norms. The author interviewed 20 adult married women and men on two separate occasions, 4 months apart, to determine perceived ideal domains of control in the family as compared to their actual behaviors. While there was high agreement on ideal content of conjugal roles, where women make few decisions and control no major sources of cash income, the results indicate the actual sphere of women's responsibilities was greater than the ideal and that of men was less. Women with most power were older, co-resident wives whose parents-in-law were dead. Factors that affect decision-making and control included residence of the male household head and phase in the development cycle of the homestead.

206

E

Abdullah, Tahrunnessa A. and Zeidenstein, Sondra A. 1982

Village Women of Bangladesh: Prospects for Change, ILO/WEP Women in Development Series, vol. 14. New York: Pergamon Press. 246 pp.

This book provides a detailed description of the context of rural women's lives in Bangladesh using anecdotes and direct observation. The focus is on women's work, their economic role and cultural limitations, including the traditions of male dominance and purdah. Women who do earn cash keep it a secret because it is embarrassing for women to work and because they want to retain control over this income.

The Integrated Rural Development Program's Women's Project and cooperative training programs are described as successful examples of improving the economic and social status of women. The authors argue that programs targeting women are not respected by the government, and they perpetuate the bias against women's full integration into the economy because the cultural segregation of roles forces projects to be focused on separate, often traditional home management, activities for women. Programs to increase women's income should recognize women's needs and priorities and be integrated into existing rural development institutions.

207

B

Abdullah, Tahrnunessa A., and Zeidenstein, Sondra 1975

Socioeconomic implications of HYV rice production on rural women of Bangladesh. Paper prepared for seminar on socioeconomic implications of HYV rice. IRDP Women's Programme, Dacca, April.

This paper first explains the dynamics by which modernizing agriculture can negatively affect women by reducing their knowledge base and thus their economic contribution relative to men. The authors then provide a detailed breakdown of agricultural and processing tasks performed by women in Bangladesh to show that the census estimate of 10.8% economically active women is a gross understatement.

The authors hold that, given the involvement of women in production, it is appropriate to train and provide technology to women, but that usually activities are shifted to the male sphere when they become profitable. This has the further disadvantage of reducing income-earning opportunities for women.

208

D

Abeille, Barbara 1979

A study of female life in Mauritania. Paper prepared for the USAID Office of Women in Development, Washington, D.C., July.

This paper provides descriptive information on women's roles, based on informal interviews with key informants.

An increasing number of girls now go to school, and women are increasingly entering paid employment. Women nominally can manage their own property and business, but working women report asking their husbands' advice on decisions and sharing their incomes by pooling or by paying some expenses.

Women have no decision-making power in their personal lives until after they have been married. The father decides most issues before marriage, then the husband. After one divorce, women have more say in choosing their next partner.

People now express a desire for daughters as well as sons to finish school so as to have financial independence.

A B D

Acharya, Meena, and Bennett, Lynn 1981

The Rural Women of Nepal: An Aggregate Analysis and Summary of Eight Village Studies. Vol. 2, part 9. Centre for Economic Development and Administration, Tribhuvan University, Katmandu, Nepal.

This book describes the methods and summarizes the results of an intensive eight-village study of women's roles in Nepal, which has been published in eight separate volumes. See abstract #78 for details.

209

B D E

Acharya, Meena and Bennett, Lynn 1983

Women and the subsistence sector: economic participation and household decision making in Nepal. World Bank Staff Working Papers #526, Washington, D.C.

For an in-depth investigation of the relationship between women's economic participation and their decision-making power, the authors have separately analyzed data on households in 8 rural Nepal villages that were collected for an extensive study of women's roles. (See abstract #78). In addition to qualitative anthropological observations, quantitative data on demographics, household economics, education and attitudes, women's roles, household decision-making patterns and time allocation were used. Specific data collection methods are described, and data collection instruments are presented.

The four spheres of economic activity that are examined in this paper are: 1) household maintenance, 2) family farm enterprise, 3) local market participation and 4) the wider market economy. The pattern of participation by sex in each of the spheres indicates an inside/outside or private/public dichotomy exists, whose strength varies by cultural domain. In Tibeto-Burman communities women marry later, are less shy and have more input in choice of partners. The strongest dichotomy exists among the Maithili and Parbataya of Indo-Aryan stock who have orthodox Hindu beliefs. Young wives there have few interactions outside the family and their work is confined to unpaid family labor.

The primary hypothesis is that the level of a woman's input into household economic decisions is positively correlated with the degree of her market participation. It is also found that higher age of marriage and greater geographic mobility are associated with increased participation in the market economy. Statistical analyses showed that age, male migration, distance from natal home, geographic mobility and positive female image are significant determinants of women's level of domestic activity, in-village market activities and out-of-village employment. Household economic status influences the composition of women's work but does not affect total work burden.

Female decision-making power in domestic issues was increased by participation in subsistence production, in local market and especially in out-of-village employment. Women's input into farm management decisions was commensurate with high labor inputs into domestic and agricultural spheres. Resource allocation decisions are not affected by women's inputs into subsistence production but women who participate more in the market economy have more power in this sphere. The authors conclude that programs to increase women's ability to earn outside income will enhance their decision-making power in the household.

210

B D

Afonja, Similolu 1981

Changing Modes of Production and the Sexual Division of Labor among the Yoruba, Signs 7(21):299-313.

This paper presents the argument that current assessments of women's roles in production often fail to recognize the historical continuity that exists in the pattern of sexual division of labor. Women remain subordinate in the modern economic structure because of their traditional role in biological and social reproduction. This overview divides the economic history of the Yoruba into two modes of production--the African and the capitalist--in an attempt to demonstrate the continuity of the sexual division of production and reproductive tasks. In the African mode of subsistence production women participated in planting, harvesting and marketing but they did not control the land. The introduction of foreign technologies has altered the normal patterns of economic cooperation in agricultural production, but the relations of dependence within the household have remained, and women have not been relieved of their traditional household and childcare responsibilities. Using the political economy model to analyze the role of Yoruba women, the author concludes that while economic development has influenced the division of labor, the historical basis for inequalities remains powerful.

211

A B

Afonja, Similolu (n.d.)

Land control: a critical factor in Yoruba gender stratification. Department of Sociology/Anthropology, University of Ife, Ile-Ife, Nigeria (mimeo).

The impact of introducing cocoa cultivation on the status of women is assessed via ethnographic interviews of 23 men and 51 women in three rural Nigerian towns. The women provide labor for farmwork and export crop production, especially during harvest season, when they spend 4-8 hours/day fetching water, carrying household crops and cooking for all others doing farmwork. Women fall into the lowest status group because they receive no wages directly and their

property is usually limited to clothing and household utensils. The income from cocoa harvests is typically invested in children's education and in private houses. The author suggests that the women did not derive as much income from cash crop production as would be expected of farmers' wives.

212

A B

Aguiar, Neuma 1976

Brazilian families and households in different systems of production. Paper presented for Center for Research on Women in Higher Education and Development, Wellesley College Conference on Women in Development, Wellesley, Mass., June 2-6.

This paper describes control of income and patterns of labor force participation in households living on plantations and in nearby roadside squatter settlements, with comparative data from an urban slum. Data were collected by recorded interviews of about 50 minutes with women from the sample households (N not reported).

On plantations, housing is provided to families. Only the head is required to work, but large families are favored in hiring because women and children also contribute labor. Women who work in the fields combine this with child care and household tasks; women engaged in factory-style processing delegate these tasks to their daughters. Women's work results in more family participation, including the husband, in home tasks, under the woman's management.

Women working in the home generally manage the family finances; women working outside the home leave this to their husbands. Single women are more likely to work outside the home than married women.

In the roadside settlement, married women are more likely to work outside the home. Children also work and contribute all their earnings to the household.

213

A B D E

Ahmad, Perveen 1980

Income Earning as Related to the Changing Status of Village Women in Bangladesh: A Case Study. Dacca: Women for Women Study and Research Group.

This short book reports results of a study of women's work for pay in a rural village (population 700) 17 miles from Dacca. Of the 100 families in the village, 95% had at least one woman working for pay. Twenty households from each of three religious groups (Muslim, Hindu, Christian) were selected; one working woman and one male adult from each household were interviewed.

The study provides a rich description of attitudes toward women's work, economic benefits, and status and decision-making power of working women. Most women work because of stringent economic need; about 40% of Muslim and Hindu women, and 60% of Christian women say they spend their earnings according to their own decisions. This varies by type of expenditure.

Both men and women agreed that women's income improved the household's well-being. Except for women employed as domestic servants, neither men nor women felt women's paid work reduced their status. Almost all men said they preferred their wives to work. Most women worked at home, however, in handicrafts and food processing; only 3% had salaried work outside. Most women said their daughters should work for pay before marriage.

Sexual division of labor is not very sharp in the village. About half the women said they get help in household work from the family; 60% of men reported they help with housework.

The chain of male authority is not visibly altered, however, and most widows and divorcees live with a brother or their parents rather than become a household head.

214

A B

Akinbode, Adefolu I.; Onazi, O. C.; and Olayiwole, Comfort 1982

Women participation in selected rural development programmes in the northern states of Nigeria. Journal of Rural Development 5(June):109-32.

This article reports the results of a study of determinants of women's participation in rural development programs and briefly reviews literature on women's economic roles in Nigeria and other countries of sub-Saharan Africa.

The literature suggests that women have separate economic spheres from men and that most women engage in commercial activities to have money of their own. This is true even of secluded Muslim wives in northern Nigeria, whose husbands and children obtain raw materials for them and market their products.

In the reported study, 348 women from five states that had female extension programs were interviewed. The study found 87.5% participated. Women, not men, made the decision. Participation was related to literacy, number of children, occupation and income of the woman, and occupation of her husband.

215

A B D

Alabastro, Estrella F. 1978

Women in the food system. Paper presented at the International Conference on Women and Food, University of Arizona, Consortium for International Development, USAID, January 8-11.

This paper describes the activities of women in food production in the Philippines. The women provide labor for transplanting, weeding, fertilizing, harvesting and threshing of crops and they are in charge of subsistence farming. Women generally have input into decisions on farm financial matters and they usually manage the family income and budget. The farmer's wife is also responsible for marketing the farm produce, a task which is complicated by difficulty in getting price information and inadequate grading and standardization of farm products.

216

A B D

Alamgir, Susan Fuller 1977

Profile of Bangladeshi women: selected aspects of women's roles and status in Bangladesh, USAID Mission to Bangladesh, Dacca, June. 82 pp.

This descriptive paper discusses the economic and social position of Bangladeshi women vis-à-vis men. Methods of data collection are not described.

Property and inheritance rights of women are described. Women's access to income-earning is very limited because of traditional cultural restrictions. Income is earned from sale of eggs and chickens, garden crops, and handicrafts, but usually the actual marketing is done by husbands or sons, so not all her earnings may reach the women. Women do have control over the income they earn themselves. Only the lowest-income women engage in agricultural wage labor; their wages are lower than men's.

Allocation of decision making power is described. Generally, women are held not to participate in household decisions, though they may have more influence than people acknowledge. Women have more influence over decisions relating to their economic activities (horticulture, food processing and sale, and other home production), and to the household than on decisions about farm inputs and cash crops. Decisions about investments in child schooling and investment rest with the person who pays, usually the man.

Women participate in decisions more in poor households. Decision-making in the women's sphere tends to be dominated by senior women in the extended-family household, so younger wives have little influence.

Women are responsible for specific household tasks of storing and processing rice. These tasks also provide acceptable employment for women. Rice mills displace women in these tasks.

217

A B

Alberti, Analia 1982

Some observations of the productive role of women and development efforts in the Andes. Paper prepared for WID workshop "Women, Work, and Public Policy," Center for International Studies, Massachusetts Institute of Technology, Cambridge, Feb. 21.

This paper describes the sexual division of labor in a highland area of Ecuador, and suggests that development projects that fail to account for secondary impacts on labor demand will fail, because of constraints on participation. Several projects are analyzed in these terms.

The author reports that each individual in the household controls his or her own earnings. Adult children usually contribute a part of their incomes to the household but save the rest.

The importance of participant-observation as a preliminary to structured data collection is stressed.

218

A E

Angel, Ronald and Tienda, Marta 1982

Determinants of extended household structure: Cultural pattern or economic need?, American Journal of Sociology 87(6):1360-83.

This detailed paper presents evidence that the formation of extended households among different minority groups is largely motivated by economic considerations. The analysis is based on a 1976 survey of income and education of 150,000 U.S. households. Extended households are defined as containing at least one non-nuclear member, that is another relative of the head, a secondary family member or a secondary individual, in addition to the husband/wife or female head and at least one dependent child under 18. Total household income was categorized into earnings of the head, earnings of spouse and adult children, earnings of non-nuclear members, welfare income and other non-work income.

For all minority groups extended family structure was more prevalent among female-headed households. The income contribution of non-nuclear members was more substantial and increased flexibility of single household headed families, although this varied by racial and ethnic group. This reflects differences in the labor market success of various groups as well as group differences in the motivation and to form and maintain extended households. The earnings of

non-nuclear members form a smaller share of the total family income than the contribution of secondary nuclear earners in all households except those headed by females of Central/South American origin.

219

E

Arnould, Eric J. 1984

Marketing and social reproduction in Zinder, Niger Republic. Ch. 6 in Netting, R. McC., Wilk, R. R. and Arnould, E. J., eds. Households: Comparative and Historical Studies of the Domestic Group. Berkeley, CA: University of CA Press.

The influence of commerce on social structure and patterns of reproduction in three Nigerian villages are analyzed. In Maidoki, which has no direct access to markets, early exogamous marriages are common because the sons eventually migrate. Also married sons help alleviate the family's financial burden. Kadafan Tulu women use local clay to produce pottery which is sold in the Mirria. Almost all women make pottery but male traders keep 60% of the revenues. Age at marriage is higher in Kadafan Tulu because of the higher cost of marriage there and endogamy predominates due to the high value of commercial pottery. Hide tanning and trading are the major commercial endeavors in Angoal Majema. Marriages occur later and are more stable and monogamous because of high brides' prices and lack of income-earning activities for secluded women. Due to their differing positions in the regional marketing systems, seasonal migration has varying effects on task performance and the structure of social reproduction in the three villages. The pattern of household organization in each village is responsive to new commercial opportunities and constraints.

220

A

Asok, Mitra 1981

Participation of women in socio-economic development: Indicators as tools for development planning. The case of India. In Women and Development: Indicators of Their Changing Role. Paris: UNESCO.

This paper argues that despite the recent emphasis on women's participation in socioeconomic development, the role of the exclusion of women in actually hindering development has not been addressed. The author states that building in socioeconomic indicators to quantify women's formal and informal economic participation that reflect desirable norms will help development planning. A discussion of how women's participation improves income distribution and productivity follows. Adequate economic indicators of women's work in both modern and traditional sectors are needed. A model for measuring household income by separately measuring men's and women's income in relation to a minimum subsistence level is proposed. Applying the equation to Indian census data shows that if men's

income falls below minimum subsistence and women make up the difference, then women's economic contribution is reported.

221

A B G

Bangladesh Rural Advancement Committee 1979

Who Gets What and Why: Resource Allocation in a Bangladesh Village.
Dacca, Bangladesh.

Results of a detailed study of the allocation of land and labor in Dhankura, Bangladesh are described. Information was collected over a five month period by a village-wide census and then by interviews of 60 of 146 household heads and other key informants. Kinship dominates land purchase, non-institutional loan and agricultural labor patterns. It was found that 14% of the households own 48% of land and often land is sold to richer kin by poorer relatives. Labor is provided by reciprocity or through hiring along kinship lines. If the labor pool of relatives is insufficient, employers may hire neighbors, favoring political supporters first. When sources of income become diversified through external economic links however, kinship ties may break down. A majority of households engage in subsidiary agricultural activities, which are performed by the women.

222

F

Banskota, Kamal and Evenson, Robert E. 1978

Fertility, schooling and home technology in rural Philippine households. The Philippine Economic Journal 36 17(1-2):32-61.

The first part of this paper describes the goods model of household production. Compensated elasticity relationships are computed to show the impacts of exogenous wage rates of all household members and market prices on household commodity choice. The model predicts that increasing the mother's wage will decrease family size and parents' leisure time but increase human capital per child and commodity consumption. Increases in the mother's education level with wages held constant have the opposite effect. Increases in child wage will lead to increased family size, education and child work.

The model is applied to data collected in the Philippines by surveys of a random sample of rural households in 1963, 1968 and 1977. The results demonstrate the applicability of this household commodity model to rural household behavior. The hypotheses that children's earning ability contributes to larger family size and that mothers' time value has a negative impact on fertility are supported. Family size is larger among farming households and smaller where home technology predominates, which is correlated with mothers' higher education level.

223

D

Barlett, Peggy F. 1980

Introduction: Development issues and economic anthropology. Ch. 1 in Barlett, P. F., ed., Agricultural Decision Making: Anthropological Contributions to Rural Development. New York: Academic Press.

This chapter provides an overview of the issues and studies covered in this book on peasant farmer decision-making and production patterns. The areas of focus include: the decision-making process and its determinants, measurement issues, how decision-makers' perceptions are related to the food production process, and policy and program implications. While the studies address a wide range of factors, the author notes that agricultural development issues are too complex to be answered with a "laundry list" of important elements.

224

A B

Barnum, Howard N. and Squire, Lyn 1979

A model of an agricultural household. Theory and evidence. World Bank Staff Occasional Papers, No. 27. Baltimore: Johns Hopkins University Press. 107 pp.

This paper presents results on labor and time allocation, income and expenditures for a sample of northwest Malaysian rice farmers. A two stage random sample of 839 households in the Muda River Irrigation Project area was selected for weekly interviews over one year, with beginning and ending inventories of goods and labor supply. The authors developed a model to predict the effects of changes in crop price, wage rate, size of family labor force, number of dependents and new technology.

They found that labor was effectively used, but land was not, as doublecropping increased net yield only 50%. Technological innovation increased farm profit, resulting in more leisure time and greater use of hired labor. Since the labor supply is relatively fixed, wage rates increased. Farm tasks are allocated by sex with the women transplanting and harvesting the crop while the men do the threshing. The model was used to calculate household consumption demand and leisure time as well as elasticities of expenditure, labor supply and marketed and home consumed output.

225

A B

Barrett, Minna 1985

Women's economic initiatives in Kenya: Some considerations. Paper presented at Association for Women in Development Conference, Washington, D.C., April 25-27.

Women's social and economic cooperatives in Kenya are presented as a positive support network in the development process. An 11 item open ended questionnaire was administered to a self-selected sample of 60 people who were asked to assess the psychosocial consequences of transitions on family processes. Eight of 41 adults mentioned women's economic initiatives, which arise out of their increased economic insecurity due to urbanization and out migration of men. Women's participation in various types of cooperatives was viewed positively by both men and women. The form and function of social coops, social welfare/rotating savings coops and business oriented coops are described.

226

A B

Barth, Gerald A. 1983

Street foods: Informal sector food preparation and marketing in the Philippines. Equity Policy Center Paper. Washington, D.C. 170 pp.

To evaluate the income and food consumption contribution of street food sellers in Ilo Ilo City, Philippines a random stratified sample of 10% of the food sellers was selected for interviewing. A different set of questionnaires was administered to two respondents at each of 123 food seller locations. Another questionnaire given to 150 households in six economically diverse neighborhoods, revealed that over 20% of household food expenditure went to street food.

The street sellers were not recent migrants to the city. Eighty percent were female; 71% of the respondents were married but only 27% worked together with their spouses. Food vending was the primary source of income for 83% of households, and women controlled the earnings in 86% of the operations. A majority of the respondents used savings for start-up capital, 36% used credit only and 6% used a combination.

227

E

Basson, Priscilla 1982

Domestic productivity in male- and female-headed households of rural Jordan. Ecology of Food and Nutrition 12:75-78.

This article reports results of a study of women's productivity in nine villages and a refugee camp in northwestern Jordan. Interviews

were conducted with 350 randomly selected married women; in each location, three families were revisited over a 10-month period to provide observational checks on reported information. Productivity was defined as preservation of food for later use.

By this narrow definition, women living alone were more productive than those with families. The number of children under age six was negatively correlated with productivity; the number of children over six and other members was positively correlated. Wage laborers had slightly lower productivity than cottage laborers.

228

B C

Batliwala, Srilatha 1981

Rural energy scarcity and nutrition: a new perspective. Economic and Political Weekly 17(9):329-33.

This interesting article argues that an alternative approach to alleviating malnutrition is to address energy cost rather than to try to raise food consumption.

Data from a large-scale survey (3500 persons, 560 households) of rural technology were used to estimate caloric energy use of household members. Women contributed 53% of the energy, men 31%, and children 16%. Most energy was spent on survival task such as getting water and firewood; this exceeded energy use in agriculture.

Women reported that the distribution of sorghum (the staple) in the household was 2 to 1 to .5 for men, women, and children. The author suggests that the introduction of appropriate technology to reduce women's energy expenditure is more feasible than altering distribution patterns.

229

B C

Battad, Josephine R. 1978

Determinants of nutritional status of preschoolers, The Philippine Economic Journal 36 17(1-2):154-167.

This paper presents regression analysis results of the effects of income and education on the nutritional status of preschool children aged 6-83 months. Nutritional status was measured by body weight as a percent of recommended weight for age and sex. Data were from the first phase of the Laguna (Philippines) Household Survey, a multipurpose survey of about 600 households.

Income was positively related to nutritional status, but the effect was small, and significant only in the 48-83 month age group. The effect of mother's schooling was positive and significant for all ages, largest for 6-23 month old children. Child's age was inversely

related to percent of standard weight, and the number of siblings under 7 years had a strong negative effect on children 2 years and older. Nutritional deficit was greater in girls than in boys. The mother's nutritional status was positively correlated to her children's status but was significant only for the youngest group. The mother's labor force participation was associated with poorer nutritional status of the children.

A H

Behrman, Jere R.; Wolfe, Barbara L. and Blau, David 1981

Human capital and income distribution in a developing country. Institute for Research on Poverty Discussion Paper No. 656-81, April. See #84 for complete abstract.

230

A F

Behrman, Jere R.; Wolfe, Barbara L. and Belli, Humberto 1978

How many? How much? The determinants of demoeconomic roles of women in a developing country metropolis. University of Wisconsin-Madison Center for Demography and Ecology Working Paper no. 78-20.

The paper presents preliminary results from a survey on labor force participation, technology use and contraceptive use by Nicaraguan women. Using aerial photos of Managua, 1300 houses were randomly selected and one woman aged 15-44, excluded non-working students, from each household was interviewed. Mean age of respondents was 28.3 of whom 38 were currently married and 33% had common-law arrangements. The women had an average of 4.9 years of education and 3.41 live children. Use, previous use or no use of contraceptives was divided equally among respondents, and equal percentages of women were either in or out of the labor force.

Cross-tabulations indicate that domestic workers expect fewer children than others, but education and fertility are somewhat negatively associated. There was little relation between religion and family size. Use of health care was positively associated with vaccination of eldest child under 5. Work activity varies positively with single marital status and education levels. Expected number of children is not related to work activity, except for domestic-nondomestic differences.

231

B E

Bekombo, Manga 1981

The child in Africa: Socialization, education and work. Ch. 4 in Rogers, G. and Standing, G., eds., Child Work, Poverty and Underdevelopment. Geneva: International Labor Organization.

This chapter describes the nature of children's socialization, education and work in both traditional African society and in the urban sector. In traditional society, where children are viewed as members of the clan, a child enters village society when the mother becomes pregnant again. Up to 6 or 7 years the child's activities remain centered in the household and become sex differentiated. From age 7-16 the child's activities are village wide, and school attendance requires a reorganization of time rather than reduction of tasks. An activity is defined as work when the child or parent receives compensation. Who benefits from the payments determines the extent of the child's exploitation.

In the urban sector, where traditional family and social structures are breaking down, children's security is decreased and their school dropout rate is high, despite the loss in status. The children who drop out, especially boys, constitute a marginal group which dynamizes the informal sector. The jobs are usually temporary and illegal for those under age. Children below the legal working age become involved in prostitution, trading of stolen goods and other illegal activities.

232

B D

Berio, Ann-Jacqueline 1984

The analysis of time allocation and activity patterns in nutrition and rural development planning, Food and Nutrition Bulletin 6(1):53-68.

The relevance of time allocation as an indicator for studies of food consumption and supply and understanding women's roles in food related activities and the impact of development programs is demonstrated using data from three surveys. The first survey recorded 24 hour time allocation over ten months by observation and interview of 25 adults over 15 years in a modern Bandu village and 30 adults in a traditional village of Central Africa. It was found that women work 8 hours and men 5-1/2 hours a day. Domestic tasks occupying 3-1/2 hours daily were performed by women only. Women's time in agricultural activities is equal to men's in the traditional village and greater in the modern village. Rural extension usually addresses men only, while increasing women's time burden. Further intensification of agriculture will be impossible if women's and men's workloads do not become better balanced.

The second survey that is discussed was undertaken in eight Nepali villages covering 1200 individuals in 192 households (see Acharya and

Bennett, abstract no. 78). The findings revealed the workload for women and children was heavy, with women generating more income than men. Children between the ages of 5 and 9 work three hours a day and those 10 to 14 work six hours a day, which affects family decisions regarding education and family planning. Men are the primary decision-makers regarding labor allocation but women have more power in agricultural decisions.

Females work more than males in all age groups, with domestic activities and meal preparation making up the time difference. Women are considered less economically active than men using Nepal's census definitions because subsistence sector work is underestimated. To better account for women's and children's contribution to household food supply, their share of total calories provided should also be calculated.

The third example used is the 1979 Ivory Coast National Household Food Consumption and Budgetary Survey of 6,000 people over 10 years in 720 urban and rural households. The results indicate women are responsible for wood and water collection, fishing, food supply and processing while both sexes gather wild fruits, nuts and herbs and process and store crops. Women do 66% of the total work, 87% of domestic chores, 74% of subsistence activities and earn 17% of total household cash income by crop sales or small trade. Children and elderly are responsible for 20% of the time devoted to food-related activities. Women provide 54% of the calories brought into the household. However, because physical activity represents 22-52% of total energy expenditure with agricultural work constituting the major share for rural adult women, their time devoted to agriculture adds to women's tasks instead of replacing them.

Development projects often result in undesired changes in household food supply consumption; therefore, the author suggests conducting a preliminary investigation of major time and activity components of the population before project design.

Berleant-Schiller, Riva 1977

Production and division of labor in a West-Indian peasant community. American Ethnologist 4(2):253-72.

This article describes household structure, labor allocation, and patterns of inheritance in one village in the Lesser Antilles Leeward Islands. Methods of data collection are not described.

The household is a group of individuals who pool and share their products. Residence, not kinship, defines the group.

Both men and women engage in subsistence production, but household work is exclusively women's. Children over age 6 contribute significant labor to the household; by age 11, boys cease to perform

household tasks. Child fosterage is common; it is seen as a benefit to the receiving household.

Inheritance is generally based on past active participation in the household, not on sex or kinship lines.

234

E

Berry, Sara S. 1978

Customs, class and the informal sector: or, why marginality is not likely to pay. African Studies Center Working Paper NS no. 1, Boston University.

The changing position of the informal sector in African economic development and the role extended families play both as suppliers and absorbers of the resources of individual entrepreneurs are re-examined in this discussion paper. The informal sector has expanded largely due to increased domestic demand for inexpensive final and intermediate goods, not as an avenue for upward mobility. Access to wealth acquiring opportunities in the public and large-scale private sectors requires education, which explains why low income families set aside a large amount of their earnings for their children's education.

As African economic growth becomes concentrated in the hands of urban elite, opportunities for increasing incomes in the small-scale sector are reduced. Poor Africans often react by economizing and attempting to diversify their economic and institutional options. Occupational diversification and education increase income.

Kinship studies reveal that few entrepreneurs rely significantly on family members for financing, although the family expects to be supported. However, if one views the entrepreneurs as individuals who rely on institutions for a range of economic functions, the extended family can be considered a provider of organizational and managerial resources.

The author concludes that it is an oversimplification to argue that extended family networks simply provide security for urban job market members or that they offer effective channels of socioeconomic mobility.

235

B

Billings, Martin H., and Singh, Arjan 1970.

Mechanization and the wheat revolution: effects on female labour in Punjab. Economic and Political Weekly 5(52):A169-174.

This article describes the effects of the introduction of high-yielding varieties of wheat and of mechanical threshing and

reaping on women's work. Results are from a survey, but the method is not described.

The study found that women's participation in farm work declined, and that opportunities for women's paid agricultural labor were reduced. Women were more able to shift to other kinds of employment if they were literate.

236

F

Blood, Robert O. Jr., and Hamblin, Robert L. 1958

The effect of the wife's employment on the family power structure. Social Forces 36(4):347-52.

This much-cited article describes results of a study of the effects of the wife's labor force participation on her role in decision-making in households in the U.S. A sample of 50 couples was interviewed, each member separately about his or her expectations regarding authority, the number of suggestions each initiated which were implemented, and the share of housework each performed. The authors' hypothesis is that power is correlated with expectations of power.

The study found working wives and their husbands were more likely to have egalitarian expectations of power. Working wives had more of their suggestions implemented, but the difference was not significant. The husbands of working wives did more housework on average, but this was not true of all of them. In the sample, the wives had worked four years or less.

237

Boulding, Elise 1975

Women, bread and babies: directing aid to Fifth World farmers. International Women's Year Studies on Women, Paper #4. Institute of Behavior Science, University of Colorado, Boulder. 44 pp.

This paper provides a quite general discussion of the importance of women's work in production in Africa and its tendency to be underestimated. Aggregated data indicating women's economic activity and status in 33 African countries are presented. A list of the program-related needs of women are presented.

B

Boulter, Brian 1982

An evaluation of time budget studies as complements to conventional labor force surveys. The Philippines Review of Economics and Business 19:43-56. See #91 for complete abstract.

238

B

Brandtzaeg, Brita 1982

The role and status of women in post-harvest food conservation. Food and Nutrition Bulletin 4(1):33-40.

This article reviews several studies showing that women work more hours per day than men when home and market production are counted, and that labor-saving implements are often disproportionately available to men.

The author identifies food preparation and processing as an area of women's activity in which new technology could reduce their workload without displacing them.

239

E F

Brown, Barbara B. 1980

Women, migrant labor and social change in Botswana. African Study Center Working Paper No. 41, Boston University.

The author has evaluated the role of women in the development of Botswana by carrying out a study of 210 households from one large village, one small village and a cattle post area in the Kgatleng district. The interviews gathered information on household composition, education, work history, agricultural practices and division of labor and decision-making power.

Almost half of the men between the ages of 15 and 60 were employed, one-third of whom worked in South Africa. Among women, 25% were employed, one-fourth in South Africa. Eighty-five percent of women workers are single and two-thirds of these single women have children under 15 years old. Unmarried mothers represent almost one-half of the adult female population, and they often receive no support from the fathers. In the Ministry of Health's survey of young children at nutritional risk, 42% received no support from their fathers.

Women's economic position has been undermined in Botswana. Male outmigration and an increasing population have led to a breakdown in family structure and support. The majority of rural women are financially dependent on their wage-earning children. Women in the labor market work in the sectors with lowest pay and least security.

The author recommends that the government assist women by developing income generating programs, by enacting its proposed arable land policy and by providing family planning and career counseling and allowing pregnant girls to remain in schools.

240

B

Brown, Judith K. 1970

A note on the division of labor by sex. American Anthropologist 72(5):1073-78.

This article suggests that the division of labor by sex in subsistence economies is determined by the compatibility of a given activity with child care, and that women's maximum economic potential is reached when the criterion of compatibility is met. Features which make work compatible with child care are: close to home, not dangerous, easily interrupted and resumed, and requiring little concentration.

This hypothesis has been widely criticized both because these features are characteristic of low-paying, low-productivity work and because many traditional women's activities in agriculture and home production do not meet the criterion.

241

E

Brown, Paula, and Brookfield, H. C. 1967

Chimbu settlement and residences: a study of patterns, trends and idiosyncrasy. Pacific Viewpoint 8(2):119-151.

This article reports results of an eight-year study of changes in the residence pattern of family groups among the Naregu tribe of Chimbos, a subsistence agricultural group.

At the beginning of the study, men and women were living separately: men communally, and women each with their children. Boys at age 10 moved in with their fathers. The trend has been for men to live with their wives and children. The authors suggest that economic progress has resulted in the requirement for more labor at home, because the number of pigs owned by households has increased.

242

B D

Bryson, Judy C. 1981

Women and agriculture in sub-Saharan Africa: Implications for development (an exploratory study). In Nelson, N., African Women in the Development Process. Totowa, NJ: F. Cass & Co.

Based on eight years of residence in Ghana, one in Cameroon and visits to Burundi and Lesotho, the author presents her conclusions on the role of women in sub-Saharan agriculture. Her results indicate that while women's labor is somewhat less important in modern intensive cultivation systems, there is no significant difference between labor usage practices of societies with extensive cultivation and those with intensive cultivation practices. Introduction of land registration, monetization of bridewealth, and new economic opportunities for men have had negative consequences for women in sub-Saharan Africa. Development has led to increased female labor input into food crop production, enhancing their control of agriculture.

The author argues that development programs that concentrate on providing attractive options for men will support growing and separate success for men and women. This results in mutually reinforcing benefits of increased income and demand for products in industry and agriculture.

243

B D E

Bukh, Jette 1980

Women in subsistence production in Ghana. Pp. 18-20 in Women in Rural Development: Critical Issues. Geneva: ILO.

Introduction of a market economy into a rural area in the Volta region of Ghana has led to new social differentiations and male migration. Many of the family and lineage group's functions have been taken over by the more isolated household unit. Cash-cropping and male migration have shifted responsibility for food crop production to women. Almost half of the households are now headed by women. Yet traditional patriarchal patterns of access to land, labor, cash and education hamper rural women's ability to ensure subsistence. Women tend to engage in activities which allow them to perform different tasks at the same time.

244

B

Bunster B., Ximena 1985

Market sellers in Lima, Peru: Talking about work. Ch. 5 in Buvinic, M., Lycette, M. A. and McGreevey, W. P., eds., Women and Poverty in the Third World. Baltimore: Johns Hopkins University Press.

This paper describes the daily routine of women market sellers in Lima, Peru. Results are based on 2-3 hour interviews with 21 women, aged 21-55, who had fixed stalls in the Ciudad de Dios market. Sixteen of the women lived with their husbands, four were household heads and one was living in a consensual union. Their day starts at 3 or 4 a.m. with cooking food for the children who attend school. Children start working with their mothers at age 10, helping to carry merchandise to the market. After the market women return home to cook dinner, sew, wash clothes, etc. Most of the women preferred to work outside the home, and market selling was viewed as the most appropriate paid work for mothers.

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A B

Burfisher, Mary E. and Horenstein, Nadine R. 1983

Sex roles in the Nigerian Tiv farm household and the differential impacts of development projects. The Population Council Study No. 2. New York, March. 89 pp.

This study analyzes the impact of an agricultural intervention package of improved inputs and cultural methods on the Tiv people of central Nigeria, where both sexes have major but non-overlapping roles in agricultural production. In general, total labor input into a crop determines control over income from its sale. Women control subsistence crops of yams and cassava, while men control millet, beniseeds and rice. Women are responsible for feeding the family so they place priority on subsistence crops despite the high labor requirement and lack of cash income.

The analysis uses secondary data to determine differential project impacts by comparing new labor requirements with current labor roles and changes in income distribution and financial responsibilities for each sex. Implications of introducing new technologies include: productivity improvements occur for only some tasks, conflicts in labor allocation may be introduced, and adoption of innovations cannot depend on pooled family labor as a resource or shared family income as an incentive. The authors suggest that the household should be viewed as an integrated production and consumption unit so no distinction is made between farm and non-farm activities.

Burfisher, Mary, and Horenstein, Nadine 1982

Division of labor and income of the farm: a framework for analyzing differential impacts of development projects on women and men. Paper prepared for USDA/ERS/International Economics Division/Africa and Middle East Branch, January.

This paper describes the effects of a large-scale agricultural improvement program on sex-specific income, labor, and task-allocation. The project was undertaken among the Tiv of east-central Nigeria, a subsistence agricultural group. Within the household, goods and labor are exchanged or sold for cash, and loans are made with interest; resources are not pooled. Traditionally, the person with the greatest labor input controls disposition of the crop; different crops are associated with men and women.

The study found that technological change affected the demand for different kinds of labor differently. The authors suggest that an increased demand for one party's labor on a crop controlled by the other will jeopardize the acceptance of an innovation. In this case, women spent their time on the crops which they controlled.

Another issue is that increased profitability of crops may result in displacement of women by men. This occurred with rice in the 1970s, and is happening with cassava and watermelon now.

Projects must be analyzed in terms of sex-specific distribution of labor and income, and in terms of sex-specific barriers to and motivations for participation.

Burton, Michael L.; Brudner, Lilyan A.; and White, Douglas R. 1977

A model of the sexual division of labor. American Ethnologist 4(2):227-51.

This article reviews previous attempts to explain division of labor by sex, and summarizes them in two principles: women's work occurs relatively closer to home and involves less dangerous tasks than men's. The authors add two other considerations: that the same sex will perform adjacent tasks in a given production sequence, and that men will be more engaged in raw material production because raw materials are found in nature, that is, distance from the household.

The authors test the model with data on 50 tasks from 185 societies in a standard cross-cultural sample. Their results do not contradict the predictions of the model. In addition, they report that women's participation in agriculture is facilitated by early supplementary feeding of infants, supporting the notion that child-bearing and nursing are major constraints on women's activities.

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E

Butz, William P. and Stan, Peter J. E. 1982

Interhousehold transfers and household structure in Malaysia. Population and Development Review 8 (Suppl.):92-115.

This article uses data from the Malaysian Family Life Survey to describe resource transfers (time, money and goods) between households. Detailed information on household composition makes it possible to identify age and sex groups receiving different kinds of transfers.

Transfers are a major source of income, especially in low-income households. Nuclear households are involved in more transfers than extended, presumably because incorporation in the household masks the transfers.

The study finds systematic differences in recipients of different types of transfers. Older household heads receive money and time (services) from their children; household heads transfer more to their parents than they receive from their children. Parents give time to children, but receive money from them. Chinese household heads receive more support from their children than Malays; Malays exchange money and goods more, while Chinese households exchange time.

E

Buvinic, Mayra, and Youssef, Nadia H. 1978

Women-headed households: the ignored factor in development planning. Report submitted to USAID Office of Women in Development, Washington, D.C., March. See #96 for complete abstract.

249

F

Cain, Mead 1984

Women's status and fertility in developing countries: Son preference and economic security. World Bank Staff Working Paper No. 682. Washington: IBRD.

This paper presents a fertility decision model based on a safety-first criterion to evaluate the relationship between women's status, defined as their degree of economic dependence on men, and fertility. The model suggests that parents concern themselves with costs and benefits of children only after old age security has been satisfied by a certain number of surviving offspring. Changes in

child-rearing costs or the value of child labor can cause declines in fertility only if fertility exceeds the security target level.

Where women are more dependent on men, sons will be preferred and fertility levels will be higher. A comparison of 114 Bangladeshi households with 119 Indian households shows the significance of women's status for fertility. Women in Bangladesh who may not participate in field labor have a higher level of economic risk and thus higher fertility rates. Women's status is a structural phenomenon and is benefited by protecting this system, representing a powerful source of resistance to change. Patriarchal structure affects women's status and increases fertility by increasing the economic dependence of women, fostering son preference and constraining female educational attainments and thus infant and child mortality improvements. Therefore, patriarchal structure, as indicated by age difference between spouses, rather than women's economic status, is the variable used in cross-national fertility comparisons. Plotting World Fertility Survey data on fertility rates against median age differences for 21 countries suggests a positive relationship. A similar correspondence for degree of son preference and median age difference in 27 countries was observed.

250

B C E

Cain, Mead; Khanam, Syeda Rokeya; and Nahar, Shamsun 1979

Class, patriarchy, and women's work in Bangladesh. Population and Development Review 5(3):405-438.

This lengthy article provides a detailed discussion of the patriarchal social structure in Bangladesh and its effects on women's home production, labor force participation and wages, economic security, and status. Males control productive resources, including women's labor. The results of a study of 114 households in Mymensingh district are also reported. Twenty-four hour time budgets were collected by retrospective interview for every household member over age four every 15 days for a year. The authors argue that time allocation is the only way to study work roles of women because home production is non-monetized, and much labor is home- or family-based.

The study found women and men work about 8.3 hours per day, of which 85% is allocated to home production for women and 64% is allocated to wage and agricultural work for men. Poorer men do more wage work; men from landed households do agricultural work. In better-off households men work fewer total hours; there is no difference for women.

Sexual division of labor is rigid. Women's market work does not affect men's home production. There are fewer wage opportunities for women than men, and wages are lower. Child care, exclusively a woman's responsibility, reduces labor force participation. Women are thus dependent on men for support.

The authors report qualitative evidence that males, especially adult males, are favored in household food distribution, since men eat first. Women often forgo their inheritance rights to obtain favor from brothers in case of widowhood. Women's greatest security is to have sons.

Women's work time varies by status in the household: new daughters-in-law work 9.7 hours; wives with children, 8.3 hours; and mothers (of household head), 5.1 hours.

The authors report that nuclear families are becoming the norm in Bangladesh, and that traditional family support networks for women are breaking down.

251

C

Carlioni, Alice Stewart 1981

Sex disparities in the distribution of food within rural households. Food and Nutrition 7:3-12.

This article reviews the evidence from several studies of food distribution within households, and discusses possible explanatory factors.

The author suggests that absolute security increases sex bias in food distribution. Some cases are cited. Control over distribution of food may increase access. meal patterns are a factor. If men eat separately, they may not be aware of the deprivation of women and children. If members eat from a common pot, older children may compete with younger ones. Finally, a determinant of food distribution is the perception of the needs of household members and of their ultimate economic value.

252

F C

Cassidy, Claire Monod 1980

Benign neglect and toddler malnutrition. Ch. 6 in Green, L. S. and Johnston, F. E., eds., Social and Biological Predictors of Nutritional Status, Physiological Growth and Neurological Development. New York: Academic Press.

This chapter presents the benign neglect hypothesis to explain parents' perspective of social and weaning customs in LDCs that contribute to toddler malnutrition. The author argues that parents who practice such customs do not see their acts as harmful, but rather as appropriate to promoting the child's socialization in a culturally accepted direction. Thus the neglect is secondary, an accidental side-effect of progress toward another goal.

During the weaning process toddlers may become malnourished due to food restrictions and added stress caused by maternal deprivation syndrome or customs which may cause rejection of the child. Cross-cultural examples of toddlers' disadvantaged position in age- or sex-based competition for food are also presented. The ignorance or lack of affection hypotheses do not adequately explain parental neglect because parents report that these customs help the child or its social group in some way and therefore they persist. The author argues that any parental behavior which promotes the social normalcy of the child is appropriate and, under these circumstances, should be considered benign neglect.

253

A B D

Caughman, Susan 1981

Women at work in Mali: The case of the Markala Cooperative. Boston University African Studies Center Working Paper #50. 35 pp.

This paper describes the impact of a women's cooperative on the division of financial responsibility between men and women in households in Markala, Mali. Traditionally, rural women provide food and clothing as well as school supplies, medicine and daughters' wedding trousseaux. Most traditional female tasks are now monetized but there are few cash earning opportunities for women. Women who earn money do not turn it over to their husbands, as financial independence is highly valued.

The cloth-dyeing cooperative provides equal salaries rather than by the piece to its members, who retain control of this income. Some said their husbands now gave them less money, however. Although the coop was criticized at first, there is now a waiting list for membership. Due to time and resource constraints the coop does not address health/nutrition issues or serve a social function.

254

B

Cecelski, Elizabeth 1984

The rural energy crisis, women's work and family welfare; perspectives and approaches to action. World Employment Programme Working Paper no. WEP 10/WP 35. Geneva: ILO.

The implications of fuel needs for allocation of labor, food consumption and the division of labor among poor rural families are evaluated in this paper. The lack of cash for fuel increases the time women and children spend on fuel collection. Traditional fuel gathering is timed around peak agricultural needs. However irrigation and modern agricultural methods will interfere with this pattern by increasing frequency of demand for agricultural labor. As fuel becomes commercialized men's participation increases because

they have primary access to the necessary tools and means of long-distance transportation.

The lack of available fuel also limits the income-earning abilities of women, as certain activities are fuel intensive. Food and fuel are complementary goods, since fuel is necessary to cook food, but they compete for cash and labor resources. Fuel shortages may reduce both quantity and quality of food consumed, thus impairing health and nutritional status.

255

B D

Cernea, Michael 1978

Macrosocial change, feminization of agriculture, and peasant women's threefold economic role. Sociologia Ruralis 18(2/3):107-24. World Bank Reprint Series, #98.

This article discusses the effects of economic modernization on women's economic and social role in the Romanian peasant population.

Rapid industrialization has resulted in rural outmigration of men, so that women are now the main agricultural labor force, and older women are drawn back into economic activity.

Leisure has not increased. Women spend more time in child care and food preparation, as well as agricultural work. Women's decision-making power has increased because of the absence, for much of the time, of men.

256

A B C D

Chambers, Robert, and Moris, Jon, eds. 1973

Mwea: An Irrigated Rice Settlement in Central Kenya. Munich: Weltforumverlag Afrikastudien. 539 pp.

This book provides an in-depth analysis of a large-scale resettlement scheme which moved 2500 tenants onto 11,500 acres of newly irrigated riceland. The ecology of the area, history, and organization of the scheme are described. Detailed information was obtained by surveys about tenant performance, household budgets, and the different roles of women and men, and on food consumption (household-level), health and nutritional status.

The study found that although household income increased on the scheme, nutritional status declined. Protein and riboflavin deficiencies were observed. This was partly because tenants are paid seasonally rather than monthly, so that cash ran out before the next season, and because households accustomed to subsistence agriculture are reluctant to use cash for food. Households consumed little milk and meat, eggs, and vegetables.

Traditionally, there was a clear sexual division of labor and responsibility, by which women engaged in food production along with child care and household maintenance (water, firewood). Women worked on men's cash crops, whose revenues the husband controlled, but sold surplus from the food garden for cash which they controlled.

In the scheme, tenant households deal with the administration through the male "head," who is paid for the whole family's work. Women spend more time (unremunerated) on rice, less on their own food gardens. Further, firewood is less available, so women must purchase it, a further drain on their reduced budgets. Because of resettlement, traditional support of friends and relatives in child care and housework is no longer available.

This report demonstrates that an increase in household real income may not improve health and nutrition if income control is shifted and changes in household labor burdens are not acknowledged.

257

F

Chamie, Mary 1983

National, institutional, and household factors affecting young girls' school attendance in developing societies. Paper prepared for International Center for Research on Women and the Office of Human Resources, USAID, Washington, D.C. 69 pp.

This paper discusses how family size and composition, demands for girls' labor and age at marriage lower females' school attendance rates in LDCs. Among poorer families, children's contributions in fuel gathering, food preparation, child care and income-generating activities are vital to survival. Thus the opportunity costs of schooling are greater for poor families, especially for girls who have earlier and greater household labor responsibilities. There is evidence that large family size is sometimes positively associated with female educational achievements. In addition to the demand for girls' labor, early marriage often forces girls to drop out before completing primary school. School policies designed to increase school attendance among older girls should plan for multiple entry points into the primary education system.

258

A D

Chand, Malini; Jain, Devaki; Kalyandsundaram, R. and Singh, H. 1980

Income Generating Activities for Women: Some Case Studies. Indian Cooperative Union, New Delhi. 144 pp.

The authors argue that income generating projects specifically for women are needed because they are disadvantaged both within the household and in projects serving both men and women. Four projects

were chosen as case studies: Lijjat Pappad Center, Tamil Nadu Sarvodaya Sarigh Spinning, Jammu and Kashmir Handloom, and Sikki Grass. These cases offer rich descriptions of each project's organization, economic impact on women, and effects on women's status. Reasons for variations in effects are explored in depth.

259

E C

Chaney, Elsa M. 1983

Scenarios of hunger in the Caribbean: migration, decline of small holder agriculture and the feminization of farming. Michigan State University Working Paper #18. 22 pp.

This paper focuses on correlations between malnutrition and occupation among women-headed households, which make up one-third of Jamaican households. Deterioration of the small farm sector, caused by outmigration of men, has led to the feminization of agriculture. Women's farm holdings are smaller than men's, yet they often are responsible for large families, while men may cease any contributions to some of their children as the number of their dependents increases.

The Nutrition Advisory Council (1978:II) estimates that Jamaican households spend an average of 70% of their disposable income on food, rising to 80% for lower income households who comprise the great majority. Therefore most households require more than one wage earner to survive.

260

B E

Chaney, Elsa M., and Lewis, Martha W. 1980

Women, migration and the decline of smallholder agriculture. Paper presented for USAID, Office of Women in Development, Washington, D.C., October. 48 pp.

This paper reviews in some detail a large number of studies from many countries of rural-to-urban migration, its effects on the distribution of labor in agriculture, and agriculture productivity under varying conditions. The authors describe a common situation in developing countries whereby a high percentage of adult males leaves the rural area, and women take over men's agricultural tasks in addition to their own. Possible consequences are reduced agricultural productivity, because of the greater burden and fewer resources (credit, modern inputs) available to men; also, income and cash remittances may be more likely to be spent on food and consumption needs than agricultural investment in these de facto women-headed households. In some cases, land is not adequately maintained, so women's dependence on men increase; eventually women may also migrate, and agriculture declines.

The authors discuss the need for empirical data on women's agricultural roles in the absence of the men who have migrated, and the difficulty of collecting the information because women's agricultural work is often not recognized and not monetized. Several studies are cited showing the major productive role of women and the problem of measuring it because of inaccurate reporting even by the women themselves.

The authors recommend more agricultural assistance for rural women left behind by migration. Also, more information is needed on the reasons women stay behind when men migrate.

261

B E

Chant, Sylvia 1984

Household labor and self-help housing in Queretaro, Mexico. Boletín de Estudios Latinoamericanos y Caribe 3745.

The main conclusion reached in this study of sexual division of labor among low-income Mexican households is that task sharing benefits the household by increasing work efficiency. Three settlements, selected on the basis of age, origin and service levels, were studied through use of 250 questionnaires and 47 semi-structured interviews. Results indicated that 68% of the women were full-time housewives, which rose to 88% if those who also work in paid employment were included. Lack of piped water, open air lavatory practices and dirt floor shacks increased the time burden of housework.

Task sharing was found to vary by family structure: 43% of women in nuclear families had no help, compared with 49% in female-headed households. In extended families tasks were shared in all female-headed households and in 91% of male-headed ones. Shared labor decreases per person time spent in domestic work and equalizes the time budgets between the sexes. Women in nuclear families have a workday 45% longer than their husbands compared to a 31% excess in extended families. The ethic of sharing and the higher proportion of women in the paid labor force (44% vs. 32% in nuclear) among extended families may explain why over 50% of men in these households help out with domestic work compared to 25% in nuclear families.

262

B D F

Charlton, Sue Ellen M. 1984

Women in Third World Development. Boulder, CO: Westview Press.

Ch. 3, "The Food Cycle," looks at the role of women at every point in the food cycle: food production, preservation and preparation. Case studies from India, the Philippines and the Sahel are examined, and guidelines for studying women's activities in the structural context

of family needs, decision-making and division of labor patterns are presented.

Ch. 4, "Food Production, Processing and Preparation," discusses the impact of technology on the domestic and farm burden of women. Failure to involve women means that factors crucial to the usefulness of a technology are overlooked: crop by-products, labor/energy requirements for operation, access and time issues, and control over the resulting products. These problems are illustrated with a case study of Gambian irrigated-rice projects during the 1970s.

Ch. 5, "Credit, Nutrition and Family Planning," talks about choosing policy alternatives for credit-granting mechanisms and cash crops to benefit women. This requires knowledge about the linkage between the agricultural activity and intrafamilial relationships, revenue-generating activities and government food and trade policies. Similar linkages must be examined before developing nutrition and family planning policies in the context of broad economic and social change.

263

B

Chatty, Dawn 1978

Changing sex roles in Bedouin society in Syria and Lebanon. Ch. 19 in Beck, L. and Keddie, N., eds., Women in the Muslim World. Cambridge, MA: Harvard University Press.

This chapter examines effects of the shift in Bedouin men's and women's roles from traditional subsistence to market-oriented production due largely to the replacement of camels with trucks. Members of the pastoralist al-Fadl and al-Hassanna tribes were studied at the level of the *beit*, which is the basic economic unit and is defined as the kin group sharing the same residence. Pastoralists are not self-sufficient; they exchange animal and dairy products for grains and other goods from agriculturalists and urbanites. In this traditional economy, all household members were actively engaged in animal husbandry and subsistence to maintain rather than increase production.

The shift from camels to trucks in the 1960s has led to changes in living arrangements and work patterns. The truck has decreased migration and travel time and has led to a concentration of residences along roads. men who were once involved in camel service now work seasonally in various occupations and women have experienced a similar shift to market-oriented work. While both men and women are satisfied with the economic benefits of the truck, women regret the loss of female communal solidarity and cooperation that were associated with the camel. The author concludes that the changes brought about by the use of trucks have strengthened the solidarity of the *beit*.

Chaudhury, Rafiqul Huda 1983

Determinants of intrafamilial distribution of food and nutrient intake in a rural area of Bangladesh. Monograph (draft), Bangladesh Institute of Development Economics, Dacca, February. See #102 for complete abstract.

264

C

Chen, Lincoln C.; Huq, Endadul; and D'Souza, Stan 1981

Sex bias in the family allocation of food and health care in rural Bangladesh. Population and Development Review 7(1):55-70.

This article describes and reports results of a careful, detailed study to test the hypothesis that the higher mortality rate of girls than boys aged 1-4 in a rural village in Bangladesh is due to sex bias in allocation of food and health care.

The study used records of the International Centre for Diarrheal Disease Research on births, deaths, and diarrheal treatment of 882 households with children under age 5. These households were surveyed to obtain baseline data on socioeconomic and anthropometric status of household members. A sample of 100 Muslim families was selected for in-depth one-year longitudinal study, including 24-hour individual and household food consumption, anthropometry, morbidity, and assets, income, and expenditure. Food consumption was measured by weighing raw food and by direct observation of the volume of food as served, the household's utensils having been measured previously.

The study found female mortality exceeded male mortality between ages 1 and 44, the difference declining with age. Male mortality was higher in infants and in adults aged 45-64. Severe and moderate malnutrition (weight- and height-for-age) were much higher among female children; male caloric and protein consumption was greater than female in all age groups. Rates of infection were (insignificantly) lower for girls. Incidence of diarrhea did not vary by sex, but males were treated 66% more often than females. This pattern persisted to age 14, after which females used health services more.

The authors suggest that sex bias in food and health care allocation is due to the expected economic contribution of sons. The study found women distribute family food, that men rarely made explicit requests for more food, and that typically families ate the evening meal together. Women denied that they allocated food differently based on sex, but said they would favor males in conditions of scarcity.

265

B

Chen, Marty 1982

Interaction of sex and class in women's work participation. Paper prepared for WID workshop on Women, Work and Public Policy, Center for International Studies, Massachusetts Institute of Technology, Cambridge, MA, Feb. 21.

This paper describes the main income-generating activities on a Bangladesh farm and the role of women's work in each. The author states that much of women's work is not recognized. Men control sale of produce and purchasing for the household; women do small-scale tracking through their children.

The sexual division of labor is rigid across all classes, but in poorer households women work outside the home and even outside the village. Capital-intensive development has eliminated some women's work, such as rice milling.

Methods of data collection are not described.

A E

Chen, Yung-Ping and Chu, Kwang-Wen 1982

Household expenditure patterns: The effect of age of family head, Journal of Family Issues 3(2):233-47. See #103 for complete abstract.

266

B D E

Cherneff, Jill B. R. 1982

Gender roles, economic relations and culture change among the Bontoc Igorot of northern Luzon, Philippines. Ph.D. dissertation, New School for Social Research. 166 pp.

This dissertation provides a rich description of the social structure among the Bontoc Igorot, based on participant observation plus open-ended interviews. Women dominate the local economy because they produce and allocate the rice crop. The traditional hierarchy of power is based primarily on class, which in turn is determined by ownership of rice fields. Successful rice production requires the ability to work cooperatively in groups, which explains the predominance of kinship linkages and neighborhood groups as means of maintaining reciprocal relationships. Sharing food to solidify kinship ties is a constant theme. Patterns of household structure and residence, work relationships and the division of labor by age and sex are also described.

267

F

Chernichovsky, Dov 1985

Socioeconomic and demographic aspects of school enrollment and attendance in rural Botswana, Economic Development and Cultural Change 33(2):319-332.

The determinants of children's school attendance in rural Botswana are assessed using data from 2,253 children aged 6-18. Only 59% of children aged 10-14 are enrolled in school, with a higher percentage of girls across all age groups attending school. OLS regression analysis shows that children in larger villages are more likely to be enrolled, although this is not statistically significant. The number of children aged 7-14 and number of elderly household members have a positive effect on schooling while the presence of a baby is negatively associated. Household heads' education has the most significant impact on schooling and length of enrollment. The hypothesis that parents consider number and quality of children to be substitutes was rejected.

268

F

Chernichovsky, Don and Meesook, Oey Astra 1985

Utilization of health services in Indonesia. Draft paper prepared for the World Bank, Research Project 672-19. 24 pp.

Patterns of health service use in Indonesia are described in this paper, based on analysis of secondary data from the 1978 National Socioeconomic Survey. It is hypothesized that choice of service is influenced by income, pertinent relative prices and preferences or tastes. A linear regression model is used where household consumption expenses relative to size is a proxy for income and years of schooling for the household head is a proxy for taste and efficiency. Data on the use of medical treatment and type of care provider for pregnant women, new mothers and people who had been ill the week before the survey were analyzed. The results confirm that type of care is income-related and that only the relatively rich see physicians. In cases of illness, larger families substitute traditional practitioners with paramedics. The effect of education of the household head on service use is ambiguous.

269

A C E

Ciparisse, Gerard 1978

An anthropological approach to socioeconomic factors of development: the case of Zaire. Current Anthropology 19(1):37-41.

This article describes the allocation of resources among household members in rural Zaire. The primary economic unit is the clan;

nuclear units have little importance. Consumption goods are allocated based on age: elders receive most; women and children receive least.

Women work the land of their husband's clan, but give gifts and assistance to their own clan. Children are also given to their mother's clan. Women sell crafts for cash to support their own and their children's needs.

In this setting, benefits are distributed based on rank, not productivity, so, the author holds, there is no economic incentive for progress.

270

B F

Clark, Carol A. M. 1983

Children's economic activities and primary school attendance in rural Guatemala. Guilford College, mimeo. 32 pp.

Time use data of 351 children aged 7-14 from four rural Guatemalan villages were analyzed to determine if work responsibilities could explain school non-attendance. Analysis of all measured no-school activities showed 66% of non-attending boys aged 11-14 work more than 7 hours while 96% of attenders work less than 7 hours. For 7-10 year old boys, 43% of non-attenders did no work and 18% worked less than 3 hours. Information for girls was not examined due to incomplete data. Explanations proposed to explain why work responsibilities did not adequately account for non-attendance included the weakness of data using 24 hour recall of a predetermined activity list, inadequate conceptualization of work and the overall context in which decisions were made about schooling.

271

C

Clark, Carol A. M. 1981

Demographic and socioeconomic correlates of infant growth in Guatemala. Santa Monica, Cal.: Rand Note N-1702-AID/RF, September.

This paper reports results of a regression analysis of survey data from four Guatemalan villages, to explore the factors determining that larger households are more likely to have malnourished children. The hypothesis is that child growth is affected by the mother's health (milk supply), time (influenced by other siblings), and resources.

The study found that male children had higher rates of growth than females. Length of breast-feeding positively related to growth. For children 6 to 12 months old, growth was negatively related to the number of children under six and the number over 15. For infants up to six months, number of children under six was negatively correlated, but over 15 was positively correlated with growth.

272

B C

Clark, Carol A. M. 1979

Women's work and child nutrition. Paper presented at Latin American seminar on the Interrelation of Malnutrition, Population and Social and Economic Development, Guatemala, September 9-12.

This paper discusses the possible dynamics of the relationship between women's labor force participation and children's nutritional status, and reviews several studies which address the issue.

Both time and material resources are essential to child survival; to some extent, time and goods are substitutable. The question is under what conditions the increased income of mothers makes up for the reduced time available. Some determinants of the tradeoff are the presence of other sources, income in the household (including other wage-earners), the productivity of women in paid work and in child care, compatibility of available paid work with child care, availability of other child caretakers in the household, norms of women's and children's behavior, and child health. Women's paid work may alter the composition of foods consumed (less labor-intensive, higher cost, higher quality), and the allocation of that food (e.g., the woman may receive more food herself or may be able to allocate the food to the children), as well as women's use of services such as health care.

Studies suggest that women reduce labor force participation where they have young children; those women who work for pay do so out of economic need. Thus the association of women's paid work with poor nutritional status of children is a poverty effect. Women with children are more likely to work for pay if other adult women are present in the household. In some cases, paid work time of women reduces leisure more than child care time.

Needs for further research are listed.

273

E

Clark, Mari H. 1985

Household economic strategies and support networks of the poor in Kenya. A literature review. World Bank-Water Supply and Urban Development Dept. mimeo. 71 pp.

This paper reviews the literature on the role of informal networks in survival strategies of low-income Kenyan households. The largest of 30 African cultural groups in Kenya are described in detail and various formal and informal social networks are presented. The poor participate primarily in informal networks. Neighbors and female relatives are more readily called upon by women while men's networks

are more geographically widespread and include extended kin and regional ties.

The author identifies three major strategies the poor use to meet their basic needs: operating outside the market economy, diversifying income options to ensure cash income for the household, and adjusting the number of members to the available resources.

274

A B C D

Cloud, Kathleen 1978

Sex roles in food production and distribution systems in the Sahel. Paper published in International Conference on Women and Food at the University of Arizona, Tucson. Distributed by USAID and FDCA, Office of Women in Development, Washington, D.C., pp. A43-A70.

This paper describes the roles of women in food production and distribution to make the point that drought relief and development programs must recognize the labor burden on women, their critical role in the food system, and their need for cash income. Past projects are criticized in this regard: a program to replace cattle that died in the drought gave them only to male "household heads," though women have separate title to cattle from bridewealth, dowry, and gifts. Also, large irrigation and resettlement projects have failed to provide subsistence farming plots, have channeled income only to the male, and have not provided help for the fuel- and water-getting activities of women.

The major production systems of the Sahel are described. Among both sedentary farmers and transhumant pastoralists, men and women have separate economic spheres. women are responsible for growing or fathering most of the food, and for food storing, processing, preparation, and distribution. Men control use of cash crops and the income from them; women control use of surplus from subsistence activities, but few of their activities generate cash. Men's income is used for farm inputs, taxes, and modern goods such as radios, and not usually to increase food expenditure.

275

F

Coreil, Jeannine 1983

Allocation of family resources for health care in rural Haiti, Social Science Medicine 17(11):709-19.

This study identified sociocultural and environmental factors that determine intrahousehold resource allocation for care of sick children in rural Haiti. Data were collected on beliefs about disease categories and survival from 25 men and 25 women and on 230 episodes of illness among 0-15 year old children. Five measures of resource allocation for each episode (number of consultations, total

money, total times, average daily money and average daily time expended) were analyzed in relation to prognosis, age and sex, diagnostic category, family size and structure, recent family medical expense and season of the year.

Of the 230 episodes surveyed, 64% were treated outside the home with a mean travel time of 27 minutes. Western therapy was obtained for two-thirds of the treated illnesses but accounted for only 47% of total expenditures. Girls averaged 65 cents per illness versus 98 cents for boys. Single-headed households and those with four or more children spent less money and time on health care. Families spent more to cure illnesses with a poor prognosis because they were thought to have supernatural cause which required expensive voodoo healing. Ethnomedical beliefs and practices are key determinants of resource allocation, with costs largely determined by the type of healer.

276

A B

Cosminsky, Sheila, and Scrimshaw, Mary no date

Sex roles and subsistence: a comparative analysis of three Central American communities. Ch. 3 in Loveland, C. and Loveland, F. (eds.), Sex Roles and Social Change in Native Lower Central American Societies, Urbana, IL: Univ. of Illinois Press.

This chapter describes economic and social roles of women at different lifecycle stages in three communities: a coastal plantation and a highland Maya town in Guatemala and a Black Carib population in Belize.

The authors conclude that economic options for women vary with their lifecycle stage and that of their households. Among adults, there is a sexual division of labor, but mutual dependence. Women's wages are low, though, so they depend on men for support. Women's time constraints are more stringent in nuclear households. Children assist in child care and homework, until they are old enough (about 15) to work for wages. Older women gain respect in all groups, although earnings and autonomy increase only among plantation women.

A richly detailed description of each society is given.

DaVanzo, Julie and Lee, Donald Lye Poh 1983

The compatibility of child care with market and on-market activities: Preliminary evidence from Malaysia. Ch. 4 in Buvinic, M., Lycette, M. A. and McGreevey, W. P., eds., Women and Poverty in the Third World. Baltimore: Johns Hopkins University Press.

This descriptive analysis of time budget data from the Malaysian Family Life Survey uses cross-tabulations and ordinary least squares regressions to evaluate the compatibility of childcare with market and non-market activities. The research utilizes Becker's model of time allocation within the household, with age, education of children and the work environment identified as determinants of demand and productivity.

Size and composition of the household were the most important determinants of the number of hours devoted to market and non-market activities, with the exception of shopping. More than three children reduces mother's time spent in production although the presence of children aged 6-10 years has a positive impact on the hours worked in agricultural activities. Younger children are more likely to accompany a working mother although they negatively affect productivity. Household capital, schools and servants decrease various aspects of mother's non-market activities while her education increases cooking and cleaning time. Regression results show that women find substitutes among household members for nonmarket work, and they substitute market for nonmarket activity time. When a woman works outside the home, the number of her hours in childcare declines more than other household activities although the effect is small, indicating a decline in her leisure time. However, as education levels of mothers increase, the amount of childcare she entrusts to other children declines.

Davis, Susan S.

Patience and Power: The Lives of Moroccan Village Women. Cambridge, MA: Schenkman Publishing. 200 pp.

This book presents a detailed picture of Moroccan women's daily activities and their public and private roles in the economic, political, religious and social spheres. The information was collected through participant observation, unstructured interviews and the collection of genealogies. The small size and non-random nature of the sample (total of 50 women, all of middle-class background) were acknowledged limitations, but were due to Moroccan cultural restrictions. At 4-6 years a girl has the responsibility of caring for younger siblings, running errands and helping with household chores. By the age of 6 children associate exclusively with members of the same sex. Married girls have low status until

they bear children. Although women earn money at home by raising livestock, working outside the home lowers their status.

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A B

Deere, Carmen Diana 1983a

The allocation of familial labor and the formation of peasant household income in the Peruvian Sierra. Ch. 6 in Buvinic, M., Lycette, M. A. and McGreevey, W. P., eds., Women and Poverty in the Third World. Baltimore: Johns Hopkins University Press.

This discussion focuses on rural women's contribution to household income and the impact of access to means of production on household activities in Peru. The latter is highlighted by the concept of the household as a producer of use and exchange values rather than units of home and market production. The data are from the 1973 Cajamarca Income Survey of 1050 households and the 1976 follow-up survey of 105 households that focused on the division of labor by sex and age, plus family case studies. Smallholders (3.5 hectares) comprised 71% of the sample; 60% of women engaged in market activities.

Results indicated mothers had full responsibility for production of use values in half of the households and they shared this with daughters in another third. The father was responsible for agriculture in 64.5% of households versus mothers in 5.7%. Socioeconomic status affected both total time and type of work women contributed to agriculture. Artisan production occurred in 97% of households and was performed mostly by women who added 76% of use value.

Among poorer households the woman's lesser contribution to income reflects the increased integration of the household into the labor market and its dependency on wage income. Men's wages are twice those of women's for activities in which both engage. Differential wages encourage greater male labor market participation and division of labor by sex on the farm because the foregone income from women's use-value and exchange-value production on the farm would be greater than their labor market wage income. The author concludes that since women contribute to total household income through use-value production, their poverty is determined by the household's poverty which is a condition of its degree of access to means of production and capitalist conditions of employment.

280

A B

Deere, Carmen Diana 1983b

Cooperative development and women's participation in the Nicaraguan agrarian reform. American Journal of Agricultural Economics 65:1043-1047.

The history of and women's participation in the Nicaraguan agrarian reform since the late 1970s are discussed in this article. The analysis is based on 13 case studies of 8 production and 5 credit and service cooperatives spread throughout the country. The author notes that one of the objectives of the reform is to incorporate rural women into agricultural cooperatives and therefore there are no sex or kinship limitations, and recipients of land do not have to be household heads. In the coops women work the same amount of time as men and are entitled to equal pay regardless of task. Women face difficulties in hiring male labor due to lack of cash and dependability by male workers who do not respect women farmers. Women also participate less than men in cooperative decision-making because of their lower education and their lack of time due to greater domestic responsibilities.

281

B

Deere, Carmen Diana and Leon de Leal, Magdalena 1981

Peasant production, proletarianization, and the sexual division of labor in the Andes, Signs 7(2):338-360.

This article argues that economic factors can explain much of the variation in the sexual division of labor for productive activities, as demonstrated by a study of three Andean regions which have undergone uneven capitalist development. The authors' survey of female participation in various activities in noncapitalist Garcia Ruvira, capitalist Cajamarca and advanced capitalist El Espinal regions indicate that the sexual division of labor is more flexible in capitalist areas, where women play a more important role within the familial labor force. Although women's labor market participation increases with capitalist development, their importance in the overall labor market declines. There is also greater participation of women in agricultural fieldwork in the two more developed regions, particularly among women in the poorer strata.

C

den Hartog, A. P. 1982

Unequal distribution of food within the household (a somewhat neglected aspect of food behavior), Nutrition Newsletter 10(4):8-17. See #109 for complete abstract.

282

B E

de Garine, I. 1978

Population, production and culture in the plains societies of northern Cameroon and Chad: the anthropologist in development projects. Current Anthropology 19(1):42-65.

This article describes household structure, marriage patterns, and their effect on work in five societies. Data were obtained during five years of participant-observation in Chad and Cameroon.

The basic economic unit consists of four to five members; 52% of households are polygamous. Each economically active person supports 1.16 dependents, and more in polygamous households. The area cultivated by each person increases with the dependency ratio in the household.

The major economic factor in the area is the very high brideprice that must be paid for a high-status wife. Girl children are a major source of wealth for father.

283

C E

Desai, Patricia; Standard, K. L.; and Miall, W. E. 1970

Socio-economic and cultural influences on child growth in rural Jamaica. Journal of Biosocial Science 2(2):133-43.

This article reports results of a three-year longitudinal study of child growth as a function of family structure, socioeconomic status, and economic support. Households were visited twice monthly for two years and monthly in the third year; children were included until they reached age 4. Data were analyzed by factor analysis.

The setting was rural Jamaica. Most households were engaged in subsistence farming; both men and women migrate to find work and leave children behind. Family composition was very varied and unstable; consensual unions and separated partners were common. Family size averaged 7.2, with a range from 3 to 17 members.

The study found that economic variables were the best predictors of child growth, despite household instability. Children with neither parent were better off than those with the mother alone, because of economic disadvantages.

284

C E

DeWalt, Kathleen H. 1983

Nutritional Strategies and Agricultural Change in a Mexican Community.
Ann Arbor, MI: UMI Research Press. 232 pp.

This book describes research methodology and results of a study on diet and nutritional status in a Mexican agricultural community. Multiple structured interviews were held with adults in 62 randomly selected households, covering economics, demographics, capital inventory, health care resources market basket interview, three day recall of family meals and woman's nutrition knowledge and reproductive history. A second set of interviews was conducted four years later on a subsample of 27 households and included an agricultural technique survey, an interview with the female head, 24-hour food recalls and heights and weights of children under 10. The methods used for the diary recalls and market basket interviews are discussed in detail.

The relationship of dietary adequacy to nutritional status measured by the children's height and weight proved to be inconclusive, although the children are smaller in families where pulque (an alcoholic beverage) provides a greater proportion of total energy. A five-step method was used to determine household economic status and linear regressions were used to relate economic indices to food consumption. While economic factors affect the use of foods and overall dietary adequacy, they fail to account for much of the variation. It was found that dependency ratio was negatively correlated to diet complexity but had no effect on diversity. Intrahousehold variations on an individual level are not discussed in detail.

285

C E

Dewalt, Kathleen M., and Thompson, Karen S. 1982

Nutritional strategies in small farmer families in southern Honduras. Paper presented for American Anthropological Association 81st Annual Meeting, Washington, D.C., December 3-7.

This paper reports preliminary results of a study of food consumption patterns. Data were collected by survey and ethnographic methods, on household characteristics, food beliefs, and food consumption using 24-hour dietary recall and one-week market basket recall.

The study found in all three villages more than 100% of caloric requirements and about 200% of protein requirements (WHO standards) were obtained by households. Seventy-five percent of the calories and 68% of the protein came from grain. Fulfillment of needs was positively associated with use of corn, and negatively with sorghum, which is bought more frequently by poorer households.

Women-headed households met only about 75% of caloric needs, and older women had greater access to protein and calories, because they had fewer dependents and more land.

286

C

Dewey, Kathryn G. 1980

The impact of agricultural development on child nutrition in Tabasco, Mexico. Medical Anthropology 4(1):21-54.

This article reports results of a study of the effects of Plan Chontlapa, an agricultural development scheme involving resettlement, collective farming of cash-crops, and cattle-raising. A sample of 149 families with children aged 2 to 4 was drawn from three groups: those participating in the plan, non-members working on the plan for wages, and non-participants. Information was collected by interview including two 24-hour dietary recalls for each child and mother. Anthropometry, clinical evaluation, and blood and stool analysis were performed.

The study found no differences in nutritional status of children in the three groups. Plan members spent less time on subsistence food production, even though land was provided for the purpose. Deforestation and drainage reduced availability of wild foods and fish. Diets of plan members were less diverse and consisted of more purchased than home-produced food.

287

A. B

de Wilde, John et al. 1967

Experiences with Agricultural Development in Tropical Africa. Vol. 1: The Synthesis. Baltimore: Johns Hopkins University Press (for the World Bank). 264 pp.

This volume summarizes findings from a larger study of agricultural development projects. While questions of intrahousehold allocation are not specifically addressed, the author makes a few relevant points. One is that the sexual division of labor interferes with the most efficient use of household resources. Generally, men control the deposition of cash crops and women subsistence crops. In West Africa, women are predominant in trading. Also, that increased income of the household head is often used for conspicuous consumption rather than the family's basic needs.

Deere, Carmen Diana 1982

The division of labor by sex in agriculture: a Peruvian case study. Economic Development and Cultural Change 30(4):795-812. See #106 for complete abstract.

288

A B C

Dey, Jennie 1981

Gambian women: unequal partners in rice development projects? Journal of Development Studies 17(1):109-22.

This article reports results of a study of changes in the household economy following an agricultural intervention. Data were collected by interview. A detailed description of method is not provided.

The setting was rural Gambia. In pre-colonial times, women cultivated rain-fed rice, men grew groundnuts and millet, and both sold the surplus from home consumption. In the colonial period, groundnut production for cash was promoted, so that men's revenue and control over household income increased. As a result, studies have found women's caloric intake is 75 to 80% of WHO standards, while men meet their requirements.

The intervention under study was the development of irrigated land for double-cropped rice, and credit for modern inputs.

The study found that the project officers worked only with male household heads; women were excluded from ownership and credit under the scheme. They were thus forced to work on their husbands' rice land for wages. Women held back their labor under these conditions, and total rice production decreased.

289

B

Dixon, Ruth B. 1982

Mobilizing women for rural employment in Southern Asia: issues of class, caste and patronage. Economic Development and Cultural Change 30(2):373-390.

This article provides a general discussion of the sexual division of labor in south Asia as a basis for suggesting ways to develop income-generating employment for women.

The sexual differentiation of labor is more pronounced in relatively higher-class and caste households. Higher-caste women work only in extreme need, and seek traditional female employment (e.g., domestic

work). Rural landless women are relatively free of cultural restrictions on their behavior.

In these societies, women are secluded and interact privately with other women.

The author suggests that these women's networks be used to develop cooperative economic activities for women.

290

A B

Dixon, Ruth B. 1980

Assessing the impact of development projects on women. USAID, Bureau for Program and Policy Coordination, Program Evaluation Discussion Paper #8, May.

This paper reviews 32 AID-funded projects that include women as intended beneficiaries, and analyzes the factors that increase actual benefits to women. The author concludes that women need to be specifically targeted, and programs need to be administered at least in part by women; otherwise decision-making reflects male-dominated power structure. Women's time burdens must be accommodated. Projects must recognize existing sexual division of labor and build on women's activities so they can control their own earnings (though there have been instances of men taking over newly-profitable women's activities targeted in projects). Activities should accommodate prevailing norms of women's behavior to minimize resistance, promote participation, and act as a "wedge" with which to introduce further social change. The poorest women will require special targeting efforts. Concrete economic benefits will encourage women's participation. Legal and cultural constraints on women's autonomy must be understood and dealt with in project design.

The paper suggests a framework for assessing project impact that focuses on changes in sex-specific access to productive assets, division of labor and allocation of resources (food, schooling) within households. Cases are cited in which failure to accommodate sexual division of labor reduced household food consumption and nutritional status in the face of increased income, and in which control over income was diverted to men even though total income increased.

The paper concludes with suggestions for evaluating projects in terms of their effects on women.

291

F

Dixon, Ruth B. 1976

The roles of rural women: Female seclusion, economic production and reproductive choice. Ch. 9 in Ridker, R. G., ed., Population and Development. Baltimore: Johns Hopkins University Press.

The central argument presented in this chapter is that female seclusion creates economic and social dependence of women that compels early marriage and lack of birth control. The author suggests making girls productive in rural cooperatives outside the home would help change attitudes.

While female economic dependence strengthens male control, it also forces men to bear the entire burden of maintaining the family. Thus, early marriage reduces economic pressure on the girl's family, but it increases her isolation, leading to social and psychological dependence. Low literacy levels also increase females' dependence on men for even simple transactions. The combination of deference to male authority, personal powerlessness and a narrow world view is probably the major correlate of early marriage and high fertility, as young brides prove their worth by producing sons.

292

C

Dixon, Suzanne D.; Levine, Robert A. and Brazelton, T. Berry 1982

Malnutrition: A closer look at the problem in an East African village, Develop. Med. Child Neurol. 24:670-685.

This study examined the circumstances around malnutrition among children in the Gusii tribe of southwest Kenya. Four nutrition surveys of children 0-36 months at various times of the years 1974-76 were conducted for a total of 597 observations. In-depth interviews with the primary caretakers of 20 children whose weights were less than the third percentile of the Howard Growth Standards were undertaken to assess risk factors.

The nutrition surveys revealed both acute and chronic mild to moderate malnutrition among the Gusii children. The subsample differed from the rest in that all these children had more than one high-risk factor. Common to all was an alteration in the usual attachment of the child to a primary caretaker. This malnutrition as a secondary event to bonding failure is labeled a symptom of "disorder of attachment." This begins very early, is multi-determined and possibly self-perpetuating.

Dorjahn, Vernon R. 1977

Temne household size and composition: rural changes over time and rural urban differences. Ethnology 16(2):105-27. See #28 for complete abstract.

293

A C D F

Dwyer, Daisy Hilse 1983

Women and income in the Third World: Implications for policy. The Population Council International Programs Working Paper #18. New York, 39 pp.

This useful paper argues that the new household economics decision-making model needs to be reformulated to address "gender and income" issues. The author uses data on gender economics from many LDCs to show that households are not the endpoint but rather complexly differentiated intermediary units in income flows.

The argument is based on the following points: (1) women's income is typically essential to survival in poor households, (2) in many societies male and female household members pool their incomes incompletely or not at all, (3) intrahousehold allocation obligations are often culturally distinguished by gender and vary across societies, (4) allocations often extend beyond the household, resulting in different gender-associated priorities, and (5) men's and women's contributions to households tend to be differentially valued by the various members, leading to decision-making conflict.

A discussion of the implications of gender differentiation for nutrition, fertility, household stability and women's power follows. The inequality of assets affects the utility functions of men and women in all parts of the world. Thus, project planners should differentiate males and females, both as recipients and as allocators, to better reflect actual household dynamics.

294

E

Dyson, Tim and Moore, Mick 1983

On kinship structure, female autonomy, and demographic behavior in India. Population and Development Review 9(1):135-58.

A descriptive analysis of differences in kinship structure and gender relations is presented to explain lower male-to-female sex ratios, fertility, and infant mortality and later age at marriage in south as compared to north India. The data are taken from the Dual Survey Sample Registration System and the 1972 Nationwide Survey of the Registrar General.

In southern India the ideal marriage is between cross-cousins, with endogamous descent patterns. Social and ritual equality exists between affinally related kin, and marriage does not cause major rearrangement of social relationships. In contrast, the northern kinship system facilitates maintenance of the authority of senior generations and reduces the value of daughters. Southern women are more active in the labor force, which provides them with greater autonomy to control fertility and favor their children in intrafamilial allocation of food and medical care. The paper concludes with descriptions of analogous situations in other Asian countries.

295

B

Eide, Wenche B. and Steady, Filomina C. 1980

Individual and social energy flows: Bridging nutritional and anthropological thinking about women's work in rural Africa. Ch. 3 in Jerome, N. W., Kandell, R. F., and Pelto, G., eds., Nutritional Anthropology and Contemporary Diet and Culture. New York: Redgrave Publishing Co.

This paper argues that the pattern of an increased workload for women throughout Africa as a result of the development process also places children at increased risk of malnutrition. Women's role in intrahousehold food allocation is critical and therefore the determinants of women's time use and physical output in food production will also affect household members' nutritional status. The concept of energy budgets as a theoretical bridge between nutritional and anthropological methodologies is illustrated with two hypothetical examples. However, the restriction of food value to its energy content and the concept of women's time and energy for different tasks being freely convertible are two limitations of the model.

296

E

Elwert, Georg 1984

Conflicts inside and outside the household: A west African case study. Ch. 17 in Smith, J., Wallerstein, I. and Evens, H. D., eds., Households and the World Economy. Beverly Hills, CA: Sage Publications.

The kinship and social structure of the Ayizo in south Benin is described to provide a background for this discussion of household conflict. Marriages are patrilocal with no property pooling, although the couples share dwellings. Historically, younger brothers had to work for the oldest brother, who had preferential right to food for his children. This control over younger brothers was maintained by respect for seniority and the mode of exchanging women between lineages.

Task separation, pre-established rules of mutual obligations, avoidance of close contact during the day and strict separation of property in the household all help reduce marital friction. The fear of a return to bride exchanges exerts strong pressure on couples to maintain stable relationships. Conflicts over public insults, field disputes or marital alliances accumulate, leading to minimal circulation between the two lineages until the elders are prompted to settle disputes at a ritual meeting.

Young women have promoted the introduction of bride wealth marriage instead of exchange marriage, which were abolished in the 1950s.

297

B F C

Engle, Patricia L. 1983

The effect of maternal employment on children's welfare in rural Guatemala. In Wagner, D. A., ed., Child Development and International Development: Research-Policy Interfaces, NDCD no. 20. San Francisco: Jossey-Bass.

This study examines how maternal work for income might affect children, utilizing data from the INCAP longitudinal intervention study in Guatemala to test the hypothesis that rural women's paid work improves child survival rates. The relationship between maternal employment and children's welfare is conceptualized as the net effect of a decrease in mother's time with children, an increase in her ability to provide food, health care and other purchased goods and variables related to the availability of childcare. The researchers interviewed 462 women between the ages of 14 and 49 who were ever married from four villages in eastern Guatemala. Multiple regression analyses were performed, controlling for maternal education, marital status and family economic level.

The mothers in this sample who were working were less likely to be in a union, and those who were, tended to be in extended family units. Women with a higher proportion of surviving children were younger, better educated and living in nuclear families. Children were consistently more likely to survive in nuclear than in extended families, although the presence of a husband had no relationship to child survival. Much of the childcare in these villages is performed by other siblings.

The lack of association between house quality as an indicator of family wealth and child survival rate was presumed to be explained by the fact that the economic variables affecting child survival were more related to the mother than to investment in housing. The study findings were consistent with the conclusion that when women have adequate income through work, the nutritional status of their children is adequate.

Engle, Patricia L. 1980

The intersecting needs of working women and their young children. Report to the Ford Foundation, New York City, August 28.

This is a comprehensive paper discussing evidence of the effect of women's labor force participation on child welfare, and the dynamics (motivations, constraints) of women's decision to work. Numerous studies are described.

The author describes alternative sources of child care, paid and unpaid, showing changes from rural to urban settings. She cites evidence that women want to work more than they are able, because of lack of jobs and child care. Desire to work is greatest in poorer households; presence of many children is positively associated with paid work of women, because of increased need and available home help.

Work which is compatible with child care tends to be low paid and low status. Traditional agricultural roles of women often are not compatible with child care.

Studies of changes in women's home production tasks with their paid work show women work more total hours than men; labor force participation affects their leisure first. In some studies, men's home production rise with women's paid work time; this varies by country.

Women who work enjoy increased status, income, and control over income; there is evidence that women direct their incomes to their children's needs. Stress and lack of time are costs of working.

Several studies are cited showing a negative relationship of child health to women's work. The dynamics of this pattern are discussed. Another negative effect may be that girl children do not attend school because they must care for siblings.

The author discusses policy and program alternatives for dealing with women's need to work for pay.

Engle, Patricia L. and Levin, Randi J. 1983

Sex differences in the effects of malnutrition on mental development: a review and some hypotheses. Prepared for Schurch, B. and Bronzek, J. (eds.), Critical Assessment of Key Issues in Research on Malnutrition and Behavior. Geneva: Nestle Foundation, 1984.

This paper reviews eighteen studies on the relationship between nutrition and mental development for a discussion of sex differences.

The studies suggest that prenatal malnutrition may have a greater effect on male than female birthweight, but its impact on physical growth after birth is similar for both sexes. However, mental performance of girls appears to be affected by nutritional supplementation or deprivation more than that of boys. One proposed explanation is that nutritional interventions have sex differentiated impacts on intrahousehold food allocation patterns. Also, girls' opportunities for social stimulation and parents' investment in daughters' schooling may be more responsive to their energy levels and apparent ability than for boys. That is, families invest in boys simply because they are boys, while investment in girls depends on parents' perception of their abilities.

300

C F

Engle, Patricia L., Yarbrough, Charles and Klein, Robert E. 1983

Sex differences in the effects of nutrition and social environment on mental development in rural Guatemala. Ch. 10 in Buvinic, M., Lycette, M. A. and McGreevey, W. P., eds., Women and Poverty in the Third World. Baltimore: Johns Hopkins University Press.

This discussion utilizes data from the INCAP longitudinal intervention study in Guatemala to examine malnutrition and social factors affecting mental development. Data on children's health, home environment, food consumption and cognitive development were collected in four villages from eastern Guatemala between 1969 and 1977. A fertility behavior study of 484 women (see abstract #297) was also conducted in 1975.

It was found that food was distributed equally in the family but the oldest children, particularly females, often received less due to meals missed when household duties were not completed. Girls were more likely to play near the home and rarely went outside the community. Results of the fertility behavior study indicated that 73% of the women lived in nuclear families, 22% were literate and 69% were not working for pay. When asked, 64% of the women said they wanted to work more for pay but 74% said their husbands were opposed.

The discussion of results focused on the mental test score of boys and girls, in which the girls outperformed the boys and improved over time. The authors note that the presence of new women role models, in the form of INCAP project personnel, helped the girls become less shy and thus perform closer to their potential.

301

B E

Ennew, Judith 1982

Family structure, unemployment and child labor in Jamaica. Development and Change 13:551-563.

A descriptive analysis of family structure, market systems and child labor in Jamaica is presented here. Most small-scale farm households need off-farm income for survival. High unemployment affects household structure through migration and contributes to child labor rates. Poor households send children to work, not only to bring in income but also to save on schooling costs.

Children in poor families will probably find themselves in several types of households over time: with a mother alone, with a nuclear family although not necessarily with both biological parents, or with a guardian who is usually a relative. The pattern of changing consensual unions is perpetuated by traditional views toward fertility and sexuality and by the possibility of women's economic independence due to the informal marketing systems and the structure of landholding.

In this situation of unemployment and changing family structure, Jamaican children are expected to be responsible for themselves, and often for others, at an early age, both inside and outside the household. The largest category of child workers is engaged in domestic and agricultural tasks of the household. Children also work in a large range of small scale manufacturing activities and in market activities of "higging" (movement of local produce to market centers), urban vendors and import vendors. This socialization provides children with independence and responsibility for their own subsistence.

302

B D E

Epstein, Scarlett 1982

A social anthropological approach to women's roles and status in developing countries: The domestic cycle. Ch. 7 in Anker, R., Buvinic, M. and Youssef, N. H., eds., Women's Roles and Population Trends in the Third World. London: Croom Helm Ltd.

The author uses a socio-anthropological model to examine how the constraints of the domestic cycle determine women's status and attitudes toward fertility control and labor market participation. The discussion focuses on the poorer strata of rural women in African and Asian societies and how gender-specific specialization of work determines women's roles. The continued female predominance in the domestic sphere is seen as a function of the persistence of the domestic cycle as an ordering mechanism in society.

The domestic cycle is divided into five phases: preparation, adaptation, expansion, consolidation and dispersal--to study women's changing status through the cycle. After describing each phase, the author concludes that women in the consolidation phase, who face less severe social constraints and are responsible for socializing their children and grandchildren, may be able to effect a change in the roles of succeeding generations.

303

B

Ernst, Elizabeth 1977

Fuel Consumption Among Rural Families in Upper Volta, West Africa, Peace Corps, Ouagadougou, Upper Volta, July 5.

This study of the use of wood and millet stalks for fuel in rural Upper Volta defined the household as those eating from a single pot. In one of the two villages studied, wood collection is entirely women's work and takes 4.5 hours including one hour walking each way. In the other village, men and boys assist in wood gathering. Wood is gathered daily or twice a day for six months a year; after harvest, millet stalks are used. This takes less time, freeing women for income-earning activities.

B F

Evenson, Robert E. 1976

On the new household economics. Journal of Agricultural Economics and Development 6(1):87-103. See #31 for complete abstract.

B

Evenson, Robert E., Popkin, Barry E. and King-Quizon, Elizabeth 1980

Nutrition, work, and demographic behavior in rural Philippine households: a synopsis of several Laguna household studies. Ch. 11 in Binswanger, H. P. et al. (eds.), Rural Household Studies in Asia, Singapore: Singapore University Press. See #117 for complete abstract.

304

B

Fagley, Richard M. 1975

Rural women as food producers: initial responses to a recent questionnaire. New York: Commission of the Churches on International Affairs, June.

This paper reviews some of the evidence on rural women's time use in Africa, Asia, and Latin America. The discussion is rather general.

In Africa, UNECA estimates women do 70% of the labor in food production, 50% of the animal husbandry, and 100% of food processing and child-rearing. In Zambia, during the planting season women work sixteen hours a day, of which ten is agricultural labor. In Zaire, women grow subsistence crops, carry water and firewood, transport and market food crops, working between 180 and 312 days a year in the field. A UNICEF study of several sub-Saharan countries found women do 50% of the work on family-owned land, in addition to household chores. An FAO study in Sierra Leone found substantial agricultural work of women from age 10 to over age 65. Generally, cash crops are under male management.

Asian studies from South India, Nepal, Sri Lanka, and Southeast Asia, found that from 65 to 80% of women's time is spent in agricultural work. These studies also show from 30 to 75% of farm-produced food is grown by women in India and Southeast Asia.

Latin American studies report that women work in the fields only at peak periods (planting and harvesting), but they care for small livestock. A Colombian study showed women spend much time preparing meals and bringing them to the fields. From 10 to 25% of food is produced by females.

The paper poses some questions about how to improve the condition of women.

305

A B D E

Fapohunda, Eleanor R. 1978

Characteristics of women workers in Lagos--data for reconsideration by labor market theorists, Labor and Society 3(2):158-171.

A case study of Lagos, Nigeria is used to demonstrate the limitations of the new home economics model in a developing country context. A review of the model's underlying assumptions indicates the theory bases its analysis on the Western monogamous family unit. Data from the 1963 Lagos census, supplemented by interviews with a stratified sample of 824 working mothers during 1975 show which assumptions are inappropriate.

The sub-Saharan culture of polygamous family arrangements and extended kinship-group based responsibilities and allocations conflicts with the concept of the nuclear family as the decision-making unit with a common utility function. In the Nigerian context it would be difficult to assume that the utility preferences of spouses are the same since the extended family obligations and degree of income pooling in polygamous households vary considerably. Patterns of childcare duties and spousal contributions to family expenditures also depart from assumptions made by the new home economics theory. Finally, the model emphasizes the optimizing

behavior of households without addressing the actual decision-making process.

306

B C

Florencio, Cecilia A. 1980a

Comparison of the determinants of nutrient intake of rural and urban families, Ecology of Food and Nutrition 10:97-104.

This study was conducted to compare the effects of education, family size, food expenditure, employment status of mothers and food preparation time on the nutrient intake of rural and urban Philippine families. Stratified random sampling of 5-9 households in each selected village produced a sample of 100 urban households from metropolitan Manila and 97 rice-farming households from Laguna. Food consumption data were collected by weighing all foods eaten by members in the house and recall of foods eaten outside the home. Data were taken for two consecutive days in urban areas and three consecutive days in rural households over a six-month period. Families were also interviewed to gather socioeconomic data.

The dependent variables were nutrient adequacy ratio for energy, protein and vitamin A and diet rating. The linear relationship between dependent and independent variables was studied using two multiple regression analyses. The analysis also included a study of interaction terms—food expenditure and food preparation time, food expenditure and family size, family size and mother's education, and food expenditure and mother's education.

The results show family size had a consistently negative effect on all dependent variables, whereas food expenditures and time spent on food preparation were positively associated with nutrient intake. The latter two factors had a negative interaction effect. A negative effect on intake was seen with urban mothers' participation in income-generating activities, while the opposite was true for rural mothers who could work closer to home and combine roles more easily.

307

C

Florencio, Cecilia A. 1980b

Household behavior from the nutritionist's perspective. Ch. 2 in Binswanger, H. P. et al., eds., Rural Household Studies in Asia. Singapore: Singapore University Press.

This chapter presents a framework, consisting of the food pattern, the social organization of food, and the material culture and technology of food, for studying the determinants of food consumption and food allocation behavior. The food pattern includes a description of core foods eaten and factors related to food preparation, distribution and consumption. The social organization

considers relevant divisions of labor, and food patterns in relation to social status, health, age, sex, etc., food symbolism and attitudes toward specific foods. The discussion then focuses on specific applications using U.S. data.

308

C

Flores, Marina, et al. 1964

Annual patterns of family and children's diet in three Guatemalan Indian communities, British Journal of Nutrition 18(3):281-93.

This article reports the results of a dietary intake survey conducted three times a year for four years in three fairly homogeneous low-income Guatemalan highland Indian communities of semi-subsistence farmers.

Dietary data were collected by three-day recall and weighing, for the whole household and for preschool children (1 to 5 years). Nutritional adequacy for the household was calculated by comparing the US and INCAP RDAs based on the age/sex composition of the household and the weight and meal attendance of the members with total household consumption. For the preschooler, comparison of intake and need was made directly. This method tends to underestimate consumption, especially of preschoolers who cannot report their between-meal consumption reliably.

Results showed adequate family intake of calories, protein, and most nutrients (except vitamins A and C and riboflavin), while preschool children were deficient in all nutrients except iron. The children received disproportionate shares of luxury foods: milk, eggs, and fruit, but less than their share of animal protein and the basic staples.

A B C D

Folbre, Nancy 1984

Household production in the Philippines: a non-neoclassical approach, Economic Development and Cultural Change 32(2):303-330. See #35 for complete abstract.

309

A B

Fordham, Miriam 1982

Women's economic strategies in southern Honduras. Paper presented at American Anthropological Association 81st Annual Meeting, Washington, D.C., December 3-7.

This paper documents the significant economic contributions of women to their households, demonstrating that local statistics on economic activity underestimate women's productive work because it is often not in the market sector. Data were collected by interview from male and female household heads (N = 52 couples plus 16 women) including 24 hour recall of activities, and information on household composition, task allocation, diet, and health practices.

Women generally do not do agricultural field work, but process and sell food, prepare meals for agricultural workers, and care for animals. Cash earnings can be significant. Some women were able to set up their own small shops with their earnings. Further, women are beginning to migrate to cities as domestic workers for cash.

310

E

Foster, Brian L. 1984

Family structure and the generation of Thai social exchange networks. Ch. 4 in Netting, R. McC., Wilk, R. R. and Arnould, E. J., eds., Households: Comparative and Historical Studies of the Domestic Group. Berkeley, CA: University of California Press.

Social network research results are used to explore the relationship between household and community structures in Thailand. The household plays an important role in Thai society partly because rice production is a domestic enterprise. Agricultural cooperative units consist of the parents' and married daughters' families, as married sons generally move to their in-laws. "Superhouseholds" are centered around the wat (temple) community.

Field data from That Sung, which represents a 40 year consolidation of two villages for government administrative purposes, indicate that exchange relationships foster solidarity and help maintain separate identities for the two villages. Lack of overlap in attendance at major ceremonial events, wats and funerals and reliance on kinship relations for loans and other exchanges reinforce the separate network structures for the two villages.

311

E

Foster, Brian L. 1978

Socioeconomic consequences of stem family composition in a Thai village, Ethnology 17(2):139-56.

This descriptive study based on field research in a central Thailand rice-farming village describes the economic strategies of stem families, that is, two related nuclear families living together.

Two types were identified: those which shared a common residence but did not pool labor or consumption, and those which did share labor and consumption. This demonstrates that household composition does not necessarily determine economic organization.

The article discusses changes in the economic strategies of these households over time.

312

B C

Franklin, David L. 1979

Malnutrition and poverty: the role of mother's time and abilities. Economic Dept., Research Triangle Institute mimeo, Research Triangle Park, NC. 43 pp.

This paper presents evidence from Colombia suggesting that malnutrition is a consequence of choices made within the household concerning allocations of time, childcare duties and food and that the time and skills of mothers play an important economic role in determining preschoolers' nutritional status. The Becker-Lewis household production model is applied to the demand for calories and leads to the hypothesis that the partial elasticity of substitution between mother's time and calories is negative and substantial. Mother's time and abilities are hypothesized to be complementary resources that combine with food and other inputs to produce children's nutritional status.

The author then estimates determinants of calorie demand, nutritional status, food expenditure and protein demand to evaluate the role of morbidity, health care, income and other factors from the Cali Health Services Pilot Study in Columbia. The three panel surveys of low-income families with at least one malnourished preschooler, included 280 families and 421 young children in the first round, with 171 families repeating four months later. The study used weight-for-age measures of nutritional status, recognizing that this excluded early and late stages of malnutrition. Food accounted for 81% of monthly expenditures, and 68% of the mothers knew their children were malnourished. The effects of mother's work variables on nutritional status suggest that as mothers enter the market, the negative substitution effect dominates in the nutrient and food demand equations. Then, as work hours increase, the money income

effect dominates the negative substitution effect. The author suggests that time is of high relative value within the households, and that the central hypotheses are plausible.

A B C D

Franklin, David L. 1984

Resource allocation decisions of low income rural households: Nutritional implications for agricultural and rural development projects. Prepared for USAID Bureau for Policy Planning and Coordination, Washington, DC. 47 pp. See #37 for complete abstract.

B C

Franklin, David L. and Harrell, Marielouise W. 1985

Resource allocation decisions in low-income rural households, Food Policy 10(2):100-108. See #38 for complete abstract.

313

E

Freed, Stanley A., and Freed, Ruth S. 1982

Changing family types in India, Ethnology 21(3):189-202.

This descriptive anthropological study looked at changes in family structure over a 19 year period in a rural Indian village. Three types of households are identified: nuclear, supplemented nuclear (includes unmarried family members other than children), joint. The hypothesis that nuclear family structure becomes more common with economic development is explored and rejected.

Joint households are the cultural ideal, in part because of mutual economic support and the increased labor for cultivation. Between 1958-59 and 1977-78, the proportion of joint households increased as the economy expanded with more advanced agriculture, more market involvement, and more salaried employment.

The authors find that families looked for economic opportunities to suit their preferred structures rather than the reverse. Nuclear households tended to result from personal conflict, not economic forces, they maintain.

B C

Gillespie, Vivian Havens 1979

Rural women's time use, Studies in Family Planning 10(11/12):383-84. See #118 for complete abstract.

314

A E

Gladhart, Emily Winter and Gladhart, Peter M. 1985

Sweater production, income creation and its uses among women of northern Ecuador: the integration of family and community development. HIID Development Discussion Paper #188, pp. 69-114. Cambridge, MA: Harvard University.

This paper describes the development of the sweater industry in the village of Mira, Ecuador, based on participant observation, detailed production interviews with 79 households and daily household expense diaries. A description of the sweater industry structure reveals differences from Mexican merchant controlled industries, as only professional knitters are entrepreneurs, and the openness and competition lead to high earnings.

Half of the families were found to have knitting incomes exceeding 49% of their cash needs and 66% of food needs. Most families depended on multiple income sources for support; however, a large share of potential class mobility is met by rural artisan earnings. Land purchase is the primary investment strategy of Miran families, and landowners were more likely to engage in sweater production. Women may invest knitting earnings in land, but the primary uses are children's education, family needs, home improvement and small animal purchases.

315

A C

Goldman, Heather and Ranade, Chandrashekhar 1976

Food consumption behavior by income class in rural and urban Philippines. Cornell University Dept. of Agricultural Economics Occasional Paper No. 90. 15 pp.

The effect of income on rural and urban household food consumption in the Philippines is evaluated using the expenditure elasticity of demand and marginal propensity to expend for food as the criteria for consumption changes. The method employed a one week food expenditure survey of 4,199 urban and 7,460 rural households, which was then multiplied by 52 weeks. Expenditures are greater than aggregate family income for over half of the income groups, which is attributed to sampling or reporting errors. The log-log inverse form was used in the analysis because of its high coefficient of determination.

The findings imply increasing family size leads to smaller per capita food consumption for the rural sector. In the urban sector, family size has a positive effect on consumption of cereals, fruits and vegetables, perhaps because better job opportunities exist for all members. In both areas the bottom 40% spend a much higher incremented total expenditure on cereals than the top 10%.

316

A E

Goldstein, Melvyn C.; Schuler, Sidney and Ross, James L. n.d.

Social and economic forces affecting intergenerational relations in extended families in a third world country: a cautionary tale from South Asia. Paper for Center for Population Research, National Institute of Child Health and Human Development. 21 pp.

This study addresses the impact of modernization on elderly Hindus living in Kathmandu. In-depth open-ended interviews were conducted with Hindus, 87% of whom were high caste men and women over 60 years old. The Hindu ideal of elderly living in an extended family with at least one son was achieved for 61%, and 96% were with some relatives. The economic situation differs, however, as 61% were economically independent and all respondents felt it was essential for elderly to have their own sources of income as relatives cannot be relied on to provide care.

The shift from agriculture to salaried employment ends the father's monopoly over resources, causing increasing emphasis on education and a shift in cost/value of sons. One way older persons have adapted is through transferring property titles to the wife in order to secure economic leverage. Although household composition remains the same, the changing social and economic relations within this unit have left the elderly more vulnerable.

317

D

Goody, Jack, and Goody, Esther 1967

The circulation of women and children in northern Ghana, Man 2(2):226-48.

This descriptive anthropological study compares residence patterns of wives and children in two rural villages in northern Ghana.

In one village, a high bride price is paid. This gives husbands considerable rights over their wives and the wives' children. There is little child fosterage, and marriages are stable, wives living with their husbands and staying in their husband's family (through leviratic marriage) if widowed.

In the other, low or no bride price is paid. Wives spend large amounts of time in their natal family, there is much child fosterage, and divorce is common. Rights to children are dispersed among kin, not centralized in the husband.

These differences are attributed to the difference in bride wealth paid.

318

C

Gopaldas, Tara; Saxena, Kalpna and Gupta, Anjali 1983

Intrafamilial distribution of nutrients in a deep forest-dwelling tribe of Gujarat, India, Ecology of Food and Nutrition 13(2):69-73.

A study of intrafamilial food distribution, expressed as a proportion of the head's intake and in relation to recommended allowances, was conducted in 78 households from 20 villages in Gujarat, India, where the Rathwakoli tribe predominates. Nutrient intake data were collected by 24 hour recall and one day weighing of raw foods. The results indicate the household head was in positive nutrient intake status. All other members received proportionately less, with preadolescents and adolescents having the best profile. It is noted that the Rathwakoli are well suited for this analysis because young male children were not given preferential treatment over their female counterparts.

319

A D E

Gordon, Elisabeth 1981

An analysis of the impact of labor migration on the lives of women in Lesotho. In Nelson, N. (ed.), African Women in the Development Process. Totowa, N.J.: F. Cass & Co.

This chapter describes the general circumstances for wives of migrant workers in Lesotho and reports results of 524 interviews on attitudes, problems and strains of these women. It appears that 40-60% of married women in the country live as wives of absent migrants at any one time. Data were collected by contacting all households at 14 sites and interviewing only those women whose husbands were currently working in South Africa. The structured interview also included calculation of a strain score based on 10 of the 22 attitude questions that indicated difficult circumstances.

The biggest problem experienced during husband's absence related to fields and livestock for 37% of the women, while 30% felt they had no problem. The low strain score group (28%) consisted of the youngest wives, with either no or one child, who felt their husbands made important family decisions while away. They were least likely to feel the family fields were their responsibility in the husband's absence.

Wives in the high strain group were older and had greater responsibilities, leading to the conclusion that wives of migrants become increasingly vulnerable with years. Wives have little control over income and 74% consider themselves responsible for the fields while their husbands are away.

320

F

Gordon, Sally W. 1986

I go to 'Tantie's': the economic significance of child-shifting in Antigua, West Indies, Journal of Comparative Family Studies, forthcoming.

The custom of child-shifting in the West Indies is described as an adaptive strategy in household formation or resource pooling. Historical and current incoming or outgoing types of childshifting are examined in 50 rural agricultural and urban households in Antigua.

The data indicate boys and girls are fostered equally, and are generally shifted to households of the parent's eldest sibling. These households are economically advantaged, as evidenced by a household inventory indicator developed by the author. Married women, whether or not the husband was present, did not foster out children. Child shifting often occurs at the time of parents' migration and frequently the children return when the parents or mother can afford the dependent.

321

C

Graedon, Teresa 1980

Nutritional consequences of rural-urban migration. U. S. Agency for International Development, December. 80 pp.

This paper provides a general discussion of the possible effects of rural to urban migration on food consumption and nutrition. The author discusses patterns of migration and the possible effects on the migrants and their families and on those left behind. Some empirical studies are cited.

In the Philippines and Latin America, migrants tend to be women seeking domestic or low-paying factory work. The possible nutritional advantages of increased purchasing power may be partially offset by reduced time for food preparation for the household and breast-feeding of infants.

In Africa, migrants tend to be men who leave their families behind. In these cases migration may damage nutritional status because the loss of male labor may cause reduced food production. The author suggests that in some cases remittances to the sending area may not balance the costs of sending. The availability of cash from remittances may result in the breakdown of traditional reciprocal exchanges of labor and goods.

322

A B E

Greenstreet, Miranda 1981

When education is unequal, Women and the Information Sector issue, IDS Bulletin 12(3):14-18.

This article analyzes the extent to which the interrelationship between lack of formal education and the importance given to motherhood pushes women into the informal sector in Ghana. School subjects are separated by sex after the primary level, which channels girls into secondary jobs. The lack of lucrative job opportunities and the value placed on motherhood act as deterrents to family investments in girls' schooling.

Women are expected to have their own source of income and assume part of the household expenditure burden. The instability of marriage and inheritance laws contribute to women's reluctance to work jointly with their husbands. Town women specialize in trading, where it is easy to work alone and the stalls are handed down to female family members.

323

C

Grewal, Tina; Gopaldas, Tara and Garde, V. J. 1973

Etiology of malnutrition in rural Indian preschool children (Madhya Pradesh), Journal of Tropical Pediatrics and Environmental Child Health 19(3):265-270.

This article reports the results of a survey of children's (6 to 36 months) nutritional status in twelve rural villages in Madhya Pradesh, India.

Data were collected on height, weight, and arm circumference of children, economic status, dietary intake, and various child-rearing practices.

The study found that nutritional status of children was positively associated with measures of income and wealth, with joint family structure, and with mothers who did not participate in market work. Both joint family structure and non-working wives are associated with higher income.) Male children showed higher nutritional status than females, with other variables controlled.

324

C

Gross, Daniel R. and Underwood, Barbara A. 1971

Technological change and caloric costs: sisal agriculture in northeastern Brazil, American Anthropologist 73(3):725-40.

This widely quoted study examined the effects of an increase in the energy demands of wage earners on the nutritional status of their households.

The study measured households food consumption and expenditure and children's height and weight for a sample of 192 individuals in a region of Brazil where sisal had been introduced as a drought-resistant cash crop. Prior to sisal, most households had been self-sufficient subsistence farmers except in periods of drought.

The study analyzed caloric intake of other household members after subtracting the caloric needs of the male sisal worker. Sisal agriculture is extremely energy-intensive. The study assumed that sisal workers not losing weight were in caloric balance consuming their estimated caloric requirement, and consumption of other members was calculated as a residual.

The study found that agricultural labor in sisal is associated with low socioeconomic status. Analysis of food consumption found virtually all the household budget was spent on food and the wage earner (sisal worker) consumed a disproportionate amount--as much as five-sevenths of food by weight.

Data collection did not include food consumed outside the home. Data collection methods are not fully described.

325

B c

Gulick, John and Gulick, Margaret E. 1978

The domestic social environment of women and girls in Isfahan, Iran. Ch. 25 in Beck, L. and Keddie, N. (eds.), Women in the Muslim World, Cambridge, MA: Harvard University Press.

The lives of women in Isfahan, Iran are described based on a study of 174 married women of child-bearing age. About four-fifths of the couples lived in simple households although 40% of these resided in the same walled compound with relatives. A greater proportion of rural women were employed than Isfahan women under the age of 30. It appears that urbanization has not led to any change in the secluded domestic environment, although more urban girls are attending elementary schools. Although a secondary school education in itself does not change the domestic social system for women, it is likely to delay marriage and provide greater awareness of opportunities. Making large numbers of non-domestic occupations available for women is seen as necessary to changing female domestic seclusion.

326

C

Gurney, J. M., and Omololu, A. 1971

A nutritional survey in south-western Nigeria: the anthropometric and clinical findings, Journal of Tropical Pediatrics and Environmental Child Health 17(2):50-61.

This article reports a dietary and anthropometric survey in two sites in southwest Nigeria, one village and one small town. A random sample of 118 households was drawn; all members had anthropometric measurements and a clinical exam. In 20 households, a seven day direct weighing food consumption survey was performed. The 20 households were each a subunit of a compound, consisting of one wife and her children. The survey was undertaken at the beginning of harvest, after three months of scarce food and high prices.

The survey found that all age/sex groups had inadequate mean protein and calorie intake except adult women. Inadequacy with respect to requirements was greatest for adolescents and for pregnant and lactating women. Dietary and anthropometric findings showed little correlation.

Since only one cooking unit was surveyed, consumption of men and of children, who may eat from several units, may be underestimated.

327

B

Guyer, Jane I. 1981

The raw, the cooked, and the half-baked: a note on the division of labor by sex, Boston University, African Studies Center, Working Paper #48.

This brief, humorous paper criticizes the argument that the sexual division of labor is based on compatibility of work with child care and suggests that an equally plausible hypothesis is that women's work must be compatible with cooking.

C D G

Haaga, John and Mason, John 1985

Intra-family food distribution and nutritional surveillance in developing countries. Cornell Nutritional Surveillance Program Working Paper no. 44, Ithaca, NY. 26 pp. See #124 for complete abstract.

328

B

Guyer, Jane I. 1978

Women's work in the food economy of the Cocoa Belt: a comparison, Boston University, African Studies Center, Working Paper #7.

This paper, based largely on secondary sources, compares the sexual allocation of tasks among the Yoruba (Nigeria) and the Beti (Cameroon). It finds that in both settings there is a strong sexual division of labor, but the specific tasks allocated to each sex are different.

Among the Yoruba, men work the subsistence farms and the cocoa plantations, and women process food, make textiles, and engage in trade. Among the Beti, men produce cocoa, but women do subsistence farming and trading. Both sexes in both settings assist in farm tasks at peak periods of labor demand.

In both settings, men can mobilize women's labor, but not usually the reverse. Women are paid in kind for their labor for their husbands or others. Yoruba female farmers can also hire labor, while Beti women rely on children and mutual aid.

Yoruba and Beti women spend 40% of their work time on domestic work; Yoruba women spend 50% on other economic activities, Beti women spend 50% on farming. Compatibility with child care does not seem to determine female tasks, since cooking and palm oil processing can be dangerous but are women's tasks.

A

Guyer, Jane I. 1980

Household budgets and women's incomes, Boston University, African Studies Center, Working Paper #28. See #42 for complete abstract.

329

A E F

Hackenburg, Robert; Murphy, Arthur D. and Selby, Henry A. 1984

The urban household in dependent development. Ch. 8 in Netting, R. McC., Wilk, R. R. and Arnould, E. J. (eds.), Households: Comparative and Historical Studies of the Domestic Group. Berkeley, CA: University of California Press.

The efficiency of various household strategies to cope with massive urban migration is tested using a structural model that shows how income is affected by kind of job and household composition, organization and management. The data are from 1005 households in Oaxaca City, Mexico and 1547 households in Davao City, Philippines.

The equations are interpreted to mean that the key to raising household income is to increase the number of workers, primarily in informal economy employment. Investing in education for the household head is important for poor and middle income families, but for secondary workers it provides no returns. The strategy of organizing sons, daughters-in-law and other kin to increase household

size and the worker pool is seen as a useful strategy for improving living standards.

330

A

Handwerker, W. Penn 1974

Changing household organization in the origins of market places in Liberia, Economic Development and Cultural Change 22(2):229-48.

This empirical study documents a change in the allocation of responsibility within households as a result of changing economic circumstances.

The study is based on data collected by participant observation, informal and formal interviews, and surveys. The sample covered 783 market sellers from three types of communities in Liberia: urban, plantation, and rural.

Household structure was traditionally a nuclear family with strong kinship ties. Men's tasks concerned the larger society (village affairs), hunting, house construction and land preparation; women's tasks concerned household chores and subsistence farming. Industrialization in the 1950s increased urban concentration, creating a market for food, and resulted in increased dependence on low-wage labor and a cash economy for food. Where men were unable to meet their households' needs, women extended their traditional responsibility for subsistence by engaging in market trading for cash. Many women who were market sellers reported having more control over household resources as a result of their cash earning.

331

A B

Hart, Gillian 1980

Patterns of household labour allocation in a Javanese village. Ch. 8 in Binswarger, H. et al. (eds.), Rural Household Studies in Asia, Singapore: Singapore University Press.

This chapter provides a helpful review and framework for the study of labor allocation patterns and presents preliminary tabulations of data from 87 Javanese village households. Several studies have found a negative association between control over means of production and/or income relative to total time spent in income-earning activities, suggesting that low returns to labor rather than lack of work opportunities is the key feature of rural underemployment. This affects household decision-making and allocation of time, which is the context for understanding individual labor allocation behavior.

The data collection method used in Java consisted of monthly household interviews over a one year period on labor allocation of each member aged 6 and over, income and consumption during the

previous 30 days. Data were analyzed according to land-holding class, where class I contained households owning and operating at least .5 hectares of land or a fish pond and class III had less than .2 hectares. The general pattern is that class III households spend substantially greater time in income earning activities versus those in class I, both absolutely and relative to household work. Goods and time tend not to be substitutable, with increases in household capital complementing a rise in labor time spent on housework, which contributes substantially to household welfare. Lower class status households, especially women, faced the greatest adjustments in the proportionate allocation of time among various types of income earning activities (rice production, fishing, sugar cane, harvesting, and trading) between peak and slack months. The low but regular and secure wages class III women earned in sugar cane and harvesting activities outside the village appeared to enable class III men to attempt high risk fishing rather than take low wage labor jobs.

332

C

Harvey, Philip W. and Heywood, Peter F. 1983

Twenty-five years of dietary change in Simbu province, Papua New Guinea, Ecology of Food & Nutrition 13:27-35.

This study was conducted to validate Lambert's (1970) findings that cash-cropping has led to reduced food production, intake and nutritional status. The method consisted of 5-6 consecutive days of direct observation, food weighing and recall of foods eaten away from home, in 12 households with 67 members, selected by willingness, age and sex. The findings do not support Lambert. They show the protein intake of younger members exceeds requirements by greater margins than that of older members, indicating a deliberate allocation of protein rich foods to younger age groups or their greater preference for imported protein rich foods. The protein-energy ratio of adult women is also higher than that of males.

333

A D E

Haugerud, Angelique 1983

The consequences of land tenure reform among smallholders in the Kenya highlands, Rural Africana 15-16 (Winter-Spring):65-89.

An analysis of the impact of land reform in the Embu district of Kenya on the pattern of land-ownership, class structure and peasant agriculture is presented. The Embu live as extended households on dispersed homesteads, where they now primarily cultivate tea, coffee and cotton rather than use the land for grazing. Land reform was intended to consolidate and register holdings and thus increase investment incentives and improve agricultural services and development. Therefore, land reform eliminated claims to land through first use and made purchases irredeemable. However, the scarcity of

land and the desire to reduce risk by increasing geographical and crop diversity have led to a de facto fragmentation of parcels and unregistered succession to inherited land. The actual land reform procedure has resulted in substantially unequal land distribution and enhanced the holdings of wealthy families.

Prior to cash cropping, the division of labor emphasized female contributions to crop production and male labor in livestock production. Today, men are much more active in agriculture and they tend to control the cash income although women still contribute the greater share of household labor to crop production. Generally, cash crop earnings are barely enough to meet basic needs and proceeds from the women's home gardens are used for commercial purchases of clothing, soap, cooking fat, tea leaves and sugar.

334

A D

Haugerud, Angelique 1982b

The limits of household analysis in the study of agricultural production: a central Kenyan case. Paper presented at the American Anthropological Association 81st Annual Meeting, Washington, DC. Dec. 3-7. 23 pp.

This presentation documents how conflict and competition over access to resources affects household dynamics by using data from the rural Embu district of Kenya. Land tenure reforms in the 1950s was designed to register and consolidate individual holdings; however, ownership titles do not accurately reflect actual occupancy. Lending, borrowing and multiple parcel ownership are household strategies to minimize risks and allow for crop diversification. Several cases are presented to illustrate the extent of interdependence and conflict among separate households with respect to land use and access. As time makes the land registration less accurate and land scarcity increases inheritance tensions, household based analysis of decisions and land use patterns no longer reflects joint preferences of its members.

335

A

Haugerud, Angelique 1981a

Development and household economy in two eco-zones of Embu district, Working Paper #382, Institute for Development Studies, University of Nairobi, Kenya, July.

This is one of several papers reporting an economic anthropological study of households in a coffee and cotton growing zone of eastern Kenya. (See Haugerud, 1979, Section II, for method.)

The study found that coffee or cotton income, which is received in one lump sum, was spent on school fees and other large expenses;

small regular sales of food crops were used to meet basic household consumption needs. If cash crop payments were late or low, some households sold livestock to meet cash needs, reducing household milk supply.

The current economic burden of school fees is great because fees are high and education reduces the household labor supply. Since cash crop prices have stagnated for several years, most households choose to invest in the future earning capacity of their children rather than in agriculture.

The dynamics of the decision making process are not addressed in this paper.

336

E

Haugerud, Angélique 1981b

Economic differentiation among peasant households: a comparison of Embu coffee and cotton zones, Working Paper #383, Institute for Development Studies, University of Nairobi, Kenya, July.

This is one of several papers reporting an economic anthropological study of households in two zones, one coffee growing and one cotton growing, in eastern Kenya. (See Haugerud, 1979, Section II [#128], for method.)

The study found a high level of instability in household composition. One fifth of the sample households were disrupted temporarily or permanently due to internal conflict. Members were lost and added, and new households formed.

The study found that secondary education of children was a high-priority consumption expenditure, because of parents' expectation of later support. School fees absorbed an average of 100% of coffee growing income. Lower income households, those in the cotton zone with below average coffee income, sold livestock (which reduced household milk supply) or performed agricultural wage labor (which reduced home food production) to meet these costs. The question of which member performed these tasks is not addressed.

E

Haugerud, Angélique 1982a

Conflict, Competition, and Cooperation: Political Economy of the Peasant Households in Embu, Kenya. American Anthropological Association 81st Annual Meeting, Washington, D.C., December 3-7. See #44 for complete abstract.

337

E

Heston, Tim B. et al. 1982

Migration and the transformation of employment and household structures, Singapore Journal of Tropical Geography 3(1):34-43.

This article reports a study of the effects of migration on household structure.

Data from Colombia and Thailand were collected in 1977 using survey questionnaires covering changes in residence, marital status, housing, and employment over the respondent's life since age 15.

The study found that rural-to-urban migration is associated with changes to a nuclear household structure and smaller household size. Migration to rural areas was much less common and was associated with a slight shift to larger and more extended households.

338

C

Heller, Peter S. and Drake, William D. 1976

Malnutrition, child morbidity, and the family decision process. Ann Arbor, Michigan: Center for Research on Economic Development, Discussion Paper No. 58. 43 pp.

This study analyzed data on household composition (number, age, and sex of children), food cost, other costs, shadow price of mother's time, birth order, birth interval, percent of child's life it was breast-fed, to see their effects on weight/height, height/age and weight/age of 1270 children in the health promotora program in Candelaria, Colombia. The research hypothesis was that child malnutrition results from a family decision process.

The study found that there was no difference in family food expenditure based on the sex of children; girls had lower weight/age than boys in the first year of life, but not later. Higher birth order children showed significantly lower growth after age six months, and shorter periods of nursing. Short birth intervals also resulted in slightly lower growth attainment. These effects were strongest among children below normal in growth. None of these variables affected the incidence of diarrhea.

Household income had a small positive effect on child growth, and breast-feeding into the second year was associated with lower growth attainment. The authors conclude that malnutrition is the result of household decisions.

339

B G

Heyzer, Noeleen 1981

Towards a framework of analysis, Women and the Informal Sector issue, IDS Bulletin 12(3):3-7.

Reasons for the predominance of women in the informal sector and the type of work they perform are summarized in this paper (which is an abbreviated version of IDS Discussion Paper no. 163, Sussex, England). Women are forced into the informal sector by migration pressures, lack of education and the changing structure of agriculture which has squeezed women out of formal production. The form women's work takes is in part determined by the assumption that women are dependent on husband's income and therefore are secondary earners who can be paid less. Women are also concentrated in jobs which are compatible with their reproductive role and often are extensions of their traditional domestic responsibilities.

340

B E

Hill, Polly 1977

Population, Prosperity and Poverty: Rural Kano, 1900 and 1970. New York: Cambridge University Press. 240 pp.

This book provides an interpretative analysis of field observations and data from third party informants on the patterns of labor, inheritance, migration, property ownership, and household status and structure in the rural Kano region of Nigeria. Upon the father's death land is divided among the married sons and daughters, who receive shares half the size of their brothers and must have their husbands' permission to sell the land. Migration is usually in the form of a permanent move to Kano city by men after their fathers' death. Migrant remittances to home are low and the family of the migrating son is disgraced. Often the cohesiveness of kinship groups outweighs economic incentives to migrate. Most transactions to meet household food needs are conducted by secluded women traders who operate through their husbands, unmarried daughters and children. Each woman trades independently of co-wives except in making groundnut oil and locust bean cakes. Maternally related kin often reside in "big houses" but they do not farm jointly.

341

E

Hinderink, Jan and Kiray, Mübecce B. 1970

Social Stratification as an Obstacle to Development: A Study of Four Turkish Villages, New York: Praeger. 248 pp.

This book reports a study of the relationship between levels of agricultural development and changing patterns of household

structure. While much of the book describes the setting and the agricultural and economic practices of households as a whole, there is a chapter devoted to family composition and its variations in the four villages studied.

Data were collected by means of formal surveys of household heads, unstructured interviews with informed village leaders, budget analysis of a subsample of households.

The study found that nuclear family patterns increase at higher levels of agrotechnological development. One reason is that patrilineal authority patterns break down with new technology, since elders cannot teach and advise younger farmers.

342

B F

Ho, Teresa J. 1979

Time costs of child rearing in the rural Philippines, Population and Development Review 5(4):643-662.

This article analyzes variations in mother's opportunity cost of time for childrearing under different conditions in the Philippines. A survey of 99 Laguna households containing 488 children gathered 7 day recall of time use data, which were limited by the difficulty in recording multiple tasks. Childcare time for infants under 1 year is taken from the mother's market time, which shifts back as the child ages. Mothers with 0-2 children average 71.1 hours in weekly home production which increases to 74.6 hours when 6 or more children are present, primarily due to added food preparation time. The presence of three children over 10 years causes mother's home production time to decline from 71.7 to 54.4 hours weekly, with little substitution of mother's time occurring with fewer children.

343

B

Hogan, Joanne, and Tienda, Marta 1979

Zinacanteco Women: Prediction for Change in a Mexican Village.
Madison, Wisconsin: University of Wisconsin Land Tenure Center. 20 pp.

This paper discusses in a general way the sexual division of labor and social roles in a highland Mexican Indian community.

Women are generally of lower social status than men and their work activities tend to be oriented toward the domestic sphere and not often to be for cash. Women keep sheep and chickens, make cloth and clothes, prepare and serve food, gather fuel wood, wild vegetables, and water. Women can earn some income from the sale of eggs and chickens.

Men's activities are oriented toward the community and include subsistence and commercial agriculture, marketing, tending large livestock, and hunting.

Increasing population pressure on the land has led to men's participation in the wage labor market. The authors suggest that the availability of wage employment will make it easier for men to pay bridewealth, resulting in earlier marriage (and consequently higher fertility), and may allow newly married couples to establish their own residences rather than live with the husbands' parents.

No empirical support for this prediction is given.

344

D

Hollerbach, Paula E. 1980

Power in families, communication and fertility decision-making. Center for Policy Studies Working Paper no. 53, The Population Council, New York.

A better understanding of fertility decisions is sought by using a framework linking husbands' and wives' power bases and the resulting communication processes. Passive decision-making results from a desire to comply with social norms or when presumptions about another person's position are made. Active decisions are based on communication and may be categorized as open, unilateral/surreptitious or joint.

A review of Latin American data from fertility surveys and anthropological studies reveals differing perceptions as to who makes contraception and fertility decisions. A study of 114 women in semi-rural Mexico showed that 20% had not discussed contraception with their husbands and half of the remainder had husbands who felt it would undermine their authority or who wanted many children.

Effectiveness in making family size decisions requires high levels of communication, which are associated with higher socioeconomic status, autonomous, nuclear family structure, legal rather than consensual unions and marital satisfaction.

Life cycle stage, actual or potential power of children or kin, and influence of peers also affect family power relationships and fertility decisions. Steps to encourage joint decision-making include reorienting patriarchal families, influencing male opinion leaders and older kin and integrating family planning into other development projects.

345

B

Hopkins, Nicholas S. 1982

Social organization of agriculture in an Egyptian village. Paper presented at the American Anthropological Association 81st Annual Meeting, Washington, D.C., December 3-7.

This paper reports a study of the sexual division of labor in an Egyptian village and the effects of mechanization.

Agricultural labor in the fields is the work of men and children. Women are responsible for animal care and household maintenance work. Mechanization has decreased women's workload because animals are no longer used for traction, and mechanized grain milling is available.

346

C

Horowitz, Grace 1980

Intrafamily distribution of food and other resources. Report to the Nutrition Economics Group, OICD, USDA, Washington, D.C. July.

This paper summarizes a large number of studies of intrafamily food distribution (IFFD) and discusses their methodological shortcomings. The author suggests these studies are important for designing and evaluating nutrition interventions. Three major hypotheses in the literature are (1) inequitable food distribution is a rational response to an absolute resource constraint; (2) it is due to maladaptive food taboos and beliefs; (3) it is a problem of behavior, separate from these, with causes to be determined.

Methods used to determine IFFD include dietary recall, records and diaries, food frequencies and other short-cut methods. Problems include accuracy of recall, validity of data on consumption, and sometimes lack of knowledge on the part of the respondent (for example, when people eat from a common pot or when a mother answers for a child whose consumption she cannot monitor). Consumption is not a direct measure of nutritional status.

The author discusses possible mechanisms influencing IFFD. Positive and negative evidence on the relationship between women's work for pay and child nutrition is presented. Seasonality is discussed. The author concludes that there is some information on IFFD, but little information on determinants of these patterns.

This paper provides a comprehensive summary of the available literature on intrafamily food allocation.

347

B

Huggard, Marianne 1978

The rural woman as food producer: an assessment of the resolution on women and food from the World Food Conference in Rome, 1974. Women in Development, International Conference on Women and Food, at University of Arizona, Tucson, pp. A3-A12, distributed by Office of Women in Development, AID, Washington, DC.

This paper discusses in quite general terms the heavy workload of rural women in LDCs. The author points out that projects for training and education of women cannot succeed because women have no flexibility in their time. This suggests that labor-saving appropriate technology can be important.

348

B D

Huston, Perdita 1979

Third World Women Speak Out: Interviews in Six Countries on Charge, Development, and Basic Needs. New York: Praeger Publishers. 153 pp.

This book describes the impact of development on women through presentation of vignettes and informal interviews with women in Tunisia, Egypt, Sudan, Kenya, Sri Lanka and Mexico. The author talked about the object of her visit to groups of women and then asked if anyone wished to pursue conversations in private. Self-selection and variability in interpreters affected the data collection. All women interviewed had traditional female roles in household cultivation, processing and cooking of food and bearing and raising children.

349

B

IRRI (International Rice Research Institute) 1983

Women in rice farming systems: an IRRI conference. Los Baños, Laguna, Philippines, September 26-30.

This pamphlet discusses background information for a conference to be held at IRRI in September, 1983. It highlights the major labor input of women into rice cultivation, although the specific tasks women perform vary in different cultures. Women's labor input is increasing as men migrate to take on wage employment.

The point is made that new technology can benefit women by increasing the productivity of women's tasks, but women's access to the new technology must be specifically insured. The effects on women in land-owning households will differ from those landless women dependent on wage labor.

350

F

Irwin, Marc; Engle, Patricia L.; Yarbrough, Charles; Klein, Robert E. and Townsend, John 1978

The relationship of prior ability and family characteristics to school attendance and school achievement in rural Guatemala, Child Development 49:415-427.

Data from an ongoing longitudinal study in three rural Guatemalan communities are used to investigate the relationships between pre-school intellectual ability, opportunities and characteristics of the family, and elementary school attendance and performance. Six age cohorts, followed since 1969, include virtually every child between 8 and 13 years old in the three communities. Each child was tested on the INCAP Preschool Battery within a month of his/her seventh birthday. Family economic status was characterized by a housing index to represent wealth and by a parental clothing index to represent family means and social status.

Multiple regression analysis showed that preschool mental performance, family SES and indices of parental values concerning education were all associated with attending or not attending school. Length of school attendance was best predicted by pre-schooling mental test scores for girls and by family socioeconomic status and parental values for boys.

351

E F

Isingo-Abanihe, Uche C. 1985

Child fosterage in West Africa, Population and Development Review 11(1):53-73.

This paper describes the conditions and characteristics of child fosterage in several West African countries, which are unique in their high prevalence and very early age of fosters. All family types practice fostering, usually among kin. Often grandparents are the recipients. Reasons for fostering include crisis alleviation, alliances and apprenticeships, social mobility, domestic work, redistribution of available services and support, and educational purposes.

Country data on prevalence and differentials in child fosterage are generally derived from the census. In Ghana nearly 20% of all children under 10 do not live with their natural parents, while in Liberia nearly 40% of 15 to 34 year old mothers have children living away from home. In Ghana and Nigeria a higher incidence of fostering occurs among working mothers. Other variables positively associated with this phenomenon are urban residence, lack of spouse, and higher numbers of children and persons per room.

The Ghanaian data on fostered children reveals that 25% are under 1 year old and 80% are under 5. Fostering is more common for girls and among urban children. School attendance is higher among fostered children; 54% of the boys and 46% of the girls. Urban nonfosters attend school more than urban fosters while the reverse is true in rural areas. Implications of child fosterage for demographic analysis are also reviewed.

352

B

Jackson, Cecile 1985

The Kano River irrigation project: The Population Council Series on Women's Roles and Gender Differences in Development. W. Hartford, CT: Kumarian Press.

This evaluation of the Kano River irrigation project, which was designed to increase the food supply, provide employment and improve health, indicates the effects are mixed. Food production output may not have increased, as production of traditional crops and fura have declined. Demand for female hired labor and remunerated family labor for wheat harvesting has risen, replacing women's time spent in cotton, groundnut, bean and pepper production. Older women's occupation of firewood and water collection has declined due to destruction of trees and availability of canal water. Although the type of dwelling is better than pre-project villages, general environmental conditions have not improved as water is contaminated and wood is scarce. The data were collected by surveying 211 nuclear Muslim households in four villages twice over an 18 month period.

353

A B E

Janelid, Ingrid 1980

Rural development programmes and the farm household as a unit of observation and action. In Presvelou, C., and Spijkers-Zwart, S., eds., The Household, Women, and Agricultural Development. Wageningen, Netherlands: H. Veenman and B. V. Zonen.

This chapter discusses, in a general way, the problem of defining farm households, mentioning the increasing number of women-headed households as a result of widowhood, divorce, and male migration for wage employment.

The author cites estimates by ILO and UNECA that women provide 70% of the labor in traditional agriculture, but only 12% in modern agriculture, with consequent loss of income-earning opportunities.

354

B

Jayme-Ho, Teresa 1976

Time budgets of married women in rural households: Laguna, Institute of Economic Development and Research Discussion Paper, no. 76-26, School of Economics, University of the Philippines, Quezon. 57 pp.

The major conclusion of this study on mother's time use in the Philippines is that family composition, rather than size, is a major determinant of mother's time allocation. The results are based on a household survey in Laguna which revealed that mothers spend an average of 10 hours/day on home and market product work combined, of which only 18% is devoted to market work. Presence of a child 0 to 6 years old increases mother's food preparation and other home time, while children over 10 years substitute for some of the mother's home production time. Total number of children had no direct influence on mother's time budget.

B E G

Jelín, Elisabeth 1982b

Women and the urban labour market. Ch. 10 in Anker, R., Buvinic, M. and Youssef, N. (eds.), Women's Roles and Population Trends in the Third World, London: Croom Helm Ltd. See #132 for complete abstract.

355

E

Jelín, Elisabeth 1982c

Coping with uncertainty: the role of women in households. Centro de Estudios del Estado y Sociedad (CEDES), Buenos Aires, Argentina. November.

This paper reports the results of a three year study of the social organization of urban working class households in Buenos Aires. Data were collected by means of participant observation and repeated interviews of all adolescents and adults in the sample households (sample size not given).

The paper presents an interesting discussion of the function of households in organizing reproduction and the maintenance of their members. The author suggests that households have an internal system of exchange, which entails both shared interests and internal conflicts.

The study found substantial variation in the composition of the households over time, both because of life-cycle changes and because of household response to economic pressure, resulting in kin joining the household to help, or children being sent away to reduce the burden.

Six types of household are identified. Four are variations on the nuclear household, including husband in wage work and wife at home, wife working and maintaining the household, with adult children also in market work, and with one parent failing to fulfill his/her responsibilities. The other two types are single-parent households and "composed" households, that is, diverse living arrangements of relatives and/or non-relatives with division of labor, but not necessarily corresponding to husband/wife roles.

Four case studies are presented. The author concludes that it is always the housewife who adapts to stress or compensates for it.

356

A B

Jelín, Elizabeth no date

Daily lives of urban women: needs, resources, and women's work. Centro de Estudios del Estado y Sociedad, Buenos Aires, Argentina.

This paper reports exploratory analysis of data from a two-year study of the social organization of women's household and market work in working class Buenos Aires. Data were collected by participant observation and repeated interviews of all adult household members.

The paper describes strategies by which households secure resources needed for survival: household work, wage employment, formal public transfers, informal transfers. How these resources are combined and spent depends on the internal organization of the household, and may be the subject of internal conflict about the definition of an acceptable standard of living and the priority assigned to the needs of various members.

The study found that women's time devoted to housework varied by their occupational status (33 hours per week for women with outside employment, 71 hours per week for full time housewives), by their husband's job, and their stage in the life-cycle, and by the structure of their incomes (amount and degree of predictability).

The paper discusses different strategies women use to ensure that domestic tasks are performed, including use of appliances, hired help or household members to help; adapting her own job to domestic needs; altering the composition of the household by recruiting members or sending children away.

The author suggests that women more than men are subject to marital and life-cycle determinants of their work patterns.

Four women are described as case studies of different organizational strategies.

B

Johnson, Allen 1975

Time allocation in a Machinguenga community, Ethnology 14(2):301-310.
See #134 for complete abstract.

357

A E

Jelín, Elizabeth 1982a

A micro-social processing of a life style: the organization of expenditures among domestic units of the popular sectors. Paper presented at the 'Demographic Research in Latin America: Linking Individual Households and Societal Variables' seminar, Ixtapan de la Sal, Mexico. August. 39 pp. Available from CEDES, Buenos Aires, Argentina.

This interesting paper views the domestic unit as a microcosm of societal production, reproduction and distribution relations with differentiation among its members in labor and consumption processes. This framework is then used to analyze the organization of expenditures among households in Argentina, where wage levels are erratic and inflation is high but unpredictable. Generally, households cope by increasing the number of hours worked and the sources of income and by spending money as soon as it is acquired.

The unstable economy creates budget organization difficulties, which are often handled by establishing a linkage between type of earning and type of expenditure. Thus, stable and predictable incomes are used to pay fixed expenses, whereas variable income covers more elastic expenditures. Families with stable monthly incomes also use "Libreta," a local system of credit, to convert basic food expenditures into a "fixed," regular expense. The power relationships in expenditures and credit arrangements are derived from income earning positions; men are in the market and women are in the less formal sphere of transfers. The patterns of household, domestic furnishing and adolescent clothing consumption reflect status and investment decisions. The impact of intra-domestic conflict and alliance on decision-making in the dynamic of domestic consumption and work is also discussed.

358

A B C

Jones, Christine W. 1983a

The impact of the SEMRY I irrigated rice production project on the organization of production and consumption at the Intra-Household Level. Paper prepared for USAID. April 20. 112 pp.

This important paper reports one of the few existing studies which specifically addressed questions of intrahousehold distribution of

work, income, and consumption. The study demonstrates that an internal economy can exist within the household in which individual interests conflict with the interest of the household as a unit.

The study consisted of two household surveys in the area of a rice irrigation project in northern Cameroon. A sample of 102 women randomly selected from compounds in a purposive sample of villages was questioned about their labor allocation to agricultural tasks. Interviews were conducted every two days throughout the growing season. In addition, food expenditures and income were measured for five two week periods throughout the year, also by means of interviews every other day.

The setting is a rural area of subsistence sorghum cultivation and irrigated rice cultivation for cash. Compounds consist of a husband and his wife or wives and their children. Each unit within the compound is separate; husbands do not always eat with their wives. Thus the western concept of a unitary household is not applicable here.

The study found that women face a direct tradeoff between time spent in rice cultivation on their husbands' fields and cultivation of sorghum at peak periods of the year. The returns of labor on sorghum at that time are lower than to rice cultivation. However, married women are usually paid by their husbands for work on rice at a lower rate than the market agricultural wage, so these women work fewer hours on rice, and more on sorghum, than single women.

This decision reduces total income of the compound as a whole. Single women control their own product and thus work on the higher wage crop. In a few cases, married women were paid the higher wage; these women worked on rice in preference to sorghum.

359

D

Jones, Christine 1983b

The mobilization of women's labor for cash crop production: a game theoretic approach, American Journal of Agricultural Economics 65(5):1049-1054.

This paper analyzes women's labor allocation data from the SEMRY rice irrigation project in northern Cameroon and concludes that individuals have their own separate utility functions. This suggests that a mixed interest cooperative bargaining model best explains intrahousehold resource allocations. In this project, rice land is cultivated jointly and men pay their wives for their labor after selling the rice harvest. If this compensation is too low, some wives may not work the next year.

The data were collected by interviewing women every other day about the allocation of their labor. One regression was performed utilizing data from 24 married women to establish the relationship

between compensation and number of hours worked in rice. The men hire women at a wage not less than the opportunity costs of growing sorghum, which is cultivated separately by men and women. A second regression performed on data from 12 female-heads of households indicates that they transplant more rice and ultimately get more income than married women, who spend more time in sorghum cultivation. Only 15% of married women are found to be as efficient labor allocators as widows, who control their own labor. Allocative inefficiency is most probable when the husband is trying to save a bride price for a second wife.

360

B

Joplin, Carol F. 1974

Women's work: a Mexican case study of low status as a technical advantage, Ethnology 13(2):187-196.

This article describes the economic characteristics of two industries in a town in Yalalag, Mexico. Shirt making is done by women; huarache (sandal) making is men's work. Both industries can provide full or part-time employment and can be done at home or in a factory. The author found that women were able to organize their occupation for maximum profit because their work is free of social pressure, since women's status is obtained from their husbands, not their work. Men have not organized in this way because their work is more visible and subject to social convention.

361

B D

Kandiyoti, Deniz 1977

Sex roles and social change: a comparative appraisal of Turkey's women, Signs 3(1):57-73.

This article reviews literature on the social and economic status of women in three types of communities in Turkey: nomadic tribes, rural villages, and towns.

In the nomadic tribes, women act as shepherds, milk and shear sheep, and deal with merchants for the sale of goods. These are considered shameful tasks for men. Women have no control over the products of their labor; they have no inheritance rights, and their children belong to their husbands' lineage. Women's influence in the tribe is obtained through marriage unions and personal alliances.

In the villages, segregation of sexes is strong. The author holds that women's work is not socially recognized regardless of economic contribution. Men will not admit that their wives work. Mechanization of agriculture has reduced women's work load.

In the towns, women work in gardening, housework, and laundering. These are not considered "work" by men even if performed for wages.

The author notes that family structure has changed in response to changing economic circumstances in Turkey, resulting in an increase in nuclear households. She notes that the same superficial structure may serve different underlying functions in different settings.

362

C

Katona-Apte, Judit 1977

The socio-cultural aspects of food avoidance in a low-income population in Tamilnad, South India, Journal of Tropical Pediatrics and Environmental Child Health 23(2):83-90.

This article reports the results of a study of food taboos. Data were collected by in-depth interview of 62 women from two districts in Tamilnad. Women were from varied ethnic backgrounds.

The author notes that many food restrictions apply to lactating women. She hypothesizes that this may be because a lactating woman is not considered to be contributing her labor to the community, and so "working" household members receive the preferred food. This hypothesis is not tested empirically.

363

C E

Khare, R. S. 1984

Women's role in domestic food acquisition and food use in India: a case study of low-income urban households, Food and Nutrition Bulletin 6(1):69-76.

This study of 45 households, mostly Untouchables, in a North Indian city reveals that both cultural and socio-economic factors constrain food acquisition and allocation priorities. No data collection methods were specified. Low caste, low income women prioritized their time first to the care and feeding of their husband, children and other relatives in the household, then to performing domestic chores and to maintaining social obligations and rituals. The women's authority in food use increased when she had children, especially sons, but the mother-in-law normally wielded control over food. Better child health was found in households with mothers-in-law present.

Income pattern influenced domestic food acquisition; larger but irregular daily wages led to erratic, costlier food and fuel purchases. Constraints to better food purchasing included lack of knowledge about quality, of time for regular shopping and of means to carry food home. Yet interventions designed to influence food purchasing and intrahousehold allocation are resisted because they

interfere with traditional household decision-making patterns and priorities.

364

B

King-Quizon, Elizabeth 1978

Time allocation and home production in rural Philippine households, The Philippine Economic Journal 36 17(1-2):185-202.

This article reports a study of time use in Laguna, Philippines rural households. Data collection methods are described and results presented.

Data on time use were collected from adults in the sample households by recall over the past week for nonseasonal activities and for a longer period for seasonal activities. Estimates were given of hours per week spent. Leisure time was calculated as the residual after market and home production were accounted. In addition, direct observation of households was conducted in three 24 hour visits over 8 months. It was assumed that the direct observation method was more accurate. Comparison of the two methods found observation measured more than three times as much market production time of children as recall, because parents view children's work as leisure or training.

The study found that fathers who work fewer hours in the market devote more time to home production, including child care and food preparation, and to leisure. The same pattern was observed for mothers. Presence of an infant increased women's home work time by three hours per day, but a large number of children increased parents' leisure (perhaps because older children could take on some work).

Time allocation is affected by market wages (which alter the opportunity cost of home production); education; age (market and home production increase with age until children become productive, then they decrease); seasonal change.

The data indicate that home production is economically more important than market production.

365

B

King, Elizabeth and Evenson, Robert E. 1983

Time allocation and home production in Philippine rural households. Ch. 3 in Buvinic, M., Lycette, M. A. and McGreevey, W. P., eds., Women and Poverty in the Third World. Baltimore: Johns Hopkins University Press.

Empirical results of a time use study in rural households of Laguna, Philippines (as described in abstract #364) are found to be

consistent with econometric predictions using the basic household economics model of maximizing the household utility function. Data on time spent on market production, home production and leisure were collected from 376 households by recall and observation, with a resurvey of 245 households conducted two years later. Regression analysis of time allocation shows home production is greatest in farm households and in households with many children and where the mother does no market work.

The wife contributes the most to household production, which provides 38% of total household real income. Appendix I illustrates the use of single and two-person household models to assess factors influencing consumption and time allocation. A second appendix analyzes differences in recall and observation data. Recall may overestimate husband's market production and wife's home production time while understating children's market production contribution.

366

B

Kisekka, Mere 1981

The role of women in socio-economic development: indicators as instruments of social analysis. The case of Nigeria and Uganda. Women and Development: Indicators of Their Changing Role. Paris: UNESCO.

This paper presents two case studies of women--the Hausa of Nigeria and the Baganda in Uganda--in its argument that quantitative indicators ignore the socio-cultural parameters which determine women's role in development. Typically women provide 60-80% of the agricultural labor on subsistence farms and they perform most of the housework. The burden of work is even greater in the increasing number of women-headed households, especially as school enrollments climb, drawing off child labor. To meet the economic and social demands of the family, women are engaging more in traditional income earning activities and in new endeavors, although they face widespread discrimination. When participating in "men's world" activities, women display signs of insecurity not evident in their agricultural and home production activities.

Among the primarily Muslim Hausa women, purdah is observed by the wealthy. This limits their participation in subsistence farming and outside employment. The women's primary source of cash income is preparation of food snacks which their children sell. Although they lack direct control over the sale of their goods, Hausa women do have considerable power over disposal of their income. The author observes that Hausa women are slowly gaining access to formal education and employment and are resisting the strictures of purdah.

Baganda women are relatively integrated in Uganda's development. They may buy, own and inherit land and often prefer the independence of heading a household. A marked shift in attitudes has allowed women to enter commercial trading jobs and receive education and training. The author concludes that rural industrialization, which

yields employment opportunities for both men and women, is the most legitimate means of integrating women into development.

367

B

Koenig, Dolores 1982

Social stratification and women's work in the rural Malian household. Paper presented at the American Anthropological Association 81st Annual Meeting, Washington, D.C., December 3-7.

This paper reports a ten month field study of 30 households in three villages in the Kita region of Mali, in which peanut production had been promoted as a cash crop in an integrated rural development scheme.

Data were collected by means of interviews twice a week with a 3-4 day recall period, covering work performed, resources used, and revenue received.

The study found that household members (defined as all those eating from one pot) contributed labor to fields owned by other members as well as to communal fields. Men work on women's fields (both cash and food crops) and women work on men's fields.

368

B

Konter, J. H. 1980

The deteriorating position of African women in the development from a subsistence economy towards a market economy. In Presvelou, C., and Spijkers-Zwart, S. (eds.), The Household, Women, and Agricultural Development, Wageningen, Netherlands: H. Veenman and Zonen, B. V.

This paper suggests that the shift in Africa from subsistence to market production has been detrimental to women because it has broken down the traditional division of labor between women and men in the household. Monetization of exchange has resulted in increased control over resources by men. Increasing scarcity of land has created competition and reduced the level of cooperation within the extended household.

Specific data are not cited.

369

C E

Korte, R. 1969

The nutritional and health status of the people living on the Mwea-Tebere irrigation settlement. In Kraut, H. and Cremer, H-D. (eds.), Investigations into Health in East Africa. Munich: WeltforumVerlag (Afrikastudien).

This article reports results of a long-term study of the effects of a large-scale resettlement program on irrigated rice land in Kenya. Data were gathered by survey from a sample of 124 families in the project and 87 families in the surrounding non-project area. Food consumption data were collected for seven days in 30 households (defined as separate cooking units, so that 30 households represent 23 families). Detailed information on household budgets is presented, but not separated by earner.

The study finds income much higher in the project (2400 shillings/year, compared with 440 shillings off the project), but malnutrition (by anthropometry) higher in the project. In both groups, most households (71-75 percent) report children get the first choice of food at meal times; 16-23 percent report the father does, and 2-6 percent the mother. Household size is larger in the project area, because the labor-intensiveness of rice cultivation is an incentive for large families. The study found no difference between the two groups in child feeding or weaning practices.

370

A B C

Kumar, Shubh K. 1978

Role of the household economy in determining child nutrition at low income levels: a case study in Kerala. Ithaca: Cornell University, Department of Agricultural Economics, Occasional Paper #95, November.

This very useful paper reports a study of 48 low income (below median) households with a child aged 6-36 months. Data were collected over nine months, covering harvest, post-harvest, and pre-harvest seasons, on income, including cash and in kind, separately by earner; employment; food consumption and expenditure, including dietary intake of the weanling child; morbidity and nutritional status measured by weight for age. The study was performed in a rural semi-subsistence agricultural area of Kerala, India. Regression analysis was performed.

The study focused on the relationship between child's nutritional status and real income. The study found that household income is a weak predictor, but per capita income is a strong predictor of nutritional status. Source of income and type of employment had significant effects.

In households with a wage earning mother, children had lower nutritional status than where the mother did not work for wages, but mother's wages had a positive effect on child nutrition which was significantly greater than that of the father's wages. Women were more likely to be in the labor force, the smaller the household's land holding, and farm production was positively associated with child nutrition. In the peak agricultural season, parents' income and maternal employment were positively associated with child nutrition, but there was a negative, though weak, association with duration of mother's employment.

Households with wage-earning mothers had fewer children (2.7, compared with 4.1) and more adults (3.7, compared with 2.6) than households where mothers did not work.

This is one of very few studies which report on use of income of different earners separately.

371

E

Kundstadter, Peter 1984

Cultural ideals, socioeconomic change, and household composition: Karen, Luá, Hmong and Thai in Northwestern Thailand. Ch. 12 in Netting, R. McC., Wilks, R. R. & Arnould, E. J., eds., Households Comparative and Historical Studies of the Domestic Group. Berkeley: University of California Press.

This paper looks at changes in household form and function over time to determine the relative role of demographic, socioeconomic and ethnic factors. All households of thirty communities in northern Thailand were surveyed in the late 1960s and again in 1980-81 to provide both cross-sectional and longitudinal data on household composition among the Karen, Luá, and Hmong ethnic groups.

Among the agricultural Karen and Luá the ideal household consists of the parents, unmarried children and youngest married daughter (Karen) or son (Luá) and family. Hmong households are extended patrilineally through exogamous marriages of sons and polygynous marriages to increase their labor supply for cash-cropping.

Changes in household composition among the Luá and Karen communities result from demographic circumstances such as death and migration rather than economic factors. The hypothesis that early stages of modernization or increased wage labor would lead to nuclearization of household structure is not supported, even among urbanized groups.

372

E

Kunstadter, Peter 1982

Household economics and household composition: comparative data from northern Thailand. Paper presented at the American Anthropological Association 81st Annual Meeting, Washington, D.C., December 3-7.

This anthropological study disputes the theory that nuclear households emerge with economic modernization. The study focused on an ethnic minority in northwest Thailand. Households were urban and rural, farmers and wage-earners. Nuclear households were the most common form regardless of economic setting. Widows and elderly couples tended to be absorbed into an extended household structure in cities and rural areas. Farm households had more children under age 10, and urban households had more of other kinds of dependents (due to illness, for example), but otherwise the proportion of different household types was the same in both settings.

373

A

Kusnic, Michael W. and DaVanzo, Julie 1982

Who are the poor in Malaysia?: the sensitivity of poverty profiles to the definition of income. Population and Development Review 8 (Supl.):17-34.

This article uses data from the Malaysian Family life Survey to explore the effect of different definitions of income on income distribution. The question is raised how to adjust household income for variation in size and composition. Income distribution is analyzed using cash, all real income, and income including time spent in home-related services. Including other uses of time as income reduces inequality among households; in female-headed households, this reduced measures of poverty, because female household heads worked fewer hours in the market sector.

374

D

Laird, Judith Fincher 1979

Rural women in Paraguay: the socio-economic dimension. Report prepared for USAID, Office of Women in Development, December.

A section of this report (p. 56 ff.) reports results of a study of decision making responsibilities in rural Paraguayan households. Data were collected by survey of the whole country, covering 2352 households. However, only women (one woman per household) were interviewed; results should be interpreted with this in mind.

Of the sample of women, two-thirds were wives, 14% were consensual partners, and 15% were female heads of household.

In female headed households, 84% of women reported managing daily expenses. In 13%, a male shared or had sole responsibility for this. In male headed households, 50% of women reported managing household expenses, and 73% said they had some participation in these decisions.

Women's decision-making power was greater in consensual unions than in marriages; among married couples it was positively associated with household income.

In male headed-households, 79 to 90% of agricultural decisions are made by men (e.g. purchase of tools, crop management, participation in cooperatives). Joint decision making is most common in decisions about education of children (39% joint), and animal purchase and sale.

375

F

Laufer, Leslie Ann 1983

Demand for schooling for boys and girls in rural India. Ph.D. dissertation. Durham, N.C.: Duke University.

This dissertation evaluates the hypothesis that because young children contribute significantly to family income the opportunity cost of their schooling is high. An extension of the Becker and Lewis child quality model was tested using data from 240 households in six representative rural India villages. Ten households from each stratum of landholding size were randomly chosen, and village workers periodically collected information on farm inputs and outputs, assets, income and expenditures and demographic data. Time use data for 10 activities were collected every 2 to 3 weeks by one day recall for each family member. Of the 415 school-aged children, 67.2% of boys aged 5-9 were enrolled in school vs. 35.3% of girls. In the 11-14 year age group, 51.1% of boys and 30.9% of girls were in school.

The dependent variable of child quality was empirically measured by the average number of hours each child spent in school. Investment in schooling was represented by time spent in school and related activities. The independent variable of child's wage was better approximated by a vector of child characteristics than actual paid wages which underestimated the child's productivity. The vector of characteristics included stock of schooling, child's age, family composition variables, parental wage and caste group and village variables.

The most significant positive correlates with demand for boy's schooling were father's schooling, land ownership and presence of younger children. For girls, both mother's and father's schooling, land and tool ownership and number of adults in the household all increased schooling for girls. The author concludes that opportunity

cost of girls' schooling is lower in wealthier households and that of boys is greater in households owning livestock. Parents generally allocate schooling to girls based on individual characteristics and to boys based on household characteristics.

376

B D

LeVine, Robert A. 1966

Sex roles and economic change in Africa. Ethnology 5(2):186-193.

This article presents an anecdotal discussion of the differences between Kenya and South Africa on one hand and Nigeria on the other hand respect to the effect economic development on sex roles.

In the former areas, male labor migration is an important economic factor. Men leave their rural families for periods of many years; women have taken over traditional male agricultural tasks, though men maintained their rights to land and livestock as well as control over their cash income.

In Nigeria, increased urbanization resulted in improved market opportunities for both men and women. Women's increased economic role resulted in greater independence from men.

Specific data are not cited in support of these conclusions.

377

A B E

Linares, Olga F. 1984

Households among the Diola of Senegal: Should norms enter by the front or the back door? Ch. 16 in Netting, R. Mc.C., Wilks, R. R. and Arnould, E. J., eds., Households: Comparative and Historical Studies of the Domestic Group. Berkeley: University of California Press.

This paper describes the variations in domestic structure, land inheritance, labor cooperation and meal consumption among three Diola villages to highlight sociocultural divergences brought about by selective adoption of Manding (modern) values. No data collection methods are given.

The paper first describes larger, more complex residential units that are commonly found in Diola society. The courtyard group, which usually owns a communal palm grove, functions as a ritual corporation. Group members bury each other's dead and perform other ceremonies communally. A second category, encompassing the house whose elders are related through loose patrilineal descent, hold land in common and cultivate together. Wards are larger and more diffuse units.

Land transmission and ownership and reciprocal labor obligations vary in the three villages. Women receive land to cultivate from their husbands. Tasks vary by sex; cash wages are sometimes paid to household members. Women's and girls' income is pooled, but kept separate from men's income.

Cooking and meal consumption patterns also vary. Husbands' and wives' grain stores are kept separate and used for different purposes.

Some shift in cultural patterns toward sex polarity and social differentiation are cited as adoption of Manding values.

378

C

Lipton, Michael 1983

Poverty, undernutrition, and hunger. World Bank Staff Paper no. 597, Washington, D.C. 70 pp.

This paper contains a useful discussion (Part II, Subsection (j)) of intrahousehold food distribution among the "ultra poor." The author suggest that discrimination against women and children in food allocation is overstated in aggregate data because women and children tend to be overrepresented in the poorest households, so more women and children than men have low levels of consumption. He further suggests that children show more evidence of malnutrition than adults because the most malnourished children die and thus do not form part of the adult sample.

The paper offers a wealth of references to studies demonstrating that food allocation does not discriminate against children (Bogota, Calcutta), or against girls as opposed to boys (several African studies), except in parts of Asia (India, Bangladesh, Philippines), where girl children appear to receive less food in relation to their needs than boys.

The author reports his personal observation that women in South Asia control the household's grain stores and feed themselves and their children while their husbands are out of the house.

379

D

Little, Kenneth 1976

Women in African towns south of the Sahara: The urbanization dilemma. Ch. 8 in Tinker, I. and Bransen, M. B., Women and World Development. Washington: Overseas Development Council.

This chapter discusses competing views of the power, status and roles of urban versus rural women of sub-Saharan Africa. African women contend that urban women have more opportunities to improve their

status. Others argue rural women are less dependent on men because they are essential to food production. Rural women are members of extended families whereas urban women have greater responsibilities for their nuclear families. Women who have resources, such as property or employment training, may influence their marriages. In Ghana wives who share financial responsibilities have more decision-making power.

380

A B C D E

Little, Peter D. 1987

Women as Ol Payian (Elder): the socioeconomic status of widows among the semi-pastoral Il Chamus (Njemps) of Kenya. Forthcoming in Ethnos.

This paper reports results of a participant-observation study over eight months. The author discusses the roles of women at different lifecycle stages.

Women among the Il Chamus do not remarry, and there are many widows since second wives are usually much younger than their husbands. Only widows are female household heads. Women obtain support from their fathers, their husband, and their sons. Husbands may sell their wives' herds for cash, but sons may complain and prevent this. Brothers also give their married sisters cattle and prevent their sale by the husband.

Women manage their own budgets and control the milk from their cattle. Food purchased with the wife's earned income is kept by her for her own children, but food produced by the whole household is shared.

Women's cash economy is separate from men, and their tasks (sale of millet, milk, beer, and contract agricultural labor) are different, but widows are less bound by the sexual division of labor. Widows have more time for work, and they are more likely to send their sons to school since they are free of the husband's demand on the sons' labor for herding. Since women marry locally, upon widowhood they still have access to support of their natal household.

D

Liu, William T.; Hutchinson, Ira W. and Hong, Lawrence K. 1973

Conjugal power and decision making. A methodological note on cross-cultural study of the family, American Journal of Sociology 79(1):84-98. See #139 for complete abstract.

381

B

Longhurst, Richard 1980

Rural development planning and the sexual division of labor: a case study of a Moslem Hausa village in northern Nigeria. World Employment Programme Research Working paper no. WEP 10/WP10. Geneva: International Labor Organization. 32 pp.

This is a case study of the sexual division of labor and of economic obligations in Moslem households in a northern Nigerian village. Data were collected by participant observation in a random sample of compounds, and by systematic interviews with women, covering work, income-earning, and marriage.

The study found a strong differentiation between husbands and wives, with clearly defined responsibilities. The conjugal household was not a joint unit of production and consumption: exchanges of goods and services were often for cash. Women seek economic independence in marriage because divorce is so easy, but they are secluded during their childbearing years, so opportunities are limited. Non-kin networks of credit and gift giving are important to both women and men.

Women's labor is paid at about one-quarter of the male wage rate, but women are socially constrained from performing men's tasks. Women may inherit land from their parents, but information on women's landholding is very hard to get. Women also receive gifts upon marriage (e.g., livestock) which they keep in case of divorce. Women's access to education is limited because of early marriage and seclusion; access to credit is also limited except from husband or informal women's saving societies.

Men perform mainly agricultural work; women's agricultural work is quite limited. Labor on their husband's farms is paid in cash. Most of the income earned by women is from the sale of processed food, using children as intermediaries.

The author suggests that development programs must accommodate the separation of men's and women's spheres to achieve desired outcomes.

382

B

Loose, Edna E. 1980

Women's time budgeting in rural Senegal. Paper presented for the workshop on Sahelian agriculture, Department of Agricultural Economics, Purdue University, May.

This paper presents results of a 15 month study of women's time use in a sample of seven compounds in rural Senegal. Data were obtained

by direct observation of women's activities between 6 am and 10 pm, recorded every 15 minutes.

The area is one of semi-subsistence agriculture. Men generally control millet production; women grow other crops for cash and home use, and are responsible for food preparation, child care, and water carrying. Households are large: an average of 13.9 members in an extended family structure.

The study found women spent 50% of their time in personal maintenance and leisure. Household tasks were shared. One woman would cook, another carry water, freeing others for field work. Water carrying, the most time consuming of women's activities, took two hours per day. The author reports women controlled the income they earned from sale of their produce, which was used for food, clothing, and jewelry.

383

A B

Loufti, Martha F. 1980

Rural Women: Unequal Partners in Development, A World Employment Program Study. Geneva: International Labour Organization. 82 pp.

This paper provides an extensive general discussion of the problems women face within households and the extent to which their needs are often not addressed in development programs. The author cites the frequent underestimation of women's work because of its fragmented and non-monetized nature. She points out that households are variable; individuals belong to many households over time; and that households do not function as homogeneous units but have internal systems of exchange. Therefore programs must target individuals, not the household as a whole. Examples are given of barriers to women's economic participation and of programs which inadvertently reduced women's income-earning opportunities. The problem of conflicting program objectives is discussed: promoting education of children can reduce labor available to their mothers; modernizing agriculture can reduce women's employment; reducing the burden of water and fuel collection may reduce opportunities for women to meet and interact.

384

B

Mangkuprawira, Sjafri 1981

Married women's work pattern in rural Java. Ch. 5 in Epstein, S. T. and Watts, R. A., eds., Women in Development, vol. 3, The Endless Day: Some Case Material on Asian Rural Women. New York: Pergamon Press.

This essay analyzes available time allocation data for three agricultural villages in rural Java to show how women divide their time between directly and indirectly productive activities. The household is the basic unit of production and consumption in rural

Java, and husbands and wives work together to maintain the family. Javanese women work in the fields along with men and many seek outside paid work. Most market traders in Java are women. Men do most of the gardening and women plant and harvest rice.

The time women devote to indirectly productive domestic work does not vary seasonally, although poorer women spend less time on such work than richer women. Women are more likely to engage in directly productive work if they have a large number of children, older children to care for younger ones and if family income is low. New technologies appear to be labor replacing, thus making it more difficult for Javanese women to find paid work.

One source of data (White, 1976) indicates that adult women in Kali Loro spend more time at work (11.1 hours/day), especially in indirectly productive tasks, than men, who averaged 8.7 hours/day. Married women under 30 spend more time on housework, such as fetching water and cleaning, than older women, who spend more time cooking. Married women over thirty spend 5.0 hours a day on domestic work, about 20% on childcare and 60% on food preparation. Observations from many households suggest that birth and childcare do not necessarily interrupt women's directly productive work. Women between the ages of 15 and 29 spend more time on directly productive activities, such as food preparation for sale or farm wage labor, than their older counterparts, who have higher incomes because they spend most of their time trading. Although the patterns of husband-wife cooperation vary, women have important decision-making power in most households and make an important contribution to family real income.

385

C

Marchione, T. J. 1980

Factors associated with malnutrition in the children of western Jamaica, Ch. 9 in Jerome, N. W., Kandel, R. F. and Pelto, G., eds., Nutritional Anthropology. New York: Redgrave Publishing Co.

This chapter uses factor analysis on results of a 1973 study in St. James, Jamaica to determine household correlates to child malnutrition. The survey sample included all households with children between 3 and 36 months in 15 of 100 1970 census enumeration districts. Anthropometric measures, and 24-hour dietary recall for each child/mealmaker pair were collected. Some degree of malnutrition was found in 47% of the one-year-olds; more serious malnutrition (below the third centile in the Gomez scale) being twice as prevalent in rural than urban areas.

Results of the factor analysis indicate that poor nutritional status of one year olds is related to the degree to which households depend on a subsistence agriculture and to the dependency stress caused by increasing number of preschool siblings. Child nutritional status is best when both parents are in the household and the mother is not

employed outside the house. Family cohesion tends to increase with the age of the parents. A child's weight is also higher in households with mature mothers and guardians. Household diet and monetary wealth were not significantly correlated with nutritional status. The author suggests that the short time periods recalled may have been unrepresentative.

386

A

Mbilinyi, Marjorie 1974

Barriers to the full participation of women in the socialist transformation of Tanzania. Paper presented to Agricultural Development Council Conference on Role of Rural Women in Development, Princeton, NJ, Dec. 2-4.

This brief paper describes the male-dominated pattern of resource control in Tanzanian households. Women have rights to land only through their husbands or their fathers and brothers. Men commonly migrate to cities leaving one wife to be farm manager in the village, but they retain the right to dispose of the wife's cash earnings.

387

A B

McCarthy, Florence E. 1980

Patterns of employment and income earning among female household labour. Paper prepared for Ministry of Agriculture and Forests. Dacca, Bangladesh.

The implications of survey findings that Bangladeshi women receive lower wages and have a lower frequency of employment than men are discussed. Results are based on a survey of 122 female household laborers in 4 different districts of Bangladesh. Women find work 70 days during rice harvesting season, and they are paid three meals and a quantity of rice. During the rest of the year they work an average of 84 days annually, with non-harvest season income about half of harvest time wages. Usually they are paid 2-3 meals for a full day's work, although in some places women are paid rice, wheat or cash.

Cash wages mean more food for the family but the very poor women will then only get one evening meal. Rising prices, increased landlessness and limited employment opportunities have forced increasing numbers of married women and young children into the labor market. Twenty-six of the 122 surveyed were the sole income earners in their families. Fifty-six women came from households averaging six members with one other wage earner, 30 had two other wage earners and 10 had 3-4 other wage earners.

The author finds that marriage and a family do not guarantee adequate income. She predicts that women's wages will fall relative to men's and their income earning capacity will decline. Agricultural work is

the most remunerative for women. The long periods of underemployment may lead to urban migration. Rice mills threaten employment opportunities in processing.

388

C

McFie, John 1967

Nutrient Intakes of Urban Dwellers in Lagos, Nigeria, British Journal of Nutrition 21:257-68.

This article reports the results of a cross-sectional food consumption survey of low-income households in Lagos who had immigrated from rural areas of the country. Data were collected on clinical signs of malnutrition and body weight, and by weighing seven consecutive days of individual food servings consumed at home. Most of the households were nuclear families, some headed by women, and some with both male and female heads.

The survey found that children had lower intakes of all nutrients, in relation to requirements, than adults, with the exception of one group of preschool children who consumed significant amounts of milk. The diets of 4 to 6 year old children were more nearly adequate than those of 10- to 12-year-olds. These results are similar to those of Nicol (1959) for rural Nigerians.

A E

McMillan, Della 1984

The role of longitudinal case studies in evaluation of household effects of large-scale development planning. In Guyer, J. I. and Peters, P. E., eds., Conceptualizing the Household: Issues of Theory Method and Application. Charlottesville, Va.: Teleprint Publishing. See #143 for complete abstract.

McSweeney, Brenda Gael and Freedman, Marion 1980

Lack of time as an obstacle to women's education: The case of Upper Volta, Comparative Education Review 24(2): Part 2: S124-139.

This article discusses the findings of a time use study (methodological details are contained in abstract #144) and analyzes the impact of the labor-saving technologies on rural women's workload that were introduced as part of the Upper Volta women's non-formal education project initiated in 1967. This article is based on data gathered from the subsamples in the project village of Zimtenga and the control village of Bayend-Foulgo.

This sample of women averaged as much time on production/supply/distribution and domestic tasks as men. Girls aged 7-11 contribute twice as much work as boys, up to half of their time being spent on hauling water, grinding and transporting grain.

Introduction of technologies designed to alleviate the time burden of women included mechanical mills for grinding grain, accessible wells and carts for fetching wood. Technology users were asked about their use of the time saved: one half used the time to do other tasks, 25% spun cotton and 25% rested. Observations in other villages indicated that use of carts led to a redistribution of women's tasks to men and accessible wells encouraged adoption of health-related advice. However, the hypothesis that more children, especially girls, in project villages with these technologies would be sent to school was not supported.

Nonformal adult education projects, including functional literacy classes and radio programs and listening groups, did alter women's behavior in project villages where filtering water (especially in the dry season) and use of latrines were selectively adopted. The radio program attracted the highest number of participants in both project and control villages.

B

McSweeney, Brenda Gail 1979

Collection and analysis of data on rural women's time use, Studies in Family Planning 10:379-83. See #144 for complete abstract.

Merrick, Thomas W. and Schmink, Marianne

Households headed by women and urban poverty in Brazil. Ch. 12 in Buvinic, M., Lycette, M. A. and McGreevey, W. P., eds., Women and Poverty in the Third World. Baltimore: Johns Hopkins University Press.

The trends of increasing numbers of female-headed households, especially in urban areas, and of declining formal sector employment among women in Brazil are examined. Almost 40% of female heads report no income vs. only 2.5% of male heads; half of these are in the lowest income class. Industrial expansion has allowed men to dominate the urban labor force; the introduction of modern technology to the textile industry led to a 25% decline in women's participation and a 200% increase in men's. Similar shifts have occurred in other industries, resulting in less than 10% of women employed in the formal sector, with its greater employment and income security.

The authors use data from the 1972 Belo Horizonte metro area survey of 2,287 households, stratified by income, to analyze poverty among female-headed households. The survey found 16.6% were female-headed households, 80% between the ages 25-59. Forty-five percent were below the poverty line as compared to 30% of all households. Low income households were more likely to have secondary workers than were the very poor. Lack of access to the formal sector, rather than lack of education, is the main cause of the disadvantaged earnings position of women household heads. Despite laws to the contrary, most employers do not provide day care, forcing female heads to have daughters fill this role rather than go to school. Female heads also have four times less access to basic government-sponsored health services than male head, compounding the poor status of female-headed households.

A hierarchical log-linear analysis of the impact of household structure and human capital endowments on work status revealed composition effects of age, sex, education and marital status on work status, regardless of the sex of household head. This combined with the lower frequency of secondary earners in poor households and the lower earnings of females versus males explain why female-headed households are likely to be poor.

B

Messer, Ellen and Bloch, Marianne N. 1983

Women's and children's activity profiles in Senegal and Mexico: A comparison of time allocation and time allocation methods. Michigan State University Working Paper #42, Dec. See #148 for complete abstract.

391

A B D

Mies, Maria 1983

Indian women in subsistence and agricultural labor. ILO Rural Employment Policy Research Programme Working Paper no. WEP 10/WP.34. Geneva: ILO. 231 pp.

The author employed resident observation group discussions and selected household surveys to characterize the work, income, and sexual division of labor of Haryan women. Data collection and analysis methods are not specified. Women's labor participation is higher than census figures, especially in agriculture where women contribute 70-80% of their yearly labor time. The manual labor required for rice, millet and tobacco cultivation is done by women, usually for cash wages. Men perform all operations using machines or draft animals. Women raise domestic animals, tend buffalo and do all the housework; girls over 10 help with the latter, and boys graze the cattle and play.

The pattern of income distribution is patriarchal; the men control allocation of their wages and give only a part to women for family clothes. Women's earnings go to family consumption. Eight of the 20 women in the survey said they had control over money and four claimed joint control. Women's control seemed to be inversely correlated with the family's economic status and the amount of men's cash income.

392

B

Mies, Maria 1982a

The dynamics of the sexual division of labor and integration of rural women into the world market. Ch. 1 in Beneña, L. (ed.), Women and Development. New York: Praeger.

This article discusses the effect of women's work as lacemakers on the division of labor and responsibility in households in a region of India.

Lacemaking is performed by women at home; marketing of the lace is mostly handled by men. Women spend 6-8 hours per day at lacemaking, which is perceived as non-work by their husbands. This work is done by higher caste women. Untouchable women do agricultural work, which is seen as work, and is more profitable than lacemaking.

Women performed all household tasks (cooking and serving food, washing, etc.) even in cases where husbands did not work and all household income was provided by lacemaking.

The author reports that women refuse to permit husbands to control their (women's) income, which is spent entirely on household needs.

393

A B D

Mies, Maria 1982b

The Lace Makers of Narsapur: Indian Housewives Produce for the World Market. London: Zed Press. 196 pp.

A detailed description of the lace making industry and its workers in Narsapur and data from a survey of 150 urban and village lace-making families are presented. Over half the women in the area are believed to make lace, working in their own homes on a piece rate basis. The traders are always men who maintain control over the producers by overseeing the final production stage in the exporter's place of business.

Women spend 50-75% of their waking hours (6-8 hours/day) making lace, and must attend to the men in the evening. Children spend 8-10 hours making lace. As women are responsible for filling the gap between family expenditures and income, lace making is an economic necessity for poor women. The proportion of lace-making income in the household budget was inversely related to the family's economic status. Women also take loans and pawn their valuables to meet consumption needs. 78% of the women reported they had no control over the family income, except for their lace earnings.

394

D

Moore, M. P. 1974

Some economic aspects of women's work and status in the rural areas of Africa and Asia. IDS Discussion Paper Number 43, University of Sussex, March.

This paper discusses the causes of the low status and power of women in many societies and the reasons for high levels of women's status in some cultures.

The author cites evidence from industrialized nations and from anthropological studies of LDCs that women's status and decision-making power (defined as control over her own life decisions, the use of her time, and access to resources which enter the household) result from her economic contribution, either through wage earning or subsistence production. Household work, though not unproductive, is not given the same respect. Anecdotal evidence shows that in LDCs women from lower economic classes are more likely to work outside the household, and have more say in family matters. Cultures which rely on women's labors for subsistence farming and for rice monoculture (which requires huge labor input) accord higher status to women within the household.

The author suggests that providing income-earning opportunities for women is the best way to improve their power within the household,

but acknowledges the problem of competing household tasks which are time consuming and labor intensive.

395

A E

Moser, Caroline 1981

Surviving in the suburbios, Women and the Informal Sector, IDS Bulletin 12(3):19-29.

A case study from Guayaquil, Ecuador where the majority of men are excluded from secure formal sector employment is used to analyze the role of women's work in low-income household survival strategies. Women generally find paid employment either in domestic service, which is considered women's work, or in retail selling, where no sexual segregation exists.

Women adopt a variety of strategies to supplement family income, but usually the whole household is involved and should therefore be the unit of analysis. The mean household size in the survey sample in Indio Guayas was 5.8 with 88% of nuclear and extended families being headed by males. Household structure is not stable, with polygyny and serial monogamy being common practices. Thus large family size and unstable consensual unions in this village constrain household-based survival strategies.

The survey data show that women's labor in domestic service varies according to lifecycle stage. Young women without dependents are paid weekly wages working as maids for middle-class families. Women with children initially withdraw from the labor force but often are forced to seek paid work to supplement family income. They generally must still perform all the domestic labor, even if the husband is unemployed and they are the primary income earners. Older women without dependents often provide unpaid child care services for kin, thus contributing to the reproduction of labor while allowing for a household strategy of multiple income-earners.

396

D

Moses, Yolanda T. 1977

Female status, the family, and male dominance in a West Indian community, Signs 3(1):142-53.

This descriptive article is based on review of secondary data (surveys, government records, and interviews with government specialists) and on an intensive participant-observation and interview study of a small number (not given) of women in Montserrat, B.W.I. The study looked at decision-making power and perceived status of women in working- and middle-class households.

The author holds that economic contributions by women do not necessarily enhance their status in households with a man present. In female-headed households, authority is determined by age. In male-headed households, middle class women defer to men more than unskilled women. Unskilled women also provide more than 50% of household income.

Skilled married women report decision-making power over routine household purchases; men decide on larger purchases such as radios and cars. Unskilled women make fewer decisions because the range of choice is more constrained. Single women take the role of decision-maker by necessity, not choice. Single women establish support networks with other women kin. Women living in their father's households report no decision-making power, irrespective of economic contribution.

397

B F

Mukhopadhyay, Maitrayee 1980

Women and development: An Indian perspective. Paper for Mid-Decade Forum at the World Conference of the U.N. Decade for Women, Copenhagen, Denmark. Oxford, England: OXFAM. 90 pp.

This report describes the current status of urban and rural poor women in India, where the traditional belief is that women must remain dependent on men and have few rights. In poor families the mother is both breadwinner and housekeeper, forcing the older daughter to perform childcare tasks. This socialization process limits the freedom of association and communication that girls can have. Women and girls also have little access to education for both cultural and economic reasons. Yet women make a large contribution to the subsistence economy via care of children, production of the major share of household food, marketing of produce and handicrafts and general household maintenances. The market economy has led to a decline in women's economic role because men have mechanized the manual tasks previously performed by women.

The high mortality rate among females in India has led to a reversal of the usual female-male population ratio there. Females are most vulnerable at 1-5 years and at 15-34 years with a recent trend of increasing death rates in other age groups as well. This phenomenon has been attributed to the neglect and lack of medical care for girls due to their relative lack of worth to the parents.

398

B

Murdock, George P., and Provost, Caterina 1973

Factors in the division of labor by sex: a cross-cultural analysis, Ethnology 12(2):203-25.

This paper presents a factor analysis of data from 185 societies on the sexual allocation of particular tasks and attempts to explain why certain tasks are assigned to one sex or the other.

Some of the factors identified are compatibility with child care (female); degree of complexity or specialization (higher degree means task is male); qualities of materials used (hard materials result in male tasks).

This typology is of limited predictive value.

399

A

Murray, Colin 1975

Marital strategy in Lesotho: the redistribution of migrant earnings, African Studies 35(2):99-121.

This article reports results of a two year field study of a village in northern Lesotho. Twenty families were questioned about marriage payments they had made. The questions covered marriages between 1914 and 1973.

Traditionally, bridewealth was paid in cattle; subsistence was derived from agricultural and cash earnings. Now cash from migrant labor is used. Because of its liquidity, this form of bridewealth is used for immediate consumption needs, while cattle was a form of saving.

400

E

Myers, George C. and Nathanson, Constance A. 1983

Cross-national variations in household and family structure among the elderly. Michigan State University Working Paper #24, May. 7 pp.

This paper reviews international data employing direct and indirect measures of household structure and concludes that the nuclear household is the predominant family form, except in Asian countries, especially India, where extended household families are common. The extent of multiple generations or couplings of family nuclei within households can be difficult to assess due to variations in definitions, census procedures and quality of the enumerations. Lack of information on kinship relations that extend beyond the household also limit the analysis.

The measures used in this analysis include household type as defined by number of family nuclei, household size, overall adult headship index to measure household complexity and the dynamics of family aging as measured by marital status according to age. Formation of nuclear family relationships is not a significant phenomenon for older persons in either developing or developed countries. Older females are less likely to marry than older males, due to the lack of potential spouses and the propensity of older males to choose younger women.

401

B

Nag, Moni; White, Benjamin N. F.; and Peet, R. Creighton 1978

An anthropological approach to the study of the economic value of children in Java and Nepal, Current Anthropology 19(2):293-306.

This article reports the results of two studies of the economic contributions of children. In Java, data on 478 households were collected by household survey. Work input, time allocation, income and expenditure, and food consumption data were collected by recall every six days for one year on 20 middle- to low-income households containing a child 6 to 19 years old. In Nepal household surveys of 674 households were combined with work input data obtained for all members of a subsample of households. Work input data were collected by one-day direct observation monthly for 7 to 10 months. Because of inaccuracy of recall and difference in method, comparability of data is subject to question.

The study found in both countries girls aged 15 to 19 spend more time in work than boys (7.9 versus 10.2 in Java; 9.5 versus 11.3 in Nepal). Girls did more household work and only girls did child care. Livestock tending was children's work in both countries.

In households with more children work input per child was higher, and incomes were higher.

Elderly parents lived with their children in 72% of cases in both countries; dependence on sons was more common than on daughters.

402

B D E

Nash, June 1983

Implications of technological change for household level and rural development. Michigan State University Working Paper #37, October. 23 pp.

This report uses case studies to analyze the impact of technological change on household structure, sexual division of labor and power and decision-making. The author argues that Chayanov's model, where

production and consumption decisions vary in response to the ratio of household producers to consumers does not take wealth and cultural determinants of decision-making power into account.

Development has tended to enhance men's role in production, and women have lost control of household labor, income and food-related decisions and become more dependent on male wage earners. The impacts of cash-cropping and wage labor include increased male migration, reduced social networks of support and reduced complementarity of tasks between males and females, thus reducing the total family potential for production.

403

B

Navera, Emeline Realubit 1978

The allocation of household time associated with children in rural households in Laguna, Philippines, The Philippine Economic Journal 36 17(1-2):203-23.

This study uses multiple regression analysis of data from The Agricultural Development Council multipurpose household survey in Laguna, Philippines to examine the determinants of the labor time costs and benefits of children to their households. Data were collected by recall and by direct observation (see #117 for method).

The hypothesis of the study was that the time cost of children will be highest, and economic contributions lowest, in the early years, and that the situation will reverse with age.

The time variables used were: child care, other home production, market production, and leisure, all measured in minutes per day.

The study found time cost of children averages 5 hrs/day under age 2, about 2.4 hrs/day at age 3-4, and about 1.3 hrs/day for children 12 and over. Economic time contributions of children start at age 3-5 in very small amounts. By age 10-11, the net contribution of time is positive.

Children's contribution of market time is inversely related to household income; in wealthier households children contribute to home rather than market production. Children from larger households contribute more economic time. Education increases home production time of children; it increases the market time of low- and middle-income children and reduces it for high-income children. Education reduces children's leisure at low incomes and increases it at high incomes.

404

A

Nelson, Nici 1979

Productive and income-generating activities for Third World women. UNICEF Knowledge Network on Women. Paper no. 3. New York: UNICEF. 111 pp.

This paper contains a brief section which discusses the differential uses of women's income versus men's. Several studies are cited which show that women are more likely to spend their incomes on household needs (including food). The case is made that women's income from outside the home increases their status in the home and influence over spending decisions, again citing studies. Examples are given of men's resistance to increased income-earning opportunities for women (Niger, Sri Lanka), and of women's reluctance to ask men for income in the absence of such opportunities (Mexico, Kenya).

The argument is made that income-earning opportunities for women will contribute to household welfare.

405

B C

Nerlove, Sara B. 1974

Women's workload and infant feeding practices: a relationship with demographic implications, Ethnology 13(2):207-14.

This study reviews evidence from 83 societies to test the hypothesis that a high degree of participation by women in subsistence activities is associated with early (before one month) supplementary feeding of infants.

An index of women's participation was developed by multiplying a measure of the degree of dependence on a given subsistence activity in a society by the degree to which the task was performed by women.

The hypothesis was substantiated statistically: women who start supplementation early contribute, on average, 38% of subsistence activity, while others contribute 27%. Given the reliance on secondary data with variable reliability and the indirect nature of the women's participation variable, this study has questionable predictive usefulness.

406

C

Nicol, B. M. 1959a

The calorie requirements of Nigerian peasant farmers, British Journal of Nutrition 13(3):293-306.

This article reports results of a food consumption survey in seven rural areas of Nigeria. Data were collected on clinical signs of malnutrition and health status at the beginning and end of the one year study period. Food consumption was measured for each member of the sample households over age 4, for ten consecutive days in three different seasons. Food consumed between meals and away from home was measured by recall; food eaten in the home by direct observation. Intake was adjusted for FAO standards for age, sex, weight, climate, and pregnancy/lactation.

The study found caloric intakes showed preferential treatment of adults. Males and females over age 12 almost always met caloric requirements, including pregnant and lactating women. This finding was confirmed by data on weight, and was true irrespective of overall food supply.

Children aged 4-12 seldom obtained food to meet their caloric requirements, even when adult diets were sufficient. Sex breakdown was not obtained.

The author notes that children spend much time away from home hunting and fishing, so their food consumption may have been underestimated.

407

C

Nicol, B. M. 1959b

The protein requirements of Nigerian peasant farmers, British Journal of Nutrition 13(3):307-20.

The article reports results of the survey described in Nicol, 1959a (#406).

The study found that protein intake as measured by dietary intake was, on average, adequate for all age and sex groups. However, by clinical measures there was an incidence of protein malnutrition between 2.2% and 5.3% in the age ranges under 9 years.

408

B

Nieves, Isabel 1982

The interface between poor women's nurturing roles and productive responsibilities. Paper prepared for the Second Annual Women, Work, and Public Power Workshop, Harvard Institute of International Development, April. 17 pp.

This paper discusses, in a general way, the strategies which women use to cope with the combined demands of economic production (home and market) and child care. The author disputes the commonly held assumptions that the biological mother is always the primary infant caretaker; that nurturing of children is not transferable; that informal-sector agricultural work is most compatible with child care.

Evidence is cited from one study showing that women employed in the formal sector breast-fed longer and more frequently than those in the informal sector. Another study is quoted, showing women's market work is traded against leisure time, not child care or home production.

Some of the strategies women use are choosing work with flexible hours or bringing children to the work place, changing household composition (e.g., recruiting members to help), and delegating some tasks.

409

B E

Nieves, Isabel 1981

A balancing act: strategies to cope with work and motherhood in developing countries. Paper prepared for International Center for Research on Women, Policy Roundtable, "The Interface Between Poor Women's Nurturing Roles and Productive Responsibilities," Washington, D.C., Dec. 10. 16 pp.

This paper argues that conventional measures of work and labor force participation in developing countries fail to account for women's roles as both mothers and providers. In order to give women the social support they need to be active participants in economic development, it is necessary to examine the ability of poor women in developing countries to cope with their dual roles of mother and provider. Poor women do work. When poverty and struggle for economic survival are a constant condition of people's lives, then the traditional sex role expectation and sex-based division of labor break down and women assume the responsibility for family survival by default. For instance, low male wages force women to contribute to family income through a combination of home production and work outside the house. When home production, child care and work outside the house are considered, females work longer hours than males. In

order to manage their multiple roles, working women appear to meet the heavy demands upon their labor in many ways which maximize the well-being of their family while also imposing heavy costs upon themselves. Coping strategies include: delegating the responsibility of certain tasks to other household members, changing the size and composition of the group that lives together, maintaining physical mobility, obtaining transfers of income goods services from others and learning to obtain support from public agencies.

410

E

Nieves, Isabel 1979

Household arrangements and multiple jobs in San Salvador, Signs 5(1):134-42.

This article provides a very interesting discussion of variations in household structure in the slums of San Salvador and how they relate to household well-being, based on empirical research.

Socioeconomic data were collected by standardized questionnaire from 197 households in 35 economically marginal communities. The household was defined as the co-residential unit, distinguished from the family (since kin do not always reside together) and from the mutual economic support group, since it is common for economic contributions to be made from non-household members.

Almost 80% of the households were based on conjugal or affinal couples. The remaining 20% were based on consanguineal ties. Most of the consanguineal households contained either no male or an economically inactive one. Women are economically more secure than men, because their wages are lower and so they are more likely to be employed. Men often contribute to consanguineal households (often to more than one) without being members of the residential group.

The author found that consanguineal households were more adaptive than conjugal ones because their boundaries were more flexible; members could join or leave easily.

The larger size of these households permitted delegation of responsibilities: household and wage-earning tasks could be shared. The author also found that households in the slums establish fictive kinship networks based on reciprocity as a substitute for the extended family support network of rural areas.

411

B

Owens, Naomi and Hussain, Naseem (n.d.)

Street food in Bangladesh. Equity Policy Center Paper. Washington, D.C. 17 pp.

This paper reports the results of a survey of all 550 street food vendors in Manikganj, Bangladesh. Women vendors are rare, although 62% of the vendors have female helpers, of which 26% are unpaid. Fuel costs are 5% of sales for those who buy it, but most fuel is gathered by women and children.

Food vending is most active in the winter, although 25% of those sampled say they do different work during at least one season a year. Most of the traders are local; two-thirds were born in Manikganj and most of the remainder have lived in the town over ten years.

412

A B

Pala, Achola Okeyo 1979

Women in the household economy: managing multiple roles. Studies in Family Planning 10(11/12):337-343.

This is a descriptive article about market women among the Luo in Kenya. The author says that, with the rise of formal education, disproportionately given to boys as a qualification for formal sector work, women find work in the informal sector as sellers in rural markets.

Women report that they work for household expense money and school fees, and to obtain financial independence from relatives. Capital to start trading is usually obtained from relatives. Market women form labor exchange relationships with other women to perform agricultural and marketing tasks. Generally, market women delegate household tasks to older children and other relatives rather than to husbands or co-wives. But women in agricultural trade often cannot do agricultural tasks and must buy food. They report spending most of their earnings on food, clothing, household necessities, and health.

413

A B D

Pala, Achola Okeyo 1978

Women's access to land and their role in agriculture and decision-making on the farm: experiences of the Joluo of Kenya. Institute of Development Studies, University of Nairobi, Discussion paper no. 263. April. 21 pp.

This paper describes the results of a study of land ownership and agricultural decision-making. Data were collected over 15 months by questionnaire, informal interview, and participant and non-participant observation.

The author describes traditional patterns, by which women had inalienable rights of usufruct but not disposal of land from their fathers and then from their husbands. Women may exchange use rights, but not ownership of land. Recent land reform has resulted in individualized registration of land ownership, generally by men. More than 90 percent of women interviewed depend on land owned by a male relative who now has the legal right to alienate the land.

Women interviewed said they mainly farm subsistence crops. Ploughing is held to be a male task: 52 percent of respondents hired male labor; 32 percent said their husbands ploughed for them. Planting, weeding, harvesting, and transport and storage are women's tasks. Most women reported that many men's tasks are now also done by women: land clearing, ploughing, construction of granaries. But when labor is hired, sexual allocation of tasks is observed.

Decisions about land sale are generally made by men, except in the case of widows or women whose husbands have emigrated; but decisions about land use are made by women. Decisions regarding sale of cattle are "male-typed." Decisions on children's education were made jointly in 41 percent, and by the father in 36-39 percent of respondent households. Data were obtained by direct question with probes.

414

A B D E F

Palmer, Ingrid 1985

The impact of male out-migration on women in farming. The Population Council's Women's Roles and Gender Differences in Development; vol. 7. W. Hartford, CT: Kumarian Press.

This article draws on case studies from Southern Africa and the Near East to examine how women adjust socially and economically when males migrate for work. In Southern Africa men may be absent for 15 years on average, visiting home between their 1-2 year work contracts. internal migration, as is the case in Swaziland, allows for more frequent, but shorter visits than country migration. Migrants bring savings home between contracts, and remittances are usually small.

In Lesotho the small remittances are spent by the wife and larger savings go toward education, livestock acquisition, improved housing, household goods and clothing.

Daily farm management falls to women who are faced with declines in farm assets, making the hiring of male labor difficult. Cash needs and difficulties in marketing grains create incentives for women to take off-farm employment. Yet women's increased efforts often did not enhance their welfare, and the strain increased with the duration of the husband's absence. Fertility remains high and only the education determinant appears to be enhanced by male migration.

Near East migrants, who often go to oil-producing countries, bring home large remittances. In Yemen, wives are left in male kin's custody and often spend the money on consumer goods, not agriculture. Pakistani women in extended families buy household food and livestock, while those in nuclear families hire labor. In one Egyptian village, the women spent the remittances to form nuclear units, thus allowing the wife to gain financial, productive and supervisory power. Already existent nuclear households use remittances to maintain farm output levels, while those who use the money to disengage from extended households may choose non-agricultural occupations. The welfare of women in this region has generally improved, especially in areas with potable water, electricity and grain mills. Women in extended households shared in the physical benefits but not in status improvements. Fertility is expected to decline, although more slowly in the absence of changes in women's status.

416

A B

Palmer, Ingrid 1979

The Nemow case: case studies of the impact of large scale development projects on women. Population Council, New York, Working Paper #7. September. 92 pp.

This paper is the result of empirical study of two actual development projects, written up as a single fictitious case. Field study was based on open-ended interviews with women (six from each of six villages) and with project managers and community leaders.

The project described was a large scale resettlement onto newly irrigated rice land. Credit and inputs for rice production were provided and social services were planned. The project results in fewer wage jobs available for women, but women worked in unpaid family labor (on the rice crop) more days than before. Household income increased, but women's access to income and resources declined, resulting in lower fulfillment of household basic needs. The increased workload of women reduced the amount of breast-feeding. Women's ability to hire labor and their legal right to land were weakened by the project, because the project focused on rice production for cash, which was a man's responsibility. Men were the

lessees of the irrigated land and full owners of the crop. Further, resettlement weakened traditional kinship networks of support for women.

The author concludes that this kind of project should provide for separate men's and women's ownership of rice land and equal legal status in Farmer's Associations for men and women.

417

A D

Palmer, Ingrid 1977

Rural women and the basic needs approach to development. International Labour Review 115(1):97-107.

This article gives a general discussion of the effects of economic changes on women's work. The author suggests that modernization in Third World countries, which results in specialization of jobs and commercialization of agriculture, decreases women's ability to secure an equitable share of family real income. Women tend to remain in untechnologized, low-productivity tasks. This reduces women's authority, because economic power shifts to men.

The author holds that development projects must address exchange relations in the household and ensure that women have some authority over family earnings, so that projects will benefit family members.

418

A B E

Palmer, Ingrid; Subhadhira, Sukaesinee and Grisanaputi, Wilaiwat 1983

The northeast rainfed agricultural development project in Thailand: A baseline survey of women's roles and household resource allocation for a farming system's approach. In the Population's Council's Case Studies of the Impact of Large-Scale Development and Projects on Women, no. 3. New York.

The study reported here was designed to provide baseline household data and an analytic component to the farming systems approach used in the Northeast Rainfed Agricultural Development Project (NERAD). The purpose of the project was to improve farm productivity and utilization of household resources in 8 selected sub-districts of northeast Thailand. Data collection methods were not specified, but the household, defined as the primary unit of family reproduction, was the focus of the study.

The study found evidence that small farm size leads to nuclearization of households, but pooling of farm resources between related households was common in poorer villages and among female heads. Although males were found to be more involved in land preparation than females, specific division of tasks varied by village. Most respondents, both female and male, claim that migration of children

and greater secondary crop cultivation has increased the workload for men more than for women.

In villages which produced a large rice surplus, men are apparently becoming the primary controllers of all sources of income. In contrast, where secondary cash-cropping and allocating income for specific purposes are prominent, women control the income. Migration of children, even daughters who would normally inherit the land, to towns has allowed farm size and viability to be maintained. In villages with small farms, daughters remitting money outnumber sons.

Suggested initial target selection and interventions are first to make the presence of institutional credit, farm input supplies and extension services more uniform and second to overcome particular constraints found only in certain villages. A third focus would be villages characterized by isolation, past neglect and lack of organization between households. Fourthly, particular groups within some villages can be targeted.

419

A B D

Papanek, Hannah 1979

Implications of development for women in Indonesia: selected research and policy issues. Center for Asian Studies, Boston University, Discussion Paper #8. 32 pp.

This paper suggests that all social, economic, and political programs of development must incorporate concern for the roles of women in the household and the society. Specific woman-focused projects, isolated from the mainstream, are not sufficient.

The author holds that women are not a single, homogeneous group, and that women do not always live in intact households in which the husband is the primary or the sole earner. Poor households are more likely to depend on the earnings of women and children for survival, so policies should not be adopted which reduce paid work opportunities for women. Women's work includes work for pay, work at household production, and the maintenance of family social status ("family status production") which has an economic benefit in terms of marriage and employment opportunities for other household members. Women, in deciding whether to participate in paid labor, face tradeoffs among these three kinds of activities.

420

D F

Parsons, Donald O. 1984

On the economics of intergenerational control, Population and Development Review 10(1):41-54.

This paper argues that traditional analyses of intrafamily allocation, which use a parental control model of the household, neglect the issue of intergenerational relations and control. The implications for Gary Becker's (1974) model of consumption, which assumes that if the altruism and income of one family member is large, then that individual will determine intrafamily distribution of consumption, are then presented. The issues that are focused on include lifecycle shifts in household composition and power, intrafamily altruism, increased demand for and investment in schooling and the effects of intergenerational exchanges on economic growth.

422

B D

Pines, James 1983

The nutritional consequences of agricultural projects: evidence and response. Paper prepared for UNACC Subcommittee on Nutrition. Mimeo. January. 33 pp.

The paper discusses the ways in which agricultural projects can have different effects on nutritional status depending in part on the type of household and the role of the individual. Projects may change the allocation of labor burdens within the household by inducing migration or increasing time constraints on some members. An increase in women's labor burden may result in reduced attention to subsistence farming, food preparation, and child care and feeding.

Projects may reduce women's income control by eliminating or mechanizing tasks formerly performed by women for wages. There is some evidence that women's income is more directly related to nutritional status in the household than other income.

The author suggests that each agricultural project should be analyzed in terms of its social impact.

423

B

Pittin, Renee 1984

Documentation and analysis of the invisible work of invisible women: A Nigerian case study, International Labour Review 123(4):473-490.

This paper contends that past surveys and censuses have underestimated Muslim Hausa women's economic contribution to the

Nigerian economy. Their primary economic activity is commodity production and trade, which is kept strictly separate from their role as wife and mother. In the census, all data on women's work had to fit into one of three male-oriented categories--trade and clerical, agriculture, and fishing and other. Homemaker was defined as a person over 6 years who was totally engaged in household duties and not paid for this work. Women who engaged in limited trading, worked on the husband's farm or in their own shop were also included in the homemaker category. To be considered in the labor force men had to work at least one day/week while women had to work three days. The use of household as an enumeration unit and emphasis on male heads in surveys tend to obscure women's economic roles. In Nigeria the introduction of universal primary education has reduced the supply of child labor, allowing secluded women more access to traditional markets. The author suggests use of participant observation and interviews plus time use surveys to improve data collection on women's economic participation.

424

B D

Pollock, Nancy J. 1970

Breadfruit and breadwinning on Namu Atoll, Marshall Islands. Unpublished Ph.D. dissertation, University of Hawaii. 357 pp.

This dissertation is the result of a participant observation study of methods of food procurement. The author notes that household composition is constantly changing as nuclear families move in and out of joint family settings. Households are defined in terms of residence location; however, mutual economic support obligations are not confined to this group, but extend along kinship lines. By tradition, the household head must be male; if no man is present, a woman may share the role with an absent male family member. The author discusses the sexual allocation of tasks, indicating a strong sexual differentiation of acceptable work. Responsibility for decision-making is also allocated by sex. Only men may trade with the ships which buy copra, so men decide what to purchase with the cash income.

425

B C

Popkin, Barry M. 1983

Rural women, work and child welfare in the Philippines. Ch. 8 in Buvinic, M., Lycette, M. A., and McGreevey, W. P. (eds.), Women and Poverty in the Third World. Baltimore: Johns Hopkins University Press.

This discussion analyzes the effect of rural mother's labor force participation on the amount of time they devote to preschool children, their diet and the resulting impact on nutritional status. The data were from a 1975 random sample survey of 573 households in 34 rural Laguna barrios using recall by the mothers and revisits to

99 households for observation. Regression analysis was performed on childcare time as a function of mother's work status, proximity of work to home, job compatibility with bringing children, mother's education, age and weight of mother, household capital and demographics.

Results indicate mother's work status does not significantly affect father's household time but does increase time older children spend on childcare, while decreasing hers slightly. Preschool children of working mothers consume 145 more calories and 3 grams more protein than those with nonworking mothers. Households with working mothers buy 42% of calories and 33% of protein in the market vs. 35% and 26% respectively for households with nonworking mothers. Regression coefficients indicate that increasing mother's per capita childcare time is associated with small gains in average child height while increasing sibling childcare time has the opposite effect. The author interprets these results cautiously and cites other factors to be considered, including the effect of work status on number and spacing of children as well as determinants of labor force participation, and other variables.

426

B C

Popkin, Barry M. 1980

Time allocation of the mother and child nutrition. Ecology of Food and Nutrition 9(1):1-14.

This article reports results of a survey of 573 households in Laguna, Philippines. Data on household dietary intake, economic and demographic variables were obtained in five rounds over two months. For a subsample of 99 households, two-day dietary intake for children and data on child care time by mothers were collected.

The author reports that young preschool children whose mothers engaged in market work had lower nutritional status than those with non-working mothers, and that child care time of working mothers was also lower. Older siblings provided more child care time in these households.

The types of market work which women performed were handicrafts, salaried employment in town, and small business, as well as subsistence farming.

Popkin, Barry M., and Solon, Florentino S. 1976

Income, time, the working mother, and child nutriture. Journal of Tropical Pediatrics and Environmental Child Health 22(4):156-166.

This article reports results of a survey of households in Cebu, Philippines. Urban and rural households were included. Data collection on income, food consumption, and women's time use was by questionnaire and direction observation, including 24-hour dietary recall for children's food intake.

The study found that 26 percent of urban and 31 percent of rural women engaged in market work. Children of low-income women who worked for pay had higher calorie and protein consumption but lower vitamin A intake than those with non-working mothers. There were no clinical signs of vitamin A deficiency, however. Working mothers breast-fed less, and 15-36 percent of the income of these women was spent on baby food. The authors suggest that time constraints on working mothers cause a reduction in breast-feeding in favor of bottle feeding, and reduce time available to cook fresh vegetables.

Posner, Jill 1983

Street foods in Senegal. Equity Policy Center Paper, Washington, DC. 112 pp.

This paper describes the informal sector vending of prepared and snack foods in Senegal. Expenditure and consumption information was based on a general survey of 200 sellers in Zinnguinchor and a detailed study of 14 women and 1 male vendor. Women dominate this occupation, with many older women entering this sector when child-rearing responsibilities decline. About 59% of the women are largely responsible for family welfare.

Sengali women control their own earnings; 50% use their money for clothing and personal effects, 20% use it for children's needs and 25% spend it on food, whereas 71% of the men (N=48) said their earnings went to food. Overall 80% of household budget was spent on food and fuel, with women contributing about 45% of the food budget. In poorer households this represented the seller's total profits. Consumers of street foods generally are those with regular monthly incomes.

The time spent in this sector varies by sex; women spend more time preparing products while men sell foods requiring little or no advance preparation. Men spent 4 more hours selling than women because of less competition for their time, and as a result have a 50% increase in potential earning power. Men have also developed

informal credit arrangements with suppliers, while women are only able to get loans from family members to keep afloat.

429

C

Poynor, George V. 1978

Malnutrition in the developing world. Paper presented at the International Conference on Women and Food. Washington, DC: Office of Women in Development, AID.

Factors which affect nutritional status are grouped into those which affect the quantity and quality of food consumed by the individual and those which affect the biological utilization of consumed food. The ensuing discussion focuses on the former category, especially on food habits, taboos and cultural practices that affect intra-family food distribution. In many countries each food is assigned a heating or cooling value which determines when they should be eaten or avoided. In Central America heating foods are withheld for 40 days from children with measles and from new mothers. Nearly all protein rich foods are contained in this category, increasing risk of PCM among these children and reduced breast milk among the mothers. Use of starchy foods and avoidance of beans for infants and small children also increases nutritional risk.

430

B

Presvelou, Clio, and Spijkers-Zwart, Saskia (eds.) 1980

The Household, Women, and Agricultural Development. Wageningen, Netherlands: H. Veenman and Zonen, B. V.

This book contains the proceedings of a conference at the Dept. of Home Economics, Agricultural University in Wageningen, with the same title, focusing on the African case. Most of the chapters describe the sexual allocation of tasks and how this has changed over time. The question whether modernization has hurt or helped women is argued. The papers are largely descriptive in nature; specific quantitative studies are not described, but a lot of general information is provided on various cultural systems.

431

C E

Price, Thomas L. 1983

Socio-economic and cultural determinants of infant malnutrition in four communities in Northern Cameroon. International Nutrition Communication Service Consultant Report. Newton, MA: Education Development Center.

This report describes food consumption and distribution patterns in four northern Cameroon agricultural communities, based on structured interviews of 130 households. Sorghum is the major staple crop and cotton is the main cash crop. The household with a senior male head is the basic unit; polygyny is common. Women have all responsibility for food preparation, water fetching and childcare. They control the income from their crafts and crops and may own and inherit goods and animals. Men's resources are devoted to extrahousehold expenses, like alcohol consumption.

Food is eaten out of common dishes with men eating separately from women and children. Jealousy and competition between wives affect infant care and feeding as resources are often devoted to satisfying the husband first. Children's nutritional status is also adversely affected by the lack of access to resources caused by divorce, which is frequent. Fostering is common for children 2 or older.

432

A C

Rao, N. Pralhad 1980

Determinants of nutritional status in India. Ch. 6 in Binswanger, H., et al., (eds.), Rural Household Studies in Asia, Kent Ridge, Singapore: Singapore University Press.

This paper uses data from surveys carried out by the India National Institute of Nutrition and other agencies to analyze the determinants of nutritional status. The focus is on factors that operate at the household or community level, including family purchasing power, food habits and beliefs and family size. Analytical methods are not presented.

Data on food consumption and income in India revealed that consumption of almost all nutrients increase with rising income, although the proportion of total calories from coarse grains like millets and tubers decreases. As income increases, the percent of income allocated to food decreases, but absolute expenditure increases. This effect of income per se on food consumption is less pronounced for young children, for whom proportionally higher requirements, infections, and traditional feeding practices are important determinants of nutritional status.

A 24 hour dietary recall from 1800 pre-school children revealed 35% did not get adequate protein and 92% had inadequate caloric intake.

In all regions studied by the Indian Council of Medical Research breastfeeding was continued for prolonged periods, and supplementary feeding and weaning practices were irregular. Despite preferential food consumption practices, pregnant and lactating women do not have adequate diets. Poorer diet was also associated with increasing family size, as was increased incidence of diarrhea and poorer anthropometric measurements.

433

D

Rassam, Amal 1980

Women and domestic power in Morocco. International Journal of Middle East Studies 12:171-179.

The author argues that the inevitable competition for domestic power which occurs among women in the patriarchal extended households found in Morocco prevents formation of alliances and weakens their position vis-à-vis men. Her analysis is based on data collected during two years of residence with families in Fes and Meknes. Among traditional urban Arab-Moslem families the ideal family consists of a patriarchal extended household with joint property, patrilateral cousin marriage and confinement of women to the domestic sphere. A new wife occupies the lowest status and power position in her husband's household. Full identification with her husband's family occurs when the sons marry and bring in daughters-in-law.

434

C E

Rawson, Ian B. and Berggren, Gretchen 1973

Family structure, child location and nutritional disease in rural Haiti. Journal of Tropical Pediatrics and Environmental Child Health 19(2):188-98.

This article reports results of a study of a small (pop. 427) rural community in Haiti. Data were collected in daily visits over two months, by means of direct observation and interview. The focus of the study was the association between the nutritional status of children aged 0-6 and their relationship to the household in which they lived.

In this setting, the household ("laccour") usually consists of an extended family: three generations, including siblings and their spouses and children. Households range in size from 2-20 persons. Most conjugal unions are consensual, not formal, and are unstable. Household disruption and reconstitution with other members is common. Child relocation occurs when a conjugal union is broken and when a couple has more than four living children, since this is viewed as an excessive burden on household resources. The household is a unit of production and consumption. The household eats together; adult men

receive preferential treatment, and children may share one plate among themselves or with an older relative.

The study found an association of nutritional deficiency with household disruption and relocation. Children with no nutritional deficiency most commonly were living with both parents, or within a small household including one parent and the parent's closest relatives. Of children living with both parents, those who were deficient came from large (5-6) sibling groups. Of 21 deficient children, 15 did not live with both parents. Physical proximity to the parents' household did not affect the incidence of deficiency if children did not live in the household.

435

F

Repetto, Robert G. 1976

Direct economic costs and value of children. Ch. 3 in Ridker, R. G. (ed.), Population and Development. Baltimore: Johns Hopkins University Press.

Evidence on the economic contribution of children is reviewed to evaluate the hypothesis that increases in the relative price of children will lower fertility, ceteris paribus. Historical evidence from the U.S. showed fertility declines occurred with children's falling wage rate relative to adults and with the freeing of slave children after the Civil War. Attitudinal evidence from developing countries indicates parents are aware of their children's economic contribution and cite this as reason for large families.

Studies on the pension motive for high fertility, and especially the desire for sons, are mostly qualitative, and little is known about the actual extent of transfers. Data from rural India, Bangladesh and Morocco fail to reveal a tendency for households with mostly sons in early parities to have fewer subsequent births as compared to households with first born females.

The author concludes there is little evidence that relative input price changes influence fertility. However, he excludes the opportunity cost of mother's time from his analysis. Children are intensive consumers of nontraded goods, whose prices rise relative to per capita income, as wage levels increase. Therefore, the price index of children will be closely correlated with per capita income, making it difficult to isolate price effects.

436

A B D

Reynolds, Dorene R. 1982

The household divided: competition for cash between husbands and wives in West Pokot, Kenya. Paper presented at American Anthropological Association 81st Annual Meeting, Washington, D.C., December 3-7.

This interesting paper describes economic relations between husbands and wives as they have changed since precolonial times. Data collection methods are not described.

Historically, male and female spheres were separate and autonomous: men traveled with cattle; women stayed with their crops and controlled production and distribution of crops and small animals. In the colonial period, land was registered in the male's name, and men were encouraged into cash-cropping, which diverted agricultural resources from women.

Now, women are still responsible for providing household subsistence needs (food, clothing, fuel), but women's property is considered part of the household, while men's property (e.g., cattle, land in cash crops) is their own. Women's strategies for preserving their control over their cash income include investing it (e.g., buying a sewing machine), removing it from the household (e.g., placing it with her parents), and concealing it from their husbands. Women also bargain for their share of returns to jointly produced crops.

The author points out that this analysis demonstrates the inappropriateness of considering the household as a single economic unit.

437

A B D

Reynolds, Dorene R. 1975

Appraisal of rural women in Tanzania. Washington, D.C.: USAID/REDSO. December. Mimeo, 44 pp.

This useful paper discusses the situation of women in post-independence Tanzania and its implications for agricultural program planning.

The author reports there is a strong sexual division of labor. Women do home and child care and subsistence farming. Men are shifting to cash-cropping and non-agricultural employment. Since work for cash is more prestigious, women's work is culturally less valued. Modern technology is generally appropriated by men, increasing the productivity gap between men and women, and increasing women's workload (e.g., more weeding is required when tractors are introduced). Demands on women's time are increasing also because there are fewer polygamous households and higher school attendance, reducing available help. As men leave agriculture for wage

employment, women take over male tasks, but men do not take over women's work. This is the case in Ujamaa villages as well as elsewhere.

Decision-making is held to be joint, but women have more responsibility for decisions about farming (what to plant and when); men for decisions about land and livestock purchase and sale, and relocation. Other determinants of women's decision-making power are location (proximity to kin increases bargaining power), age, presence or absence of husband, and access to her own source of cash income. Women control income which they earn from crafts or sale of their produce, but men control income from cash crop sales even if women work on the crop.

Obstacles to women's employment are lack of education and other household responsibilities. Families hesitate to educate women because benefits will accrue to her future husband's family. Women generally do not have access to agricultural extension because agents are usually male and their methods include large group meetings and programs at raining centers or demonstration plots; women usually cannot leave home to attend.

438

C D

Rizvi, Najma 1983

Effects of food policy on intra-household food distribution in Bangladesh. Food and Nutrition Bulletin 5(4):30-34.

Bangladesh's food policy and its effect on household food availability and distribution patterns is analyzed here. The Food Security Plan assumes that by increasing food production, a price support policy and public food distribution, the food needs of the population can be met. This policy has not taken the existing inequality between different age and sex groups into account; women and children are not recognized as particularly vulnerable groups.

Lack of employment, low wages and limited supply of food grain received in the food-for-work program reduce total food available to many households. Household size was found not to affect food allocation. The traditional preferential treatment of husbands and adult males, especially in low income groups, leads to unequal intrahousehold food distribution. Ready availability of baby formula and milk powder has also affected food distribution patterns and children's nutritional status.

439

B

Robertson, Claire 1975-76

Ga women and change in marketing conditions in the Accra area, Rural Africana 29(Winter):157-171.

This paper discusses the effect of technological change on the role of market women in Ghana. Before paved roads and mechanized transport, women engaged in production of food which they sold in local markets. After modernization, small local markets declined; and fewer women were involved in marketing, because larger quantities could be handled at one time. The author suggests that modernization has reduced opportunities for women's economic participation.

440

C F

Rosenberg, E. M. 1980

Demographic effects of sex-differential nutrition. Ch. 7 in Jerome, N. W., Kandel, R. F. and Pelto, G. H., Nutritional Anthropology. New York: Redgrave Publishing.

This chapter examines cross-cultural evidence and explanations of differential nutrition between the sexes. The author hypothesizes that almost anywhere there is a fixed order of preference, with those who eat last getting the least food. Men generally have first priority because of their high status in most societies. Women have direct access to foods but their rights are limited by jural rules or supernatural sanctions. Two cases where women and children eat first were noted: in rural Haiti, where women's status and religious power is high, and among the Mae Enga, a New Guinea group which suffered an epidemic and desired to increase its population.

It is argued that food taboos increase the dependency of women on men and strengthen the social stratification system. The author hypothesizes that sex differential nutrition predominates more in agrarian than in hunter-gathering societies. Further study requires qualitative and quantitative recording of regular and special status diets.

441

C

Rosenzweig, Mark, and Schultz, T. Paul 1981

Market opportunities, genetic endowments, and the intrafamily distribution of resources: child survival in rural India. Yale University Economic Growth Center. Mimeo. April. 32 pp.

This paper reports a secondary analysis of Indian census data to look at sex-specific survival rates of children in rural areas in relation to employment opportunities for women. Survival is assumed to reflect investment of household resources in these children.

Results show that relative survival rates of girls (compared with boys) in various regions is positively related to women's labor force participation in those areas. The relationship is stronger in lower-income households, suggesting that at higher incomes, investment in all children is increased. Religion and caste do not show a significant influence on child survival once labor force participation is controlled, but such participation is lower among Moslem and low-caste women.

B

Rosenzweig, Mark R. 1981

Household and non-household activities of youths: Issues of modeling, data and estimation strategies. Ch. 8 in Rodgers, G. and Standing, G. (eds.), Child Work, Poverty and Underdevelopment. Geneva: ILO. See #171 for complete abstract.

442

A

Safilios-Rothschild, Constantina 1983

Women and agrarian reform in Honduras. In Land Reform: Land Settlement and Cooperatives. Rome: FAO.

This paper evaluates the effect of the 1975 Agrarian Reform Law in Honduras, especially for female household heads. Land grants were made to the male head of the household, and included women only if they supported a family. Despite the fact that 26-27% of all rural households are headed by women, a survey showed that only a few were regular members of the agrarian reform. Also the program implementers generally interacted only with men because the majority of men and women believe women can only perform certain agricultural tasks.

In the study of the extent to which wives benefited from agrarian reforms it was noted that women received little training in agriculture and bookkeeping compared to the men, and their access to land for crop cultivation remained limited despite their heavy

involvement in agriculture. Animals are important for food consumption and income generation, so it would be useful to include technical assistance on animal maintenance, especially for women who all own chickens and/or turkeys. It was also found that the breadwinning function is shared by husbands and wives in 30-44% of the families and income is often controlled by the wife who uses it for food and medicine. Thus the assumption that most families are headed by men and that there is no need to single out women for services or access to land must be re-evaluated.

D

Safilios-Rothschild, Constantina 1984

The role of the family in development. Appendix 2.1 in Charlton, S. E. M. Women in Third World Development. Boulder, CO: Westview Press. See #173 for complete abstract.

443

A B C E

Safilios-Rothschild, Constantina 1980

The role of the family: a neglected aspect of poverty, in Implementing Programs of Human Development, Washington, D.C.: World Bank Staff Paper #403, July.

This paper discusses in a general way how family structure affects household resource availability and use. The author distinguishes between family and household, stressing that co-residence does not define kin groups, and that division of labor may not be analyzed within a single household, if labor is shared among kin. Further, families and households are not static, but change composition.

Food and other resources are usually distributed unequally within households, based on age and/or sex. Determinants of food distribution are whose income is used for its purchase, who stores and cooks it, and beliefs about appropriate roles. The author holds that distribution often disfavors women and children.

Strategies to cope with poverty include multiple earners, including children and women. This may increase women's decision-making power. Another strategy is to modify household organization, including migration of some members to find work. Weakening of kinship ties with modernization means that women's support systems are lost in case of widowhood, divorce, or separation.

The author cites empirical studies which show some of the ways in which economic modernization has resulted in a more dependent role for women. She suggests that development projects must consider family structure and family dynamics.

Safilios-Rothschild, Constantina no date

Female power, autonomy and domestic decision-making as it relates to the division of labor. University of California, Santa Barbara. Mimeo. Commissioned by the ILO, Employment and Development Dept.

This paper is a discussion of women's power within the household. Power is defined as self-determination and access to the same life options as men. Power may be derived from men, but this continues dependency; it may be derived from women's collective activity or through individual achievement. Women's power decreases men's power. In some--e.g., Caribbean and Latin American--settings, when women's power increases, men withdraw from family responsibilities, but in other cases, women's power results in more equitable division of labor and decision-making.

The author suggests that study of female power should be by observation and interview rather than by formal survey; that men and women must be interviewed separately; and that studies should be longitudinal to capture the dynamics of change.

Sarma, M. T. R. 1976

Effects of household structure, size and household income on expenditure patterns. Geneva: International Labour Organization. Population and Employment Working Paper no. 31, February, 55 pp.

This study used data from the NCAER Additional Rural Income Study in India, a survey covering 4118 rural households, each interviewed once, over a one-year period. The purpose of the analysis was to derive adult-equivalent units of consumption based on expenditures, analogous to the adult-equivalent scales based on caloric requirements used in nutrition surveys. Households were classified by the ratio of females to males and of children under 14 to males.

Results showed that different members differentially account for household expenditure. Female-equivalents were higher than males for clothing; both females and children were higher for sugar consumption. Income affects the weight given to different household members. For example, children under ten have a higher weight for cereal consumption in higher income households. That is, in better-off households, more expenditure is allocated to children's consumption.

Income elasticity of demand for milk is higher in houses with more children; elasticities for fruits and vegetables were above 1.00 in households with more than two children. Additional children raise the income elasticity of demand for cereal, milk, sugar, fruits and vegetables, meat, fish, and eggs. This indicates that households with

children demonstrate a greater demand for these food products as income rises than those without children.

446

B

Savané, Mary Angelique 1981

Implications for women and their work of introducing nutritional considerations into agricultural and rural development projects. Food and Nutrition Bulletin 3(3):1-5.

This paper suggests that development programs must consider the role of women as food producers, child caretakers and feeders, and economic participants. Nutrition programs have failed because they are superimposed on women whose time is already overburdened. Division of labor must be considered in agricultural projects: the introduction of cash-cropping and agricultural mechanization has in some case reduced women's access to resources and increased their labor burden. An example from Ghana is cited, where the introduction of cocoa resulted in women being given responsibility for yams, but shifting to cassava production because it was less time-consuming though less nutritious.

B F

Schildkrout, Enid 1981

The employment of children in Kano (Nigeria). Ch. 3 in Rodgers, G. and Standing, G. (eds.), Child Work, Poverty and Underdevelopment. Geneva: ILO. See #179 for complete abstract.

447

B C

Schofield, Sue 1974

Seasonal factors affecting nutrition in different age groups and especially preschool children. Journal of Development Studies 11(1):22-44.

This article discusses various aspects of the seasonality of malnutrition: seasonal food shortages, peak demand for labor with its attendant time constraints and increased caloric need, and changes in disease incidence with climate. The author cites several African and Latin American studies showing that preschool children fulfill less of their caloric and other nutrient needs than other household members. She suggests that seasonal constraints will disproportionately affect women and children where they are already discriminated against in intrafamily distribution. Women's work is also often more calorie-intensive than men's. There are no data to demonstrate whether food is allocated seasonally to those members engaged in the most arduous labor. Because of the sexual division of

labor, women's home tasks (cooking, child feeding, food gathering) will suffer when their labor is in peak demand.

The author suggests the importance of programs to deal with seasonal constraints on time, energy, and food.

448

C

Scrimshaw, Mary and Cosminsky, Sheila 1985

Family and food: Strategies of food procurement on a Guatemalan plantation. Unpublished manuscript, MIT and Rutgers University, 20 pp.

This paper examines the strategies used to procure food through access, control and allocation of resources at a plantation on the Pacific coast of Guatemala. A sample of 35 households, containing at least two children and representing a range of nutritional statuses, was selected for intensive interviewing and observation. The diet follows a corn and beans based pattern. Food is procured through a combination of agricultural activities, animal husbandry, hunting and gathering and cash purchases.

The food inventory was described as adequate for a well balanced diet. However, surveys conducted in 1970 and 1976 showed 18-36 month old children were eating less than 75% of the RDA for calories, protein, calcium, niacin and vitamin A. Inadequate intakes of calories, protein and vitamins, as well as anemia due to iron deficiency were common among adults as well. Seasonal factors, including food availability, female employment, and household income, influenced the type and quantity of food items brought into the household.

Men are responsible for providing the main staple, corn, through production or purchase. Women do all the marketing and animal husbandry and are the main decision-makers in the food domain. They manage the household budget, make all food purchases (except corn) and control children's work activities. Women maximize their cash by more efficient purchasing practices and extend their food supply through the gathering of greens.

Food requirements were calculated based on consumption units, using the 1973 FAO/WHO age and sex standards. Available income for food was measured by dividing the consumption unit into the cash spent for animal protein foods. Since half of multiple-income households were in the lowest category of animal protein intake the authors concluded that variables other than income potential influence cash available for food.

449

F

Scrimshaw, Susan C. 1975

Families to the city: A study of changing values, fertility, and socioeconomic status among urban in-migrants. In Nag, M. (ed.), Population and Social Organization. The Hague: Mouton.

To study the effect of urban migration on fertility and socioeconomic status, interviews of 2,000 randomly selected households in squatter settlements and central-city slums of Guayaquil plus 100 households in each of two rural villages were conducted. All women aged 15-45 and men in a sexual union with women in the sample households were asked about housing, work, economic factors, unions and fertility histories, contraception and migration.

Of the migrants, 76% of the men and 66% of the women knew someone in Guayaquil before arrival. Women were motivated by perceived opportunities for a better life in the city whereas men saw more job prospects and advancement opportunities. Economic characteristics of male migrants and urban non-migrants were similar, except migrants had poorer housing and no electricity. Migrants, especially men, were more educated than the rural villagers.

Migrants married later than non-migrants but averaged more years in an alliance. When the latter was held constant, there were no differences in number of pregnancies or family size. Origin of the spouse was potentially significant to fertility behavior, as migrants married to migrants had longer unions and more children than alliances having at least one non-migrant member.

450

B E

Searle-Chatterjee, Mary 1981

Reversible Sex Roles: The Special Case of Benares Sweepers. Women in Development Series, vol. 2. Oxford: Pergamon Press.

The interchangeability of domestic tasks and work between men and women and kinship and living arrangements among an untouchable group of sweepers in the north Indian city of Benares are discussed in this book. Conclusions are based on participant observation and structured interviews of 33 households in Bhangipura plus lengthy interviews with a prominent person in seven other localities.

In most households men and women make about equal financial contributions, although often women are able to work in private houses and increase their incomes. In 60% of the households the wife controls the earnings of the whole family. Sweepers are unusual in that men perform a considerable amount of housework, although the main burden and organizing responsibilities still fall to women. Sweeper women return to work shortly after childbirth, and usually there is no adult at home to care for the children. Although group

values affirm childcare and household duties as primarily the wife's responsibility, actual practice is much more flexible.

Kinship links are very important in Bhangipura, with uterine and affinal kin being more prominent than agnates. Sixty-five percent of the households are conjugal and only 24% are joint lineal. With increasing mobility the pattern of upwardly mobile marriage has diminished and there is increasing fusion of castes.

The author concludes the concept of uniform conjugal roles is inappropriate. The division of labor in sweeper homes appears to be a personal response to experience rather than roles learned from tradition. To demonstrate that patterns of female employment determine conjugal division of labor, other urban caste groups with a similar cultural pattern must be studied. It is posited that other groups would also exhibit a joint pattern of division of labor. The nature of childcare and paid employment appear to be crucial determinants, and in the case of the Benares sweepers, women's equal position vis-à-vis men occurs at the expense of their children's well-being.

451

E

Sen, Gita 1980

Rural women and the social organization of production--some conceptual issues. In Women in Rural Development: Critical Issues. Geneva: ILO.

In her analysis of rural women's position in subsistence production, the author emphasizes that division of labor reflects men's and women's relationships to households. The mechanisms of survival and subsistence are organized by a set of authority relations within the household. Subsistence production is not defined by the nature of the work but by the performer's relationship to the means of subsistence. Both men and women from poor rural households engage in subsistence activity, but their positions reflect the differing nature of their connection to the household. The survival of the household is often obtained at the expense of the woman, which social programs must take into account.

452

C

Shah, C. H. 1978

Food preference costs, poverty, and nutritional gap. Paper prepared for Nutrition Economics Group, OICD, USDA, Washington, D.C. (mimeo).

This paper reports results of a survey of the income and individual food consumption (one-day recall) of 1376 rural and suburban households in Kerala, India. Data were analyzed for dietary adequacy of protein, calories, and 10 micronutrients by age/sex and income class.

The author finds that preschool (age 1-5) children had the largest gap between consumption and need; then adult males. School-aged girls and lactating women were deficient in calories but otherwise adult women came closest to meeting their nutritional needs.

These results were not correlated with any measure of nutritional status.

453

C

Sharman, Anne 1981

Distribution, sharing and independence in domestic food consumption. Paper presented at American Anthropological Association 80th Annual Meeting, Los Angeles, December.

This paper reports a study of 23 urban Black low-income households in the U.S., all containing a child under age 5. Methods of study included formal and informal interview, direct observation, record books, medical records, and participant observation.

The study found that household composition was not a good predictor of dietary quality of the members; within households, children had different nutritional status. Reasons are not given.

Most of these households experienced considerable change in the composition during the study.

454

B

Simmons, Emmy B. 1975

The small-scale rural food-processing industry in northern Nigeria. Food Research Institute Studies 14(2):146-161. Stanford University.

This paper explores self-employment patterns and economic variability among firms in the north Nigerian food-processing industry. Data were gathered from monthly interviews over two years of about 45 women in each of two villages plus participant observation the following year.

All processing enterprises, except dan wake, show profits of 6-40%, and require minimal labor in addition to the principal producer. In a survey of 465 women from three villages, 95% were working at an economic activity and 90% were involved in at least one food processing business. Aside from wage and profit gains, food processing industry advantages are minimal educational qualifications and capital investment needs, and ability of secluded women to participate. However, these same factors limit cooperation and expansion. Although competition comes from modern large-scale plants and urban-centered firms of all sizes, their higher technology and

transportation costs have kept prices of manufactured products higher than local products. Low income elasticities for rural women's food products indicate that in times of increasing agricultural incomes, these women will receive smaller shares of the increase.

B D

Simmons, Emmy B. 1976

Economic research on women in rural development in northern Nigeria. OLC Paper no. 10. Washington, DC: American Council on Education. 32 pp. See #186 for complete abstract.

455

F

Simmons, George B. and Bernstein, Stan 1982

The educational status of parents, and infant and child mortality in rural north India. Health Policy & Education 2:349-367.

This paper examines the impact of education on child mortality in a very poor setting, utilizing interview data from 120 villages in Uttar Pradesh State in India. The analytical technique used is multiple regression, where the dependent variable is the log odds of death during the defined period. Separate logit regressions are estimated by sex for tetanus and non-tetanus caused deaths. Education is not significantly related to probability of tetanus deaths.

The findings indicate female children from the relatively educated portion of the sample have significantly higher probability of survival. Older sibling competitors do not reduce survival chances in the neonatal period, except for female newborns with an older male competitor. It appears that households in which the mother has some education experience lower child mortality, although this may be partly attributed to household status.

456

A

Singh, Andrea Menefee 1980

The impact of migration on women and the family: research, policy and programme issues in developing countries. Social Action 30(2):181-200.

This paper discusses the implications of the fact that there is significant labor migration of women independent of male migration. Studies are cited showing that in India and Latin America, volume of female migration is greater than male, and that women who migrate tend to be single, low-income, and have greater control over their incomes. The author stresses the need for more information on this

phenomenon, and holds that, though women earn less than men, they spend a higher proportion of their incomes on family basic needs.

457

A B D G

Singh, Andrea Menefee 1977

Women and the family: coping with poverty in the Bastis of Delhi. Social Action 27(3):241-265.

This paper discusses the effects of rural-to-urban migration on role allocation and decision-making within the family, and on the economics of the household. It reports results of a survey of 161 adult women in four urban slums of Delhi.

Most of the women left the village for economic reasons and came to Delhi because of kin ties. Household structure generally (90 percent) was nuclear due to space constraints, but there was significant variation by region of origin as well.

Domestic tasks exclusively done by women are cooking, cleaning, and washing. Between 35 and 48 percent of women said their husbands did shopping and home repairs. Forty percent of women and 48 percent of men were employed for pay. Women's work force participation varied by caste and region.

Women reported they decide whether to work or not (57 percent), and they plan daily menus (78 percent). All other decisions are reported as joint. Women report that they spend their incomes on basic needs; 70 percent reported most of their income went for food. Twenty-two percent of women said their income was pooled and spending decisions were made jointly.

458

C

Sjafri, Aida 1981

Socioeconomic aspects of food consumption in rural Java. Ch. 6 in Epstein, T. S. and Watts, R. A. (eds.), The Endless Day: Some Case Material on Asian Rural Women, Women in Development series vol. 3, Oxford: Pergamon Press.

The role of women in access to food and intrahousehold food distribution in rural Java is the focus of this chapter. It is argued that how a mother distributes food may symbolize her relationships with household members at different stages of the domestic life cycle. This study of the Javanese village of Pasawahan found 32% of all children under 5 suffered from protein deficiency. This was explained by low income levels and food habits whereby children were given the same diet as adults. Food consumption profiles of 5 case-study households indicated children are usually given priority for breakfast, but in only one wealthier household did the mother

prepare special foods to supplement the children's diet. The activities of the Nutrition Rehabilitation Center are also described.

459

B

Smucker, Jacqueline Nowak 1981

The role of rural Haitian women in development. USAID Mission, Port-au-Prince, Haiti. 69 pp.

This descriptive analysis of rural Haitian women's role in development is based on a literature review, interviews with development officers in Port-au-Prince and field observations and interviews with peasants. Women's involvement in commerce, agriculture and animal husbandry is correlated with region of residency and individual economic circumstances. Representative examples from seven regions are presented to demonstrate that commerce is the major economic role for women, which is restricted only during weaning. The author suggests that rural women's increasing involvement in commerce has improved their status and balance of power and affected fertility and domestic roles. Recommendations to improve Haitian women's economic circumstances include distribution of seeds to promote utilization of kitchen gardens and expansion of home industry. Programs should preserve family structure through culturally appropriate interventions.

460

D E

Sndarkasa, Niara 1977

Women and migration in contemporary West Africa, Signs 3(1):178-189.

This paper describes the impact urban-migration has had on women and household relationships in Ghana. Datas were collected by interview, although no specific methods are described. The pattern of migration has changed; young girls now migrate to urban areas and stay, often marrying at a later age. It was also found that spouses in urban areas usually trade jointly due to the interdependence created by shared living spaces, whereas in the homelands men and women live in separate compounds, and trade separately. If trading successfully in urban areas, men and women will often act independently. Thus the joint-decision-making and cooperation that exist in urban areas is not derived from Westernization or elite status, but rather emerges among lower income, otherwise traditional marriage partners who have adjusted to a new social environment.

461

E

Solien de Gonzalez, Nancie L. 1961

Family organization in five types of migratory wage labor. American Anthropologist 63:1264-1280.

This paper attempts to classify various types of migratory wage labor and suggests some of the probable effects of each on family organization. Seasonal migration occurs in many societies and has little impact on family structure, whereas temporary nonseason migration does. This form of migration cannot completely support the home society, so traditional economic pursuits must be maintained by the remaining labor supply. Young men who participate in recurrent migration are increasingly reluctant to follow traditional customs and divide cash wages among extended kin. Wives of absent men in Africa live in patrilocally or matrilocally extended households, depending on the society. In the Caribbean women often reside in consanguineal households, which cooperate to maintain and socialize the children and help alleviate some of the effects of recurrent migrants. Continuous migration, occurring primarily in the U.S., and permanent removal are also briefly discussed.

462

B

Spencer, Dunstan 1976

African women in agricultural development: a case study in Sierra Leone. American Council on Education, Overseas Liaison Committee, Paper #9, June. 20 pp.

This paper reports results of a study of the effects of an agricultural project developing inland swamps for rice cultivation. A random sample of 143 households (participants and non-participants) was selected, of which 23 were intensively interviewed over 13 months. Data were obtained on income by member, hours worked in each activity by member daily (by record), all output, all real income and expenditure. The hypothesis to be tested is whether agricultural projects increase women's workload and reduce that of men.

The study found that effects on labor depended on the length of time households had been in the project. During land development, men put in 55 percent of labor, while women do 38 percent. After development, men do 42 percent, women 46 percent, and children the rest of the work on swamp rice. Men do the landclearing, women the weeding and harvesting. The greatest increase in workload in the first year of program participation (130 percent) is among male children, who contribute 44 percent of total man-hour equivalents in land preparation and planting. Women's workload is increased, but that of men is increased more. The author points out that in this project, women as well as men took advantage of modern agricultural technology.

463

B

Spencer, Dunstan S. C. and Byerlee, Derek 1976

Technical change, labor use and small farmer development: evidence from Sierra Leone. American Journal of Agricultural Economics 58:874-880.

The impact of technical change on household family inputs and the differentiation of labor use by sex in Sierra Leone is evaluated using data, from the 1974-75 nationwide farm management survey of 500 households in 24 sites. Farmers were interviewed twice weekly over a 12 month period. This paper discusses data from the Bolilands region and from the IADP (Integrated Agricultural Development Project) area.

Male adults participating in the IADP project increase their labor inputs by at least 50%, whereas female input is not significantly altered by participation in the project. The opposite effect is seen in Bolilands, where mean hours of work per adult male decreases slightly as mechanical cultivation is introduced, whereas females work 50% more than in households using hand cultivation. The key to these differences lies in the sex-specific nature of some farm activities in Sierra Leone. In the Bolilands, mechanization almost completely eliminates the land preparation performed by men but increases farm size, which increase the demand for female planting and harvesting labor. In contrast, the substantial land development required in the early years of the IADP project placed the burden of work primarily on men. In the Bolilands area the wage rate for men and women is almost identical, indicating women's relatively important role there. In the IADP area, as in most other regions of Sierra Leone, men's wages are about one-third higher than women's.

464

A B D E

Spiro, Heather 1985

The Ilora Farm Settlement in Nigeria. The Population Council's Women's Role and Gender Differences in Development Series, W. Hartford, CT: Kumarian Press.

This evaluation of the 1959 Ilora Farm Settlement program in western Nigeria was conducted by comparing 52 Ilora households to 60 Oluwatedo control households. The survey covered demographic information, farming issues and women's trading activities. A stratified sub-sample of women was interviewed 3-4 times/week for five months to gather two-day recall of time devoted to farming, trading, domestic and other activities.

The results show women in Ilora have benefited only marginally because the settlement strategy was focused on farming, whereas trading is the primary income source for most younger women. Ilora women are more likely to make major decisions about their farms, but the

overall division of labor by sex is the same in both villages. In Oluwatedo, men supply 72% of household food whereas in Iloro contribute 86%, freeing more of the women's output for sale. Women in Iloro put in fewer hours as unpaid family labor and seasonal work is less intense than in Oluwatedo; however, the time devoted to the most time-consuming tasks remains similar in both villages. No labor saving technologies geared to women were introduced in the settlement village.

465

A B

Spring, Anita and Hansen, Art 1979

Women's agricultural work in rural Zambia: from valuation to subordination. Paper presented at the African Studies Association Meeting, Los Angeles, California, October 31, 25 pp.

This paper discusses changes in the relative economic roles of women and men in Zambia since the 1930s. The authors briefly review the literature which suggests that modernization causes the marginalization of women and shows that the colonial bias toward treating men as landowners and economic producers reduced women's access to resources.

These hypotheses are discussed in the context of the Luvale of Zambezi district. In the past, women had rights to cultivate their husband's land. Each sex had different agricultural tasks (men cleaning, women planting and harvesting), but both had rights to the crop. In 1959, women's incomes and men's were equal, though from different sources. Now women's income has dropped relative to men's because government agricultural policy favors commercial, not subsistence, crops and thus favors men.

Methods of data collection are not described.

466

A B D

Staudt, Kathleen 1985

Agricultural Policy Implementation: A Case Study from Western Kenya, The Population Council Series on Women's Roles and Gender Differences in Development. W. Hartford, CT: Kumarian Press. 56 pp.

This study compares access to agricultural services for female versus jointly managed farms in the Kakamega district of western Kenya. Data were collected from 212 households, selected on the basis of distance from main roads and for age and economic status representativeness. The survey showed that women typically make many agricultural decisions and determine use of produce, although they have less access to wealth, loans and income than men. Agricultural services are biased against women, indicated by the fact that half of all female managed farms have never been visited by an agricultural

agent in contrast to only 25% of jointly managed farms. Training at centers is four times more likely to be attended by a jointly managed farm member, usually men who are often not active in agricultural work. Jointly managed farms had more access to formal information on growing hybrid maize and grew more diverse crops. Only in the provision of tractor services at one coop was there no discrimination against female managers.

467

B

Staudt, Kathleen 1978

Agricultural productivity gaps: a case study of male preference in government policy implementation. Development and Change 9(3):439-457.

This paper discusses the effects of a general tendency on the part of government agricultural extension services to be given to men rather than women, thus reducing women's productivity relative to men. The author reports a cross-sectional study of female-managed and jointly-managed farms in two sublocations in Kenya. Historically, women have been active participants in agricultural work and decision-making. Recently, male migration has involved the proportion of female-headed households (40 percent in the sample).

The study found that extension staff directed more services to farms with men present, irrespective of economic classification, innovativeness, experience of farmer. While females and males start out equally productive, the author argues that over time differential treatment by government policy results in relative reduction in women's productivity.

468

B C D

Stavrakis, Olga and Marshall, Marion Louise 1978

Women, agriculture and development in the Maya lowlands: profit or progress. Paper presented at the International Conference on Women and Food. Washington, DC: Office of Women in Development, AID.

This paper reports on the changes that occurred with the development of the sugarcane industry in Belize in 1973. Prior to the increase in cash cropping, men engaged in slash and burn agriculture, hunting and gathering. Women cared for kitchen gardens and small animals. This complementary food procurement system began to break down when food production declined due to the introduction of sugarcane crops. Women lost control over their productive resources and became economically dependent on men. Cash cropping rather than domestic production good food became the source of male prestige and introduced a new public sphere of activity with western values and goods. Women have developed new strategies to counteract their powerlessness, through direct control of children, control of men

through sex and children and by developing entrepreneurial activities.

A nutrition survey carried out in 8 Rio Hondo households in 1973 and repeated in 1974 showed children ate the least well and no major improvements occurred over the year.

469

E

Stinner, William F. 1977

Urbanization and household structure in the Philippines. Journal of Marriage and the Family 39(2):377-85.

This article uses data from the 1970 Philippine census of population and housing to examine correlations of urbanization with household size and composition.

Urban households in Manila are slightly larger (6.15, compared with 5.84 in rural areas), but a greater difference is that rural households have more children and Manila households have more adult relatives and non-relatives. In Muslim provinces, however, urban households had more children than rural households. Possible explanations are not given.

470

F

Stinson, Sara 1980

Child growth and the economic value of children in rural Bolivia, Human Ecology 8(2):89-103.

This study explores the significance of children's economic contribution in agricultural societies using child growth as an indicator. Households with many producing children are hypothesized to have increased food production and thus enhanced nutritional status. The analysis is based on a subsample of 171 of 510 Aymara study children aged 6.0 to 21.9 years who attended schools in the town of Ancorcumis and four nearby villages. Age and sex standardized measures of weight, height, subscapular and triceps skinfolds and upper arm muscle area were recorded, and detailed household demographic information was collected from about 60% of the sample children.

For each household, a household age composition index was calculated by summing the values of all the children. The results indicate that the effect of household age composition on child growth appears to be due more to the negative influence of small children than the positive contribution of older children. The findings that there are no differences in size between children from large and small completed households, or from households with different numbers of children aged 16 and over suggests that children in Ancoraimes make a

positive economic contribution as they grow older, which makes up for their negative effect when they are younger.

471

F

Stinson, Sara 1982

The interrelationship of mortality and fertility in rural Bolivia, Human Biology 54(2):299-313.

This paper describes the relationship between fertility and child mortality for a sample of 149 rural, high altitude Bolivian households in a larger study (see abstract #471) on child growth. The limitations of this data set include: non-random sample of only families with school age children, inexact reporting of ages and exclusion of unmarried or widowed women with families. The results suggest that child mortality rates are fairly constant for families with between 5 and 13 live births, and the probability of dying decreases as birth order increases.

472

C

Swanberg, Kenneth G. and Shipley, Elizabeth 1975

The nutritional status of the rural family in East Cundinamarca, Columbia, Food Research Institute Studies 14:111-125.

The nutritional status of families in corn and potato growing zones of rural East Cundinamarca, Colombia are compared via 24 hour recalls. Analysis of dietary information, socioeconomic data, family food practices and height-weight measures of all children under 6 was performed for 119 corn and 123 potato zone families.

The findings indicate preschoolers in both zones eat greater quantities of milk, eggs and fruit and relatively lesser quantities of legumes than the rest of the family. Their average nutrient intake also exceeds the family average, indicating that children's diet needs are met before those of adults. Despite lower incomes in the corn zone, those children are nutritionally equally provided for, although the one time height weight measures indicate children in the potato zone have superior nutritional status.

B

Szalai, Alexander et al. (eds.) 1972

The Use of Time: Daily Activities of Urban and Suburban Populations in Twelve Countries. The Hague: Mouton & Co. 868 pp. See #191 for complete abstract.

Tekçe, Belgin and Shorter, Frederic C. 1984

Determinants of child mortality: a study of squatter settlements in Jordan. In Mosley, W. H. and Chen, L. C. (eds.), Child Survival: Strategies for Research (a supplement to Population and Development Review 10), pp. 257-280. See #192 for complete abstract.

473

E

Tienda, Marta 1978

Dependency, family type and the family life cycle in Peru: some interrelations. University of Wisconsin-Madison paper.

Variations in non-nuclear and nuclear household size as a function of extension, economic dependency ratio and family age dependency index are examined in this study of 4,850 Peruvian family households. A nonnuclear household is defined as one containing 5 or more unrelated individuals living together.

Urban households are slightly larger (5.9 vs. 5.4 members) and contain a higher proportion of relatives than rural households due to differential availability of housing and urban migration. The mean number of extended kin varies inversely with the number of dependent children in the household. The variation in the age dependency index is greater in rural areas, whereas the converse is true when the relationship is expressed in terms of labor force participation. These results indicate that varying household structure is a strategy for adjusting to dependency.

474

E

Tienda, Marta and Angel, Ronald 1981

Female headship and extended household composition: comparisons of Hispanics, Blacks and Nonhispanic Whites. Center for Demography and Ecology Working Paper no. 81-8, University of Wisconsin-Madison. 20 pp.

Racial and ethnic differences in extended living arrangements among female-headed and husband-wife families are evaluated in this paper. This empirical analysis is based on a subsample of the U.S. 1976 Survey of Income and Education of 151,000 households. Households containing only a head, spouse and one or more children are non-extended, while those containing at least one other relative of the head are extended.

Both minority and female-headed households are more likely to be extended. This propensity to extend is a function of economic need, taste for particular living arrangements and spatial dimension

characteristics. Individual level logit analysis reveals that the higher prevalence of extended household structure among female headed units is largely a function of socioeconomic and demographic differences. Household extension is presumed to increase single women's flexibility and support for economic and domestic responsibilities.

475

E

Tienda, Marta and Salazar, Sylvia Ortega 1980

Female-headed households and extended family formation in rural and urban Peru. Center for Demography and Ecology Working Paper no. 79-34, University of Wisconsin-Madison. 21 pp.

This paper examines how the extension mechanism enhances the social and economic viability of female-headed households in Peru. The analysis consists of 3974 households containing a mother-child dyad or married couple from a total of 5487 households in the 1970 National Multipurpose Survey of Peru.

The results show female heads are somewhat older than their male counterparts, have significantly less education and lower labor force participation rates. As hypothesized, the mean number of extended relatives is largest among those households where the head is not in the labor force. For female headed households, the size of the non-nuclear component varies inversely with the number of nuclear member labor force participants. Life cycle effects on the propensity of female-headed households to extend are pronounced, whereas the hypothesized negative effect of education existed only for urban males. In urban areas, 88% of all female headed units with preschool children were extended versus only 38% of those with children 6-18 years old.

476

A

Tinker, Irene and Cohen, Monique n.d.

Street foods as a source of income for women. Equity Policy Center Paper, Washington, DC. 21 pp.

A comparative study of street vendors in Senegal, Bangladesh, Indonesia and the Philippines is reported. A complete census of the street foods and vendors in one town of each country was supplemented by a random sample of in-depth interviews and a subsample of home and market observations. Customers were also interviewed and the major foods were tested for bacterial count and nutritional content.

Women were found to dominate as vendors in the Philippines and Senegal and were invisible workers in Bangladesh. In Indonesia and the Philippines 25% of enterprises were jointly managed by the husband and wife, although women controlled the income only in the

Philippines. The patterns of division of labor and sales, income and consumers for each country are also discussed. The evidence indicates that more of the women's incomes go to directly support the family than men's.

477

A

Tolley, Dayna M. 1978

Cultural aspects of regional development among Nigerian women. Paper prepared for Society for Applied Anthropology Annual Meeting, Merida, April 2-9. 13 pp.

This paper reviews cultural differences in the economic roles of women from different ethnic groups in Nigeria, while making the point that development projects must be designed differently for the different groups.

In the Muslim North, women are secluded, while in other groups (Ibo, Yoruba) women have more freedom and autonomy. However, Muslim women also have independent earnings through the sale of prepared food and crafts. Women from all groups have independent responsibilities for certain categories of household expenditure, and also want to provide special benefits to their children to ensure their later support. Women therefore want to earn an independent cash income.

478

A B

Tully, Dennis 1982

The decision to migrate: conflicts between the individual and the household in Dar Masalit, Sudan. Paper presented at the 81st Annual Meeting, American Anthropological Association, Washington, D.C., December 3-7. 6 pp.

This paper makes the point, reinforced with examples from Dar Masalit, Sudan, that decisions of household members (such as that to migrate) are based on individual preferences; the household is not the appropriate unit of analysis.

Households represent a set of reciprocal rights and duties; but the role of household welfare as a determinant of individual behavior depends on whether these can be enforced. Husbands are responsible for providing housing, clothing, and other cash needs; women provide household services and child care. However, men's commitments are not fully met, due to polygamy, divorce, widowhood, and male migration.

Men and women maintain separate fields, and do not provide labor to each other; children provide labor to their mothers.

As men migrate, women and children are taking over agricultural production.

A B C D

UN Protein-Calorie Advisory Group Report 1979

Women in food production, food handling and nutrition. Rome: UNFAO, June. 202 pp. See #70 for complete abstract.

479

B D

UNECA (United Nations Economic Commission for Africa) 1975

Africa's food producers: the impact of change on rural women. Ekistics 236:46-51.

This article provides a very general discussion of the effects of modernization on women's roles in agriculture. Specific research is not cited.

The article suggests that modernization has reduced women's importance but increased their workload because new technology is available mainly to men, yet women still assist in labor-intensive tasks on the men's cash crop. Male migration has increased women's workload, as does the woman's desire to educate her children (which costs her their school fees and their labor). Changes in land tenure patterns have also tended to reduce women's access to land.

480

B

UNWFP (United Nations World Food Program) 1979

Women in food-for-work: the Bangladesh experience. Rome: UN Food and Agriculture Organization. 34 pp.

This report describes the women who participated in a food-for-work (FFW) project in Bangladesh. A sample of 303 women were interviewed.

Women in FFW projects are from very poor households whose kinship support systems have broken down. A third of the participants were wives of unemployed men or laborers; one-third were widowed; and the rest unmarried or divorced. About one-half were chief income-earners for their families.

There is social pressure against women doing this kind of work, but male members are migrating out to seek work and not returning, so women are responsible for family support. Women cannot work as many hours as men on these FFW projects because of their household

responsibilities. This explains, in fact, women's lower productivity and lower daily wage.

481

C

USAID (United States Agency for International Development) 1972

A study of food habits in Calcutta. Calcutta, India: Hindustan Thompson Associates.

This report presents detailed results of a survey of household food consumption and expenditure and individual dietary intake. Data were obtained on a random sample of 2,386 households in Calcutta, excluding pavement dwellers. A subsample of 280 households was interviewed three more times to obtain seasonal data. Dietary intake was measured by 24-hour recall including food consumed at home and away.

The study found that men consumed more of all items, in relation to the RDA than any other household member, except milk was consumed mainly by children under age 10. Calories, deficient for all groups, were most deficient among preschool children. One-third of children under four received only half or less of their caloric requirement. Infants under six months are reported to receive an average of 27% of their calorie needs, which suggests problems of data accuracy. No sex breakdown is presented for children under age 12.

482

A C

USAID Africa Bureau 1984

Nutrition guidelines for agriculture and rural development. Washington, DC: USAID, mimeo. 13 pp.

Structural causes of undernutrition are the focus of this policy paper, which discusses the influences of food availability, ability and willingness to obtain adequate food, and biological utilization of obtained food on nutritional status. The complex influences of changes in income, production and specific farming systems factor on consumption are also evaluated. Changes in the division of labor may adversely affect nutritional status if women's control over income or time for food preparation decreases.

An approach to incorporating nutrition concerns into development planning and projects is then reviewed.

USDA Nutrition Economics Group 1983

Intra-family food distribution: review of the literature and policy implications. Draft. Office of International Cooperation and Development, Technical Assistance Division, Washington, DC. March. 105 pp. See #195 for complete abstract.

483

C

Valenzuela, Rosario E. 1978

A study on nutrient distribution within the family and factors affecting nutrient intake. Philippine Economic Journal 36 17(1/2):168-184.

This article reports results of a dietary intake survey in Laguna, Philippines. Individual intake of 547 members of 97 households was measured during three cycles, the first consisting of two-day food weighing, and the next two consisting of one-day observation. (No significant differences were observed between the two days of the first cycle.) Food away from home was measured by recall. Data from other parts of the Laguna survey were income by member, food expenditure, and time use by member. Nutrient content was calculated using Philippine food composition tables, and compared with Philippine nutrient RDAs for each age/sex category.

On average, no household member fulfilled 100% of the RDA of all nutrients measured. Mean calorie intake was 76% of the RDA, and, of protein, 80% of the RDA. Children had significantly poorer diets than parents. Adolescents had the poorest diets. Fathers had slightly better diets than mothers, and boys had better diets than girls at all ages, the biggest difference being among preschoolers.

A regression analysis of individual intake (percentage of RDA) of calories, protein, vitamins A and C to identify determinants of intake level. Food expenditure was positively associated with calorie and protein, but not vitamin intake. Labor force participation of the mother was positive with nutrient intake, as was her education (in most cases), and cooking time. Nutrient intake by individuals showed a weak relationship with that person's income contribution. Food expenditure had a higher association with nutrient intake in larger households, while household size was negative with intake.

No direct measures of nutritional status were used.

484

C

Valverda, Victor; Pivaral, Victor Mejia; Delgado, Herman; Belizan, Jose; Klein, Robert E. and Martorell, Reynold 1981

Income and growth retardation in poor families with similar living conditions in rural Guatemala, Ecology of Food and Nutrition 10:241-248.

A study of the effect of family cash income on children's nutritional status among coffee plantation laborers in Western Guatemala is reported in this article. Wage data for all permanent laborers and their relatives during 1977 were gathered from salary records at 13 plantations. Weight and height measurements were collected every three months for 3-24 month old children and every six months for 24-60 month old children between June and December 1977.

Continuous and discrete analyses for various age groups indicated that growth retardation levels varied by income. As the living conditions and education levels are similar, it is concluded that variations in family allocation of income to food products explains the findings.

The greater variations in growth retardation among older children may be due to their greater participation in the family diet or to larger family income differentials that may have existed prior to 1977 when these children were smaller. Family income captures the impact of factors such as food availability at the community level, intrahousehold allocation and individual utilization of energy and nutrients.

485

C D E

Van Esterik, Penny 1984

Intra-family food distribution: its relevance for maternal and child nutrition. Cornell Nutritional Surveillance Program Working Paper no. 31. 103 pp.

This paper presents a useful framework for the analysis of intra-family food distribution, whose components include household resources, food classification systems, individual characteristics, commensality system and the food consumption system. Evaluation of the impact of household resources, especially food availability and time, on food distribution requires consideration of home production control, shopping patterns, income availability patterns, social celebrations, and allocation for special foods such as alcohol and infant formula. Classification of foods influences choice of food, preparation and distribution, while characteristics of the individual being served provide the basis for food distribution. It is predicted that classification systems which categorize food by the hot/cold system may differentially impact toddlers, while

pure/polluted categorization systems may have a greater impact on women.

Additional information on kinship patterns, food categories, meal cycles and maternal competence should be collected in household surveys. In the detailed discussion of each component in the framework, the author makes additional specific data needs recommendations.

486

C

Vemury, Merlyn 1981

Rural Food Habits in Six Developing Countries: a CARE study on Environmental, Social and Cultural Influence on Food Consumption Patterns. New York: CARE. 146 pp.

This study was conducted in Peru, Colombia, Guatemala, Tunisia, Jordan and Bangladesh to investigate dietary habits and practices of rural populations, especially for groups at nutritional risk. Principal factors affecting food habits are social influences, household income and food availability, households' ability to purchase, cook and store food, food beliefs and life cycle stage.

A five-stage stratified technique was used to identify a survey sample of mothers with pre-school children and influential community members in each country. Sample characteristics and data results are reported by country but no detailed analysis is included. Comparing the responses of mothers and community influentials indicates that the latter can be considered reliable information sources on general food habit patterns in all six countries.

Generally, household members eat their meals together, except in Tunisia and Bangladesh, where a significant number eat separately, according to age and sex-linked patterns. In all countries the male head is favored in food distribution, although in Bangladesh 11.6% of the fathers-in-law, 7.6% of mothers-in-law and 6% of older male children are sometimes given preference. Children under 6 are given preference in less than 10% of households, whereas pregnant and nursing women are favored in one-third of Colombian households and to a lesser extent in other countries.

487

F

Walther, Robin J. and Nugent, Jeffrey B. 1982

Household structure and intergenerational transfer mechanisms: a theoretical and empirical investigation. University of Southern California mimeo. 44 pp.

The role of old age security in determining household structure is evaluated using a model that focuses on substitutes for the

intergenerational transfer system. The model suggests there is a direct tradeoff between household extension and government taxation for transfer to social security. The regression analysis indicates a negative relationship between agriculture, wealth and nuclear household structure, but a positive relationship with other income and education. Poorer, non-cultivators are more likely to be in nuclear households. Non-cultivating households are more likely to participate in a provident fund than agricultural households, but in all groups only 2-4% participated.

488

C

Wenlock, R. W. 1980

Nutritional risk and the family environment in Zambia, Ecology of Food and Nutrition 10:79-86.

The effects of social factors on the nutritional status of rural children from the 1969 Zambian National Nutrition Status Survey are analyzed in this article. Anthropometric and biochemical data from 2161 children under 5 years of age and interviews with their mothers were studied.

The results show that nutritional risk is greater among children whose mothers have no education, whose fathers are subsistence farmers or who are in polygamous households. The weaning period is associated with the greatest risk of nutritional deficiency, especially for children whose mothers are pregnant. The author concludes that the greatest nutritional priority is the stimulation of production of local foods, except cassava, that are familiar to the producer and consumer.

C

Wheeler, David n.d.

Do the poor need nutrition education? Some methodological issues and suggestive evidence from Kinshasa, Zaire. Boston University African Studies Center Working Paper NS no. 2. See #201 for complete abstract.

Wilk, Richard R. 1984

Households in process: agricultural change and domestic transformation among the Kekchi Maya of Belize. Ch. 9 in Netting, R. McC., Wilk, R. R. and Arnould, E. J. (eds.), Households: Comparative and Historical Studies of the Domestic Group. Berkeley, CA: University of California Press.

This paper describes the transformation of household structure among the Kekchi Maya of Belize, who are converting to cash crop production. As the government owns the land, land-use practices and rights are enforced by informal consent of the villagers. Three kinds of social groups are defined on the basis of frequency of resource and labor exchange, quantity of goods and property held in common, and the degree to which the unit head controls the group's activities. Independent households are usually formed by nuclear families. Household clusters, containing more than one dwelling unit, may be tightly or loosely organized depending on the frequency of labor exchange, meal sharing and coordination of production activities. Loose clusters are spatially more dispersed and less formally planned. The choice of different residence locations after marriage creates different types of household structures, depending on kinship patterns. The author visited nine villages and found the differences between them depended on the number of independent households and the frequency of patrilocal (usually tight) household clusters. A strong correlation between lower land availability, higher frequency of cash cropping and a low frequency of independent households is noted. Household clusters provide more flexible solutions to scheduling conflicts and seasonal labor demands and are bound by parental control and by labor and resource pooling networks.

Wolfe, Barbara L. and Behrman, Jere R. 1982

Who is schooled in developing countries? The roles of income, parental schooling, sex, residence and family size. Mimeo. University of Wisconsin-Madison. NPP no. 15. 27 pp.

A modified version of the new household economic model of investment in children is used to study the demand-side determinants of schooling for a subsample of 2075 women with 6 to 14 year old children in rural, urban and central Managua regions of Nicaragua. The authors attempt to explain child schooling as the maximization of parental utility subject to the child quality production function and time and income constraints, using a linear approximation function.

The results indicate that income and woman's age at childbirth are significantly associated with greater child schooling, as is parental schooling with a maximum impact after 8 or 9 grades. Maternal schooling is of greater significance, reflecting preferences,

genetics or the woman's decision-making role. The analysis of standardized fertility, which is the current number of children normalized to control for incomplete fertility, suggests that there is a quantity-quality tradeoff and that fertility is simultaneously determined with child schooling.

491

A C

Wolfe, Barbara L. and Behrman, Jere L. 1979

The household demand for nutrition inputs in a developing country. Mimeo. University of Wisconsin-Madison and University of Pennsylvania. NNP no. 20. 21 pp.

This paper uses the basic demand model, extended to include the role of women and their nutrition knowledge, to examine the determinants of household nutritional inputs in Managua, Nicaragua. Income or wealth is represented by current potential income and a housing index and dummy variables representing in-kind payments to women domestics and the presence of a refrigerator. No direct measures of price are available although differentials are partially represented by neighborhood population densities. Household size may have positive, through economics of scale, or negative, through lower per capita income, effects on demand. The significance of women's role in nutrition is related to her capacity to evaluate nutritional information, which depends on her age, education, specific nutrition knowledge and background characteristics such as the presence of both parents during her childhood, their education and status, her migratory status and whether she has had parasitic diseases (reflecting her hygiene patterns).

Regression analysis on data from a survey of 1167 households showed that the effect of increasing income on improved nutrient intake was not substantial, whereas in-kind payments resulted in a 33% increase in protein, 16% increase in vitamin A and 8-9% increase in calorie and iron intake. Refrigeration and population density also had positive impacts on intake. The association between women's nutrition knowledge and household nutrient inputs indicates the simple demand model that ignores the woman's capability factor may be misleading.

492

A C

Wolfe, Barbara L. and Behrman, Jere R. n.d.

Determinants of nutrition demand: the limited relevance of income and the importance of in-kind food, refrigeration, women's education and nutrition knowledge. Mimeo. University of Wisconsin-Madison and University of Pennsylvania. 21 pp.

This paper extends previous analysis (see #491) of Nicaraguan data on the determinants of dietary intake to argue that the World Bank focus

on increasing income to improve nutrition is inadequate. The data are from 1167 households in a larger study on the socioeconomic roles of women aged 15 to 45 in Nicaragua. Low bivariate correlations with intake of calories, protein, iron and vitamin A show that income, household size and women's education variables alone have limited explanatory power. The authors then extend the basic model to include household income disaggregated into transitory and permanent components, wealth represented also by in-kind payments to domestics, housing and refrigeration, price variation in terms of neighborhood population densities, women's general characteristics that may affect tastes or efficiency and her knowledge about health and nutrition.

The extended model's coefficients for income elasticities are even smaller than the basic model, but the effects of price, in-kind payments for domestics and refrigeration are all significant. Thus, market integration and specific nutrition measures, such as provision of food and refrigeration, may have more impact than general income increase. The extended model also suggests that economies of scale and women's general education and specific nutrition knowledge are more important determinants of nutritional status than previously estimated with the basic model. The returns, in terms of better nutrition, to women's education and programs to improve nutrition knowledge may be immediate and also carry over across generations.

493

A D

Wolfe, Barbara L.; Behrman, Jere R.; Belli, Humberto; Cairns, Kathleen and Williamson, Nancy 1980

Socioeconomic characteristics of women in a developing country and the degree of urbanization. Institute for Research on Poverty Discussion Paper No. 655-81, University of Wisconsin-Madison. 41 pp.

The relationship between women's socioeconomic characteristics and degree of urbanization is examined in this analysis of 4104 Nicaraguan women aged 15 to 45 in central Managua, other urban and rural areas. The conceptual framework includes parents' preference function for quality and quantity of children and their own lifetime consumption. Multivariate analysis of education, migration, marital factors, work experience, earnings, fertility and contraceptive use, and health and nutrition data is included.

Socioeconomic welfare indices are generally positively associated with urbanization, the main exception being that women in other urban areas have the highest caloric averages. This is most closely correlated with her and her companion's schooling and socioeconomic status, strength of correlation being inversely associated with degree of urbanization. In contrast to the usual assumption, there is a positive association between schooling and migration in rural areas whereas in urban areas economic incentives may reduce migration. Women's own and their mothers' level of schooling is highly correlated with their socioeconomic success, which is reinforced by strong assortative mating.

494

C

Ybañez-Gonzalo, Susan, and Evenson, Robert E. 1978

The production and consumption of nutrients in Laguna households: an exploratory analysis. The Philippine Economic Journal 36 17(1/2):136-53.

This article reports results of an analysis of individual food consumption data for 97 households as part of the Laguna survey (see Valenzuela, 1978). Data were obtained by 24-hour recall plus 24-hour record. The dependent variable was an aggregate of nutrients (calories, protein, vitamin A) consumed. The study found that calorie consumption was higher for higher-income households with the mother in the paid labor force, but in low-income houses the relationship was negative. Vitamin A consumption was lower for working-mother households in both income groups. No measure of nutritional outcome was used.

495

B

Yotopoulos, Pan A. and Mergos, George J. 1983

Family labor allocation in the agricultural household. Stanford University Food Research Institute Working Paper no. 8302. 19 pp.

A study on the patterns of family labor allocation by member and by activity in the rural Philippines is described. A survey of 598 agricultural households, stratified by landholding status, in northern Mindanao resulted in a final sample of 298 households containing men, women and children. The households were analyzed based on mean labor contribution by member category, using the basic Becker model extended to include Z-goods (household welfare) which are produced and consumed but not traded.

Labor distribution across households and activities was found to be related to sex and to landholding status. Women contribute 40% of total household labor time, while men and children add 30% each. Unequal distribution of labor across activities occurs in tenant households who must rely solely on family labor, especially women and children, unlike landholders who hire additional help for peak seasons. Substantial substitution and complementarity of women's and children's labor for men's activities are compared to relatively small contributions to home production by men. Pronatalist incentives are strongest in tenant households where children reduce women's work.

Young, Kate 1980

A methodological approach to analyzing the effects of capitalist agriculture on women's roles and their position within the community. In Women in Rural Development: Critical Issues. Geneva: ILO.

This essay proposes that development policies may actually make women central to the production of market crops rather than pushing them into the subsistence sector. Production may be on the household level, where women work as unpaid family laborers, or on a large scale, where women may provide cheap seasonal labor. This view requires study of the nature of the production system prior to integration, the differential access to labor, and who controls the proceeds of each labor process.

This methodological approach is illustrated using field data from Mexico. The expansion in coffee production in the late 19th century led to the increasing importance of large familial labor households. This ensured a sufficient supply of labor but increased the competition for and pressure on land. The effect of women was such that they turned from skilled cloth manufacturing work to being unpaid family laborers, and their value as child-bearers increased.

Zeitlin, Marian F.; Mansour, Mohammed and Boghani, Meera 1983

State of the art paper on positive deviance in nutrition. Paper prepared for UNICEF (WHO/UNICEF Joint Nutrition Support Programme) at Tufts University School of Nutrition, Medford, MA. 188 pp.

This paper evaluates the recent literature on positive deviance, focusing on the psychosocial and behavioral aspects of the mother-child interaction and their support networks. Positive deviance refers to the adaptive mechanisms households use to raise children who develop well under conditions of poverty and scarce food resources. Studies of this phenomenon will help identify the determinants of child growth and adaptive behaviors, which can then be taught to parents of malnourished children.

Results from the Burmese Positive Deviance Study indicate that the quantity of breastmilk between 7 and 12 months, not supplementary feeding patterns, distinguished well from malnourished children. The general findings from other studies are also reported, although methodological limitations make generalizations difficult. The many studies that relate nutritional status during pregnancy and infancy to behavior and performance indicate that better nutrition during this period produces the potential for a more vigorous, demanding, perceptually capable child who is more efficient in obtaining food. Evidence of the importance of the social network or available support system in determining the quality of childcare is discussed. The

paper also covers research issues, policy relevance and implementation examples. Controlling for genetic and socioeconomic status factors may be best done by studies with longitudinal growth data from birth and parental and sibling heights and weights for the age cohort from all low economic status families in the community.

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