Household Allocation of Labor Time in Two Types of Smallholder Farming Systems in Rural Kenya.
by Monica Ayieko

Introduction:
The study analyzed the effects of gender and farming systems on time allocated to work activities by agricultural households in rural Kenya. A total of 289 participants were selected from two different representative ecological zones, Njoro and Kikuyu divisions. There was a wide spread drought and typical changes in the patterns of rain in both Njoro and Kikuyu which influenced the observed time allocation. Therefore, the focus of the study was slightly changed from analyzing the effects of ecological zones to examining the differences in the two communities due to the unexpected drought. The drought influenced the way communities planned their lives around farm activities and interrupted the onset of the various agricultural activities. By means of four methods of data collection (spot observations, personal observations, questionnaire, and focus group discussions), patterns of time and work allocations, and differences in work allocation were explored. Also changes in intra-household decision-making and livelihood strategies in the event of adverse climatic fluctuations were observed. The four major research questions responded to were:
1. How do households members in a five-month farming system differ from those in a nine-month farming system in terms of household labor allocation?
2. Given the different production resources available for households in the two farming systems, how do gender roles influence labor allocation of household members in the two farming communities?
3. What factors play major roles in determining the amount of time individual members of households contribute toward work activities in rural Kenya?
4. How do the factors affecting labor allocation differ for males and females in rural Kenya? (How do these factors affect males and females differently?)
The Key Findings
1. The ecological zones influenced the amount of time allocated to work activities by different groups of household members. Females in the marginal areas worked longer hours than their counterparts in high potential areas due to differences in the high rainfall area (Njoro) and spent less time on work activities than households in the warm, dryer marginal area (Kikuyu).

2. Other factors considered, females spent more time on work activities than males except for income generation where men dominated the sector. Nevertheless, younger males spent more time in agriculture than females of the same ages. Contrary to the research expectations, female-headed households in this study were not significantly different in the amount of time they allocated to work activities. Although not statistically significant, respondents from female-headed households spent more time in agriculture and household production than their counterparts from two-parent households, and less time in income generation, suggesting the effects of fewer adult income earners. However, the female-headed households spent more time on house chores than did the members in husband-away households. The presence of a husband in a household also made members work relatively more hours doing household activities than when he was not living within the home. However, his presence did not influence member’s time input in agriculture. It was interesting to note that males living in husband-away households contributed more time to housekeeping than their counterparts in husband-wife households.

3. The major factors that influenced time allocation of females in this sample population were their ages and educational attainment. Age had a positive linear affiliation to the amount of time spent on the three sectors of work. Levels of educational attainment also positively related to income generation activities. That is, older females spent more time on the sectors than younger females. For males, the factors identified were their ages, educational attainment, type of family and the size of the farm. Time allocated to household production decreased with age, and was significantly different between husband-away and husband-wife families. As the farm sizes increased, so did the amount of time males contributed toward housekeeping. However, time spent on income generation increased with age and education. But males living on larger farms allocated less time to income generation.

A sudden upward surge of time allocated to income generation by males ages 31 years and above was observed. This was attributed to either financial demands of the households during this stage in family life, or the opportunity structure of the labor market and job availability for the males. It is reckoned that during these ages most males have their own families of procreation. It is a stage of increased financial pressure to help build the family, put children in school and begin to acquire household properties. Such demands on heads or prospective heads of families are sufficient to make them double their efforts in search for additional income. On the other hand, the surge could indicate that older males are simply retaining their paid jobs secured during good economic times in the late 1970s and early 1980s, while lack of income earning activities for the younger generation are reflected in lower levels of time spent in income earning. If the latter was the case, (which was most probable) then it was a manifestation of dire need for provision of income generation opportunities to help keep young males employed in the rural areas.

4. A strong interaction effect of sex and age was observed in all the three sectors of work. For every additional year in age, females contributed increasing amounts of time in household and agricultural production while males decreased the amount of time expended in the same sectors. But in income generation, males allocated almost six times the amount of time females did for every additional year in age.

Livelihood Strategies.
It was found that many households employed several livelihood strategies to cope with the bad weather and unfavorable economic conditions. These included reducing number of consumers by shifting member's maintenance responsibilities to relatives with additional resources outside the area, and depending on remittances from relatives holding paid jobs for supplementary financial support. Increasing sources of household income by sending off older household members to seek paid jobs was another strategy used by household members to enable them to cope with weather and economic adversities during difficult times. Such behaviors reflect in-built traditional strategies of reliance on networks of support among relatives to safeguard against effects of famine, unexpected low food reserve and occasional severe drought.

Observed Intra-household Changes.
Several changes were identified to be taking place in the household. The major observations were that respondents were conscious of the heavy labor demands on women in the villages and openly talked about it. Because of the autonomy women are beginning to experience in farm production, they break new lands for agricultural production on their own without waiting for men to do it. Even children were experiencing
changes in the type of work they do. The emigration of men and higher educational attainment of females have helped weaken the once rigid traditional intra-household rights and obligations that subordinated females within the households and the society.

There was also a suggestion that the mothers were becoming more liberal than the fathers in allocating gender-designated responsibilities to their children. This could have been a result of mothers' time crunch, or an indication of change in the work socialization in the households.

Based on my own understanding of the society, I would argue that the complexities of co-existence of males and females held together by the advantaged relative power of males and females held a major role in slowing down the process of change in the way household members perceived work activities. This also includes a moral economy in which the female household members are obliged to cooperate in order to maintain the admissible level of harmony in the home. Similarly, the females contributed most of their time to unpaid work activities because they are gender-trapped within a rapidly changing economy that is embraced in slowly changing sex roles. Being the disadvantaged group within the bargaining relationship, they strive to maintain a desired harmony by shouldering most of the household responsibilities.

Young Males and Agriculture

Boys of ages 6-18 years contributed more time to agricultural activities than male adults and even their counterpart females. This indicated a cohort effect of a new, different generation of males which is realizing the need to actively participate in agricultural production. The second possible explanation is that the boys played an active role in food production because their time allocation to work activities was controlled or influenced by their mothers as the mother's decision-making power increased. The young males lose out as mothers gain control of the children's time. As the mothers experienced time crunch, they turned to other members of the household within their power of control to help out. If this scenario is correct, then the cohort will not be different from their fathers when they mature, thus sustaining feminization of subsistence agriculture.

Policy Implications and Recommendations

1. Effectiveness of policy interventions in development rely critically on identification of the target recipient and the intra-household issues addressed. Every household member has many identities and the behavior of each member is influenced by the conflicting affects of the identities. Thus meeting individuals' needs in a household is a proxy to addressing the welfare of the community.

2. Policy interventions need not be designed to address the problems of adults alone, but also the children. Children contribute a lot of labor which helps improve the economic status of their households. Therefore, appropriate resources should be provided to improve their work conditions. The achievement of improving work conditions for children should be enhanced by introducing attractive and easy to handle, child-specific equipment as articulated by them. Introducing lessons would also allow children to explore possible options for their later world of work.

3. Electricity, a rare and expensive commodity in rural Kenya, is one of the modern inventions that has facilitated use of improved products and equipment in urban centers. As a priority of the government, accelerated provision of rural electrification would greatly facilitate use of modern household products in the rural areas where the majority of the Kenyan population lives. Introduction of affordable technology for home cleaning and available energy for home automation can also help bring changes in household production and consumption. Also it would substantially effect the amount and type of labor necessary for household production and also encourage production of a wide variety of consumer items necessary for improving levels of consumption and standards of living.

WOMEN IN INTERNATIONAL DEVELOPMENT ACTIVITIES AT UIUC

Reception and Report on NGO Forum and the 4th UN World Conference on Women.
Kathleen Cloud, Director, Office of Women in International Development, and Shang-Fen Ren, Assistant Professor, Department of Physics, will give a de-briefing report illustrated by slides on their experiences in attending the NGO Forum on Women and the United Nations Fourth World Conference on Women which was held in Beijing, China, August 30-September 15. The de-briefing will be held on Friday, October 6, 1995 at 4pm, Rm 101, International Studies Building, 910 S. 5th Street, Champaign and will be followed by a reception. All are welcome.
T-shirt and Tote Bag Sales Sponsor Women to the Beijing Conference: Congratulations and thanks to all those who were able to buy NGO Forum t-shirts and tote bags from the Office of Women in International Development at the Spring conference. The t-shirt and tote bag sales helped support a total of 90 women (who otherwise would not have been able to attend) on full scholarships to Beijing.

Results of the 1995 Thirteenth Annual WID Paper Competition
Congratulations to:

Becoming an Associate of the WID Office.
We are actively recruiting applicants to become Associates of the Office of Women in International Development, which serves as a center of communication and common effort for people at UIUC interested in issues of gender and development. The Office also serves as a point of outreach to national and international institutions.

The Office serves the entire University community, but its most direct ongoing contact is with Associates. Upon application, faculty and students with interest and/or expertise on women's roles in an international context are eligible to become Associates, subject to confirmation by the WID Executive Committee. Becoming an Associate entails no obligation but offers useful information and networks of contact. For more information on becoming an Associate, contact the WID Office at 333-1994.

News of WID Associates.
Monica Awoor Ayleko, received a United Nations Development Program grant to conduct research in Kenya on children and AIDS.
Bernice McNair Barnett, Associate Professor, Educational Policy Studies/Sociology, University of Illinois at Urbana, is the newly elected Chair of the National Sociologists for Women and the Society’s Minority Scholar Committee which is charged with a) overseeing, planning and executing fundraising strategies for yearly doctoral scholarship support for female minority scholars, and b) facilitating integration of women of color into the organization.


Bernice is also the 1994-95 recipient of the Excellence in Graduate Teaching, Advising, and Research Award by the University of Illinois at Champaign-Urbana Council for Graduate Students in Education.

GRANTS, RESEARCH, STUDY AND TRAINING OPPORTUNITIES

GRANTS

- The Center for African Studies announces Conference Travel Grants of up to $300 for University of Illinois, Urbana-Champaign graduate students presenting papers related to Africa to a professional meeting or conference. Eligibility: All UIUC students are eligible to apply, but priority will be given to African Studies MA Students. Research Grants for up to $500 to UIUC graduate students to support dissertation and their work related to Africa. Deadlines for both grants: October 6, 1995 and March 1, 1996.

- East-West Center announces the following fellowship opportunities:
  Graduate fellowships are available to individuals interested in participating in the educational research programs at the East-West Center while pursuing graduate study at the University of Hawaii. Preference will be given to Master's applicants, but outstanding doctoral applicants will be considered. Eligibility: non-U.S. applicants, application must be made through the Center's in-country program representative. Application
deadline is usually earlier than the East-West Center deadline. Deadline: November 1, 1995.

Joint-doctoral Research Fellowships (formerly pre-doctoral fellowship) are available to individuals who are at the Ph.D. dissertation stage. Fellowship provides round-trip fair to Honolulu, a monthly stipend, shared office space and library privileges. Awards are available up to two years. Deadline: January 1, 1996.

Post-doctoral Fellowships are available for recent Ph.D. recipients whose dissertations deal with contemporary Asia and the Pacific. The objective of the fellowship is to support preparation of the dissertation for publication as a book. Deadline: January 1, 1996. For more information on these fellowships contact Jane Y. Hirano, Award Services Officer, 1777 East-West Road, Honolulu, Hawaii 96848. Tel: (808) 944-7735. Fax: (808) 944-7730.

- International Programs and Studies announces the following grants:
  MUCIA Travel Fund of up to $1000 to faculty and staff to further institutional development or enhance international programs. Deadline: November 1, 1995. For more information contact: MUCIA Liaison Office at 333-1993.

  The William and Flora Hewlett Summer International Research Grants for regular tenure-line faculty. The grant of $3,500 is intended to support international projects. The proposal will be judged primarily on perceived quality. Fundable activities include: 1. Studies which focus upon particular world cultural, geographical, political and/or economic areas, excluding contemporary USA; 2. Studies which focus upon relationships among nation states or upon diplomatic or strategic policies; and 3. Studies which generate international comparative data and/or analysis. Eligible projects include both contemporary and historical studies. Deadline: November 1, 1995. For more information contact: Sheila Roberts, 303 International Studies Building, MC-480. Tel 333-8331.

  The Social Science Research Council International Pre-dissertation Fellowships. The fellowships gives the student a chance to train in a particular language and/or culture to conduct research in the developing world. There are no citizenship requirements for the fellowship, but foreign nationals are discouraged from applying for a fellowship to prepare to study their own culture. Deadline: December 12, 1995. Application forms are available from Dr. Goldberg, 306 International Studies Building, 910 S. Fifth Street, Champaign, IL 61820. Tel. 244-0254.

- The Hubert H. Humphrey Fellows program provides mid-career professionals from developing countries a year of study in American Universities. (Over 150 fellows are selected each year from over a hundred different countries). Administered by the USIA Bureau of Educational and Cultural Affairs, applicants must apply through their home country American Embassy, USIS office or Fulbright Commission. Encourage more women to apply and encourage local committees to recommend more women.

- International Peace Scholarship Fund (P.E.O.) is a program which provides grant-in-aid for selected women from other countries for graduate study in the USA and Canada. The grant covers all academic or personal expenses. Eligibility: applicant must be qualified for admission toward a full-time graduate study, promise to return to home country, evidence of return travel expense to home country, have a sponsor who is a citizen of the US or Canada, and who will act as her non-academic adviser. Request application materials before December 15, 1995 from P.E.O. International Peace Scholarship Fund, P.E.O. Executive Office, 3700 Grand Ave., Des Moines, Iowa 50312.

- A Directory of potential donors for fellowships, scholarships and grants to African Women Students and Scholars is available at the Women's Studies Research Center, of the University of Wisconsin Madison, 209 North Brooks Street, Madison, Wisconsin, 53715 USA.

- The National Academy of Education announces Spencer Post-Doctoral Fellowship Program. Qualifications: Applicants must have had their Ph.D., Ed.D. or equivalent degree conferred between January 1, 1990 and December 31, 1995; persons from education, the humanities, or social and behavioral sciences will be accepted but they must describe research relevant to education. Application should be made by the individual applicant. Applications will be judged on the applicant's past research record, the promise of early work and the quality of the project described in the application. Fellows will receive $40,000 for one academic year of research or $20,000 for each two contiguous years, working half-time. Fellowships must begin during the 1996/97 academic year. For further information and required application forms, write The National Academy of Education, Stanford University, School of Education, CERAS-507, Stanford, California 94305-3084, or call (415) 725-1003. Application packets will not be sent after December 7, 1995. Deadline: Complete
applications must be received by December 21, 1995.

- The Margaret McNamara Memorial Fund invites women from the developing countries to apply for grants to be awarded spring of 1996. The goal of the fund is to strengthen the role of women in the development of their countries. Eligibility: At the time they apply for the grant they are residing in the US, are enrolled in an accredited educational institution in the US and will be enrolled during the period covered by a grant; they have record of service to women and/or children in their countries; they plan to return to their countries within approximately two years of the date on which grants are made; they can demonstrate their need for financial assistance to complete their course of study. Applications have to be requested before January 15, 1996 from The Margaret McNamara Memorial Fund, 1818 H Street, N.W. Room G-1000, Washington, D.C. 20433.

TRAINING

- The Royal Tropical Institute announces a Training Workshop on Women, Gender and Development from November 12 - December 30, 1995: A yearly 2-5 week international training workshop for men and women who wish to improve gender sensitivity in their work. The training program has been developed by Women and Development Training Program, Department of Culture, Management and Development. The training will be conducted in English and will take place at the Royal Tropical Institute in Amsterdam. For more information contact: Head, Culture, Management and Development, Mauriskade 63, 1092 AD Amsterdam, The Netherlands, Tel. 31(20)5688 711. Fax: 31(20)5688 409.

CONFERENCES AND CALL FOR PAPERS

UPCOMING CONFERENCES

- Return From Beijing: A Statewide Conference of Private Citizens, Local Grassroot Organizations, Representatives of the U.S. Government, Officials from the United Nations will be held on October 21, 1995 from 9am-5pm, followed by a reception till 7pm, at the University of Illinois at Chicago, Chicago Cirle Center, 750 South Halsted Street, Illinois Room. The goals of the conference include communicating a vision to see the world through women's eyes, creating challenge to spark initiative, connecting communities, and establishing a platform for action for Illinois and Chicago. The conference will focus on:
  - Reports on the World Conference and the Platform of Action--what happened and the impact on the global and local women's movements.
  - Education on the Issues--themes such as human rights, violence, decision-making, health, economic rights and development, education, poverty, equality, environment, and media.
  - Building Momentum Beyond Beijing--Identify skills needed to organize and implement; determine what comes next globally and locally; strategize next steps; consider coalitions to be formed.
Registration Fee $15.00. At the door fee $20.00.
* For more information contact: Zyphria Ford, UIC's Center for Research on Women and Gender, 1640 W. Roosevelt Road, Chicago, Illinois, 60608-6902. Phone: (312) 413-1924. Fax: (312) 413-7423.
* The Office of Women in International Development, UIUC, is organizing transport for those who are interested in attending the conference. If you are interested, please contact Consolata Kabonesa at 244-1722.

- National Women's Studies Association 17th Annual Conference on "Borders/Crossings/Passages: Women Reinterpreting Development", June 12-16, 1996. The conference will be held at Skidmore College, Saratoga Springs, NY 12866-1632. Plenary topics include:
  - Sexualities: Various cross-cultural issues, political issues, reproductive health, population, family planning, the international sex trade, the global assembly line and other issues on sexuality.
  - Narratives of Development: What are theoretical and fictional narratives that have shaped development?
  - Crossing Educational Borders.
  - Working in the Field(s).
Deadline for receiving proposals: November 1, 1995.
CONFERENCE REPORT

- "Family Education in the Era of Decreasing Births" was the theme for the International Seminar of Family Education held December 12-15, 1994 in Japan. Excerpts from the National Women's Education Center of Japan (NWECC - Newsletter, vol.12, No. 1, May, 1995). The seminar was organized by The National Women's Education Center to discuss interdisciplinary research focusing on the International Year of the Family. The Seminar was attended by experts and invited researchers from Australia, Korea, Sweden and the United States. The background for the seminar was the recent changes taking place in Japan and elsewhere in developed countries: rapid development of urbanization, information, and consumer society; falling birth rates caused by non-marriage and late marriage, diversification of men's and women's choices in life, and changes of values of having children. The seminar had three sections:

I. Gender and the Family focused on diversification of choices of women's life styles, changes in the family and relations between women and men which has accelerated and decrease of births. Discussion centered around what constitutes a family. It was acknowledged that the family is changing so much that the conventional definition of family, as people living under the same roof, no longer explains it as it exists in reality. Accordingly, a broader concept of family was introduced which included family as a network and as a circle.

II. Focused on what children mean to parents; what parents mean to children; and human rights of children and parents. Discussion led to questioning stereotyping a child, as an object of protection, unilateral disciplining or nurturing by the parent. There is need to realize that a child is an individual with inalienable rights, as is the parent.

III. Examined values of the family and children which constitute the essential element in the deliberation of policies, including social policies. A consensus was reached on the need of providing social support and the apparent need to formulate policies for family, community and business from a gender perspective.

Seminar conclusion: Family education cannot be considered merely within the confines of the family. It must be related to the community, the school and the larger society. The family should no longer be considered merely as members living under a single roof but should be redefined from a broader perspective. In this regard, concepts such as family network and family circle were introduced.

ANNOUNCEMENTS/RESOURCES/PUBLICATIONS

ANNOUNCEMENT

- New Women Studies Program at the University of Bucharest in Romania Needs Your Books

Three women professors have succeeded in introducing two Women's Studies classes at the University of Bucharest -- one in sociology and one in philosophy. A third class in journalism will be added this fall. It is difficult obtaining books because of limited resources and the availability of such books on the market. They would be grateful for any relevant books, journals, magazines, articles and especially pedagogical materials. Please bring your books to the Women's Studies Office, 911 South Sixth Street, Champaign, 61820 or The Office of Women in International Development, 320 International Studies Building, 910 S. Fifth Street, Champaign, 61820. For more information, call Nikki Negrau at 333-0820 or 352-4104.

RESOURCES/PUBLICATIONS

- The World's Women 1995: Trends and Statistics by the United Nations presents few global generalizations, focusing primarily on country data and regional averages that will make it useful for the shift in development strategies from focus on women in isolation to women in relation to men. The book provides comparative data and analyses of the economic, political and social differences that still separate women's and men's lives. The findings also indicate that great disparities remain between women and men. The book is a powerful tool that can assist policy makers and the media in understanding current conditions and evaluating policy options that can achieve that important goal. To order: Sales no. E.95.XVII.2, ISBN 92-1-1161372-8;
- Forging A Women's Health Agenda: Policy Issues for the 1990s edited by Jeri A. Sechzer (Pace University), Sheila Pfafflin (AT&T), and Anee Griffin (The Cooper Union). The papers in this volume assemble a wealth of medical, scientific, and legal data concerning the specific health problems that can arise in the course of a woman's lifespan and have the greatest impact on her life. The papers offer the most present and pressing needs in women's health and essential information on a wide array of issues. Topics include political intrusion on women's health problems; sex and gender bias in research; prenatal treatment and the mother's rights; infant mortality and prenatal care; reproductive hazards in the workplace; fertility and reproductive choice; sexually transmitted diseases; dissemination of HIV; RU 486; Breast cancer; breast cancer in African American women; ovarian and uterine cancer; cardiovascular disease; osteoporosis; and women's health and public policy. For more information: Publications, The New York Academy of Sciences, 2 East 63rd Street, New York, NY. 10021. Tel. 1-800-THE-NYAS or 1-212-838-0230, Ext. 341. Fax 1-212-888-2894.

- Anti-Racism, Feminism, and Critical Approaches to Education edited by Roxana Ng, Pat Staton, and Joyce Scane. The book maintains that there has been sufficient dialogue and cross-fertilization between various forms of critical approaches to education, notably multi-cultural/anti-racist education, feminist pedagogy, and critical pedagogy. Contributors from Canada and the United States address educational issues relevant to aboriginal peoples, people of color, and people of religious minorities in light of feminist and critical pedagogical theory. For ordering contact: Greenwood Publishing Group Inc., 88 Post Road West, P.O. Box 5007, Westport, CT 06881-5007. Tel 203-226-3571. Fax: 203-222-1502.