

### **Abstract**

This paper discusses the role of women in the household and strategies for sustaining women's contribution in rural development. Women contribute more than men in terms of labor input in farming and are solely responsible for household management duties; however, the income accruing to women is not commensurate with their efforts in the household. Household income distribution is skewed in favor of men; hence, men are erroneously believed to play a more dominant role in rural development than women. With the increasing rate of rural to urban migration of youths (mostly males), coupled with Nigeria's fast growing population, there is need to enhance women's effort at sustaining the rural farming sector. Adoption of strategies such as formation of women's cooperatives, introduction of modern farm inputs, diversification of farming enterprise, and intensification of extension services are proposed in this study.

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## **Women and Rural Development: Strategies for Sustaining Women's Contribution in Rural Households of Anambra State, Nigeria**

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WOMEN AND RURAL DEVELOPMENT: STRATEGIES FOR SUSTAINING WOMEN'S  
CONTRIBUTION IN RURAL HOUSEHOLDS OF ANAMERA STATE, NIGERIA

Introduction

Rural development, according to Dijeomah (1972), is a process of not only increasing the level of per capita income in the rural areas but also of the standard of living of the rural population, where the standard of living depends on such factors as food and nutrition level, health, education, housing, recreation, and security. Phillips (1973), on the other hand, sees rural development in terms of the condition and percentage of the labor force in the agricultural sector, although he rightly argues that a program of rural development goes beyond agriculture to include the country's total economic development in rural areas. About 70 percent of Nigeria's labor force is employed in the agricultural sector, which is characterized by a predominance of small-scale production using mostly local inputs. This paper takes the position that rural development in Nigeria should at present be concerned mainly with improving per capita income and standard of living of the rural populations.

Over 80 percent of the habitants of the rural areas are primarily engaged in farming and produce more than 70 percent of the food consumed in Nigeria. Despite the contribution of the rural people to Nigeria's Gross Domestic Product (GDP), development of the rural areas has not been given the deserved attention. As a consequence, rural people suffer untold hardships; they have been described as "Nigeria's Neglected Rural Majority" (Daramola et al. 1962) and the "Stagnant Sector" in the Nigerian economy (Anthonio 1967). Rural people constitute "the other Nigeria," with poverty-linked characteristics, lacking enough purchasing power to maintain a minimum standard of living, and surrounded by the Government Reserved Area (GRA), their better-off neighbors (Ijere 1981).

Several factors have militated against rural development in Nigeria. Some of these include lack of coordinated rural development programs, inadequate infrastructural facilities, and the lack of political power (Ijere 1981). Traditional farmers at the grassroots are faced with numerous problems ranging from inadequate finance and credit facilities, and inadequate transportation and storage facilities, to low prices for farm products. In addition, there is an increasing shortage of farm labor which currently constitutes a serious threat to agricultural production. For example, there has been a continuous rise on the rate of migration of youths, especially males, to urban centers in search of better jobs, thereby leaving women and old men to carry on farming activities. Returns from farming are significantly low compared to non-farming activities in the urban sector—hence the trend in migration.

Since women's role in the household is increasing in importance, there is a need to study ways and means of increasing women's ability to sustain the rural economy in a situation where there are fewer hands on the farm, little or no mechanization of farming operations, but an increasing demand for food products. This study therefore discusses the role of women in rural farming households and suggests strategies for increasing women's contribution to household welfare and rural development.

Nature of Data. Data for this paper were obtained from two separate studies conducted by the author between 1981 and 1984. The first study, for which information was obtained on a bi-weekly basis from 48 farming households, randomly selected from the Abakaliki areas of Anambra State, was conducted from April 1981 to March 1982. The second study was conducted in both Anambra and Bendel States from October 1983 to September 1984, with focus on the Abakaliki area in Anambra, and the Orhionmwon area in Bendel. A total of 220 farming households was studied--162 households from Abakaliki and 58 from Orhionmwon. Abakaliki and Orhionmwon areas have an estimated 2,500 and 1,070 farming households respectively.

For both studies enumerators were selected and trained from the localities to assist in data collection. The data collection exercise involved interviewing both the household heads and their first wives on a regular basis, as well as physical measurements of farms, inputs and output, and so on. Discussions in this paper are limited, however, to Abakaliki area which, along with the Anambra River area, represent the humid zone, and half of the yam production belt of Nigeria (Bachmann and Winch 1979). Information from the two studies is to some extent complementary; however, where significant variations existed in related data, adjustments were made for the two periods and average values were taken for all survey households. The purpose of using local enumerators, as well as the indepth style and procedure for data collection, was to ensure a high degree of objectivity and applicability of results.

### Survey Results and Discussions

Background Information. The primary occupation of the women was farming. About 86 percent of the survey households had more than one woman; there were between one and four women per household. In addition to farming, 37 percent of the women were engaged in secondary occupations such as trading and handicrafts.

The average household size was about 12 persons with a range of 2 to 26 persons per household. The male-female ratio in the average household was 5:7. The household in this context comprises the man, the wife or wives, and children as well as other dependents, all of whom eat from the same pot. Dependents may include the parents of the man, his brothers and sisters, and other relatives.

The age distribution of the women showed that 9 percent of them were above the 50-year age bracket, 42 percent were between 41 and 50 years, 37 were between 31 and 40 years, and the rest (12%) were between 21 and 30 years. None of the women had post-primary education; only 4 percent spent 1 to 6 years in school, while 96 percent had no formal education. Eighty-nine percent of the men had no formal education, 7 percent spent 1 to 3 years in school, and 4 percent spent 4 to 6 years in school. Age distribution also shows that 67 percent of the men were above 50 years, and 23 percent were between 41 and 50 years, while the rest (10%) were between 31 and 40.

Farming in the study area includes the growing of food crops (yams, cassava, cocoyam, maize, legumes, vegetables, and rice), tree crops (oil palm, oil bean, mangoes, oranges), as well as the keeping of livestock (poultry,

sheep, goats, cattle). While the food crops must be cultivated, most tree crops grow wild. Both semi-intensive and free-range systems are commonly practiced in livestock husbandry. Management of livestock enterprise, however, is of relatively low importance as the number raised per household is small. Hence, farming in the study area relates largely to production of food crops from which the bulk of household farm income is derived. With the exception of rice, all other crops are grown mostly in mixtures or combination. Yam-based crop mixture (YBCM) and cassava-based crop mixture (CBCM) constitute the most common crop mixture enterprises both in the number and size of fields cultivated by the household.

YBCM is comprised of yams, cassava, cocoyam, maize, legumes, and vegetables, with yams as the main crop; CBCM, however, contains virtually the same crops except yams, with cassava (rather than yams) as the main crop.

It is traditional among the farmers to devote particular fields in a farming zone to the cultivation of specific crops or crop mixture enterprises. Farmers base this decision on their assessment of the characteristics of the soil and crop requirements, as well as on the relative values attached to crops. This assessment also influences land management and other farm practices adopted by the farmer. For example, the areas bordering the banks of river and streams are used for rice production since such areas are usually waterlogged for the greater part of the year. The soil, relatively fertile due mainly to alluvial deposits from the flood water, is cultivated every year without fallow. Swampland fields, which are waterlogged only for a few months of the year, are used for rice and YBCM enterprises. Such fields are cultivated for about three consecutive years, then fallowed for one to two years.

CBCM and some YBCM fields are located in the up-land areas which are relatively dry for the greater part of the year; the soil in upland areas is of comparatively low fertility (Bachmann 1981). Crop rotation system is practiced more often in upland than swampland areas to reduce the rate of depletion of soil fertility. The principle behind the crop rotation system as practiced in the study area is such that crops with similar feeding habits and nutrient requirements do not follow each other in the sequence. Refuse from the home is often deposited on such fields to restore soil fertility. Most upland fields are cultivated once and then fallowed for two to three years.

In the study area, farmland was acquired by men, mainly through inheritance and from the community, since women traditionally do not own land. The man, on receiving his own share of communal land to be cultivated for the season, decides how much of his land he can cultivate, given the resources available to him. He gives what is left to his wife or wives, friends, or relatives for cultivation. In the survey period, an average of 3.96 hectares (ha) of farmland was cultivated per household. A total of 3.10 ha was allocated to YBCM (men had 2.44 ha; women 0.66 ha) and 0.65 ha to rice enterprise of which men cultivated 0.57 ha and women 0.08 ha; women cultivated the total 0.21 ha allocated to CBCM enterprise. On the average, therefore, men cultivated a total of 3.01 ha of farmland, while women cultivated only 0.95 ha during the survey year. The women, however, owned all the cassava, cocoyam, maize, legumes, and vegetables on their farms as well as the men's farms. Since women shared the men's yam fields through intercropping--while subscribing to the labor requirements--it therefore follows that in absolute terms, women cultivated more than 0.95 ha of land in the survey year.

## Contribution of Women to Rural Development

The activities of women in the household have been variously classified by different scholars. Olayide and Atobatele (1980), for instance, classify women's activities into cultivation, harvesting, distribution, and alimentation. On the other hand, Boulding (1977), Spiro (1980), Taylor (1975), and Patel and Anthonio (1973) do not highlight the significant contribution of women in the food distribution system; they restrict their consideration of women's activities to domestic chores and producer roles. Since farming is the main occupation of the rural dwellers, the contribution made by women in farm production, for instance, is one of the ways to measure their contributions to the development of the rural area. For purposes of this study, however, the contribution of women to rural development is recognized with respect to their role in farm production including processing and marketing, and in household management duties.

Role of Women in Farm Production: The greatest contribution of women in farm production in the study areas is the provision of labor. The customary division of labor in the area maintains that men perform the "tedious" farm operations while women do the "light" ones on all farm enterprises. While women may participate in clearing and bush-burning, men are solely responsible for tillage and mounding operations on both men's and women's fields. Furthermore, men customarily perform the "tedious" tasks of climbing and cutting in harvesting tree crops, while women assemble and carry home the harvested products. The categorization of farm activities performed by men and women as "tedious" and "light," respectively, is based largely on the amount of energy that would be physically exerted per time unit in performing an activity, rather than on the amount of work accomplished. This arrangement is not only the result of male chauvinism and the view of women as the "weaker sex" but also the result of the perception of agriculture as a male domain.

Shortage of women's labor for performance of the so-called "light" operations on traditional farms has been shown to impose severe limitations on crop types and cropping intensities because of the differential responses of specific crops and crop combinations to labor requirements, and hence on the viability of agricultural projects in general (Bergmann et al. 1980; Galletti et al. 1956).

Traditionally, a woman is expected to assist on her husband's farms for a certain number of days per week. The number of days the woman works on the man's farms varies among households depending mainly on the size of the man's fields and number of wives in the household. On such days the woman has to be physically present and seen working on the man's farms. For timely performance of farm operations, women employ labor on such days to work on their own farms, so they can satisfy their obligation to work on their husbands' farms. Presently, the reduction in rate of polygamy as well as the increased size of farmland (in response to the Green Revolution Program launched in 1980) have increased the number of days a woman has to assist on the man's farms.

Inadequate farm labor supply in the rural areas has necessitated increased involvement of women in the performance of some of the men's jobs, and the number of hours per day that women work on the farm. There is, however, only

a small increase in the number of days of work put in by women for production of different crop enterprises. For example, women's labor presently accounts for about 60 percent and men's labor about 40 percent of total labor input on household farms (Table 1) compared to the 42 percent and 58 percent of total labor input contributed by men and women respectively during the 1981-82 farming season.

Figure 1 shows the relationship between men's and women's labor in the performance of specific farm operations in the survey year. Although some farm activities are performed jointly by men and women, there are others performed specifically by either men or women. For such jointly performed farm activities as sowing/transplanting, staking, and harvesting, women's labor dominated men's labor. Men's labor dominated fencing and fertilizer application, because men's fields were usually fenced, and fertilizer was applied only on rice fields for which men had significantly larger areas than the women. Bird scaring on rice fields was done by male children; female children mainly assisted their mothers in performing domestic chores. Akorhe (1981), however, reported that both male and female children were involved in bird scaring activity in Plateau State. Seedbed preparation was done by men, while the job of weeding on all fields was exclusively women's in the study area. On the average, men performed five activities in both men's and women's fields, while women performed seven in men's field and eight activities in women's fields in each season.

Table 1 shows that women provided over 70 percent of the total labor used in CBCM and rice enterprises and 52 percent in the YBCM enterprise for both seasons. When compared to their labor input in the 1981-82 farming season, increases of 8 percent and 19 percent were recorded per hectare of CBCM and rice enterprises respectively; women's labor input increased by about 14 percent per hectare of YBCM in 1983-84 compared to the labor input in 1981-82 farming season. The low increase recorded for CBCM enterprise was probably because the enterprise comprised women's crops with the bulk of labor input provided by women. Shortage of men's labor had the least impact on CBCM enterprise; it had significant impact on YBCM and rice enterprises which had depended to a reasonable extent on men's labor for performance of many of the farm activities. Shortage of men's labor compelled the women to participate in the performance of some of the so-called men's jobs, inevitably putting in more days of labor than the men for a given farm operation. But since the same output per labor input is assumed for men and women per day, it follows that the women contributed higher labor input than the men during the survey period. Similar findings were made in Benue State by Burfisher and Horenstein (1984).

Figure 2 shows the monthly allocation of women's labor among crop enterprises in a farming season. Except for the period of January to March, women usually work full time (10 hours) on the farm every day of the month. The 10 hours of work per day covered the times the farmer left her home for the farm in the morning to the time when the farmer returned in the evening. During the months of April to December, the distribution of demand for women's labor on the farm was fairly uniform. In some cases, however, the time spent on the farm by women increased to about 12 hours per day especially during the period between June and August.

With the exception of cassava tubers, rice, and palm fruits, all other harvested products were not processed by the survey farmers. Some cassava tubers were processed into gari, while palm oil and kernels were extracted from the palm fruits. These activities were performed solely by women in the study area. Few households processed their paddy rice, and the operations involved were shared by men and women. The exact number of hours spent by women in processing activities could not be determined because the exercise was not continuous; some were seasonal, while others were performed only when needed. Kwatia (1986) and Ekpere et al. (1986) have also reported the dominant role played by women in processing agricultural products in Bendel, Ondo, and Oyo States of Nigeria.

While men and women shared the marketing of yams and rice, only the women were involved in the marketing of cassava, cocoyam, maize, legumes, and vegetables. Marketing in this study refers to activities such as sorting, grading, and pricing as well as transporting products to and from the market. Men were mostly involved in sorting and grading as well as price haggling for yams. Men also shared in transporting yams to the market but transporting unsold yams back to the home was usually left to the women. Marketing activities for rice were shared by men and women. Women, on the other hand, were solely responsible for all marketing activities (sorting, grading, processing, transportation, and price haggling) for cassava, cocoyam, maize, legumes, and vegetable products. Women therefore, played a greater role in marketing operations performed in the household than men, since women participated in the marketing of all crops while men took part in the marketing of only rice and yams.

A significant factor of women's role in household management is that they usually accomplish numerous domestic chores at the expense of their leisure. While men and women spend an average of 10 hours per day on the farm, the women spend an extra four hours at home performing various domestic duties. Brown's (1970) view was that women's role in such domestic duties as child rearing would restrict their participation in subsistence activities. Women in the study area, however, worked late into the night after the day's routine work on the farm; they had to prepare meals, clean the compound, and collect water from the ponds. In this way, they contrast with the view presented by Boserup (1970), who claims that African women who spend a great deal of time in the field cannot spend much time cleaning the house and looking after the children.

The consequences of water scarcity in most of African's rural communities have been stressed (Spiro 1980; Cleave 1974; Taylor 1975); hence the recent rural water development scheme embarked upon by the Nigerian government is a big relief to rural dwellers in general and women in particular.

#### Contribution of Women to Household Income and Expenditure

Greater contribution by women than men in farm production and performance of household management duties would suggest that women realize income comparable to that of men, and hence, contribute significantly to household expenditure. Women's contribution to household expenditure was, however, comparatively low because:

- (1) Men realized significantly higher income (69 percent) than women (31 percent) from all income sources (See Table 2). In the first instance, women's farmland was significantly smaller than that of the men. Although women controlled the cash realized from the sale of cassava, cocoyam, maize, legumes, and vegetables from both their fields and the men's fields, relatively small quantities of these products were sold while the rest were used for home consumption.
- (2) Men controlled household resources including women's labor. Much of women's labor time was spent performing farm operations on men's fields for which they received no remuneration. This limited the extent to which women participated in non-household farm and non-farm employment for wages, as they had to perform their traditional obligation on men's fields in addition to household domestic chores.

Income distribution in the household is skewed in favor of men, and a direct relationship exists between contribution to household economic activities and the financial position of men and women in the household. Cash expenditure related to household development is largely undertaken by the men (See Table 3), and men are believed to play a greater role in household welfare and development than women. However, an income valuation that considers all incomes from household duties would provide a different income distribution as an appropriate reflection of total household income. Such a valuation would definitely reveal an undisputably greater contribution by women than men in rural household welfare.

#### Strategies for Increasing Women's Contribution in Rural Farming Households

In most of Nigeria's rural farming communities, people still adhere strongly to certain cultural norms and values, regarding farming, traditional household structure, and the division of labor, despite Western influences. Programs that in any way infringed upon these fundamental traditional observances have always been resisted by the people. The strategies proposed in this study are, therefore, basically aimed at sustaining women's dominant role in food production in the household with the least interference with the customs and tradition of the people. The following strategies are therefore suggested:

- (1) Formation of women farmers' cooperatives which would undertake not only large scale production but also the processing and marketing of such food crops as cassava, cocoyam, maize, legumes, and vegetables--stereotyped women's crops. The government should acquire and allocate some communal land to women farmers in the study area. Experience in the past (Okorji and Obiechina 1985) showed that the agricultural development program, not related to the production of yams and to some extent rice, received very little response from the men, and since men controlled household land, most of such programs eventually failed. As a group, rural women would effectively embark on such agricultural programs and at the same time would meet their individual obligation of working on the men's field for the required days in the week. Further assistance in the form of ploughing/harrowing of fields by the government or its agency will enhance success.

- (2) Introduction of improved seeds and agrochemicals. Except yams, for which there presently exists no improved variety, adequate quantities of the improved varieties of the other crops should be made available to the women for cultivation, especially on their own fields where there are usually no restrictions regarding crop combinations and intensities. Agrochemicals should also be provided for use on such fields for crop protection and increased yield. In addition, the results of the application of agrochemicals on women's fields may enhance similar adoption by the men for the production of yams; most farmers will not apply agrochemicals on yams based on their belief that they are injurious to yam tubers.
- (3) Provision of processing and storage facilities. A sizeable proportion of total output of food crops is wasted annually due to poor storage and processing methods adopted by the farmers. Effective storage and processing will improve the quality, durability, and value of food products. Such semi-mechanized processing equipment as grating machines and oil press mills, for instance, should be made available by the government to groups of women farmers, to increase production efficiency and farm returns. Relevant chemicals should also be provided to reduce post-harvest losses of stored food products.
- (4) Provision of credit facilities. Women farmers need credit both in cash and kind, to sustain farm production. Improved seeds, agrochemicals, and equipment, for example, could be provided on credit to the women farmers. Cash is also necessary for payment of hired labor and purchase of other farm inputs. Women in the study area essentially require credit facilities because, first, they have relatively low financial status, and second, they do not have access to land and other property which could be offered as collateral to obtain loans, especially from the informal credit system (i.e., money lenders). Availability of credit will enhance timely acquisition of adequate quantities of farm inputs, increased production levels, and farm returns.
- (5) Diversification of farm enterprises. Emphasis has most often been placed by farmers in the study area of food crop production, to the neglect of the livestock enterprise. With the exception of the cattle owned by a very few household heads, most of the other livestock (poultry, sheep, goats) are owned by women. Not much attention is given to the management of livestock enterprise—a factor that is largely responsible for the low productivity, relatively high mortality rate, and negligible contribution of livestock enterprise to income of the survey households. Assisting women to own and manage sizeable stocks of livestock will help to alleviate the protein deficiency problem prevalent in most rural communities, as well as to increase farm income.
- (6) Intensification of extension services. Currently, extension services in the study area, as in most rural communities of the state, are inadequate. There is need to intensify extension services to the proposed women's "model" farm as a component of the program's package.

#### Summary and Conclusion

Most often men have been identified with rural development while the immense contribution made by women has been neglected. For instance, although

women contribute more than men in terms of labor input in the farm, returns from farm production accruing to women are not commensurate with their labor input. This is because, first, the traditional system of resource allocation in the household favors the men as household heads. Second, men control household labor including women's labor, thus limiting the extent to which women participate in cash-generating off-farm activities.

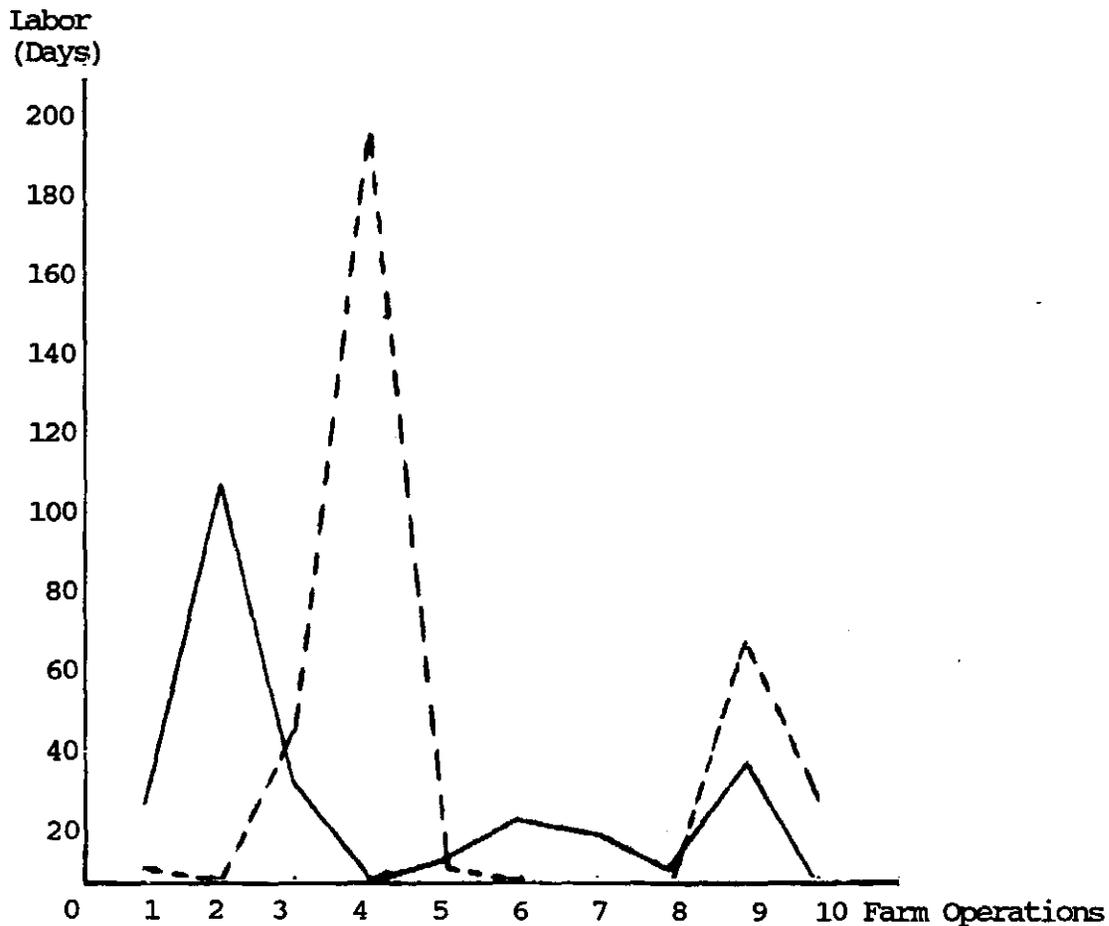
Women play a significantly greater role than men in the processing and marketing of farm products and are also responsible for the performance of household domestic chores--activities for which women receive no remuneration. These activities compete with farm work for women's labor, thereby leaving the women with little or no time to engage in other income-generating occupations. As a consequence rural women are comparatively poor and hence contribute less than the men in household welfare expenditures.

This notwithstanding, women have so far sustained agricultural production, a major component of rural development, in a situation in which the farm labor force is decreasing and the demand for food products is increasing. (Scarcity of farm labor is a consequence of the increased rate of youth migration, especially males to the non-agricultural urban sector in search of more rewarding employment.) Women have been able to sustain production by performing some of the farm operations (previously considered men's jobs), as well as putting in more days and hours of work per day. Though this increase in the use of women's labor over the year for various farm activities has sustained agricultural production in the area, women's labor may not be available for farming activities in the near future unless the agricultural sector is made more attractive; women will migrate, as do the men, in search of a better livelihood, thereby causing the stagnation of the agricultural sector.

The recent rural development program embarked upon by Nigeria's government aims to minimize the rate of migration to urban centers. It is hoped that the provision of electricity and good drinking water, as proposed in the program, will improve rural household welfare as well as attract agro-based industries to rural areas, thereby creating job opportunities and amenities for youths in rural areas. However, there is a need to devise strategies for enhancing women's contribution in rural households to sustain the increase production during and after the implementation of the program. Strategies such as the formation of women's production-processing-marketing cooperatives, the introduction of improved seeds and agrochemicals, provision of processing, storage, and credit facilities, and diversification of farming enterprises, as well as intensification of extension services, have been proposed in this study.

Figure 1

Relationship between men's and women's labor  
in the performance of specific farm operations



Key

- |                         |                           |
|-------------------------|---------------------------|
| 1. Land clearing        | 8. Fertilizer application |
| 2. Seed bed preparation | 9. Harvesting             |
| 3. Sowing/transplanting | 10. Threshing             |
| 4. Weeding              |                           |
| 5. Staking              |                           |
| 6. Fencing              | — Men's labor             |
| 7. Bird scaring         | - - - Women's labor       |

Source 1984 field data.

Figure 2  
Monthly Allocation of Women's Labor Among  
Crop Enterprises in the Survey Year

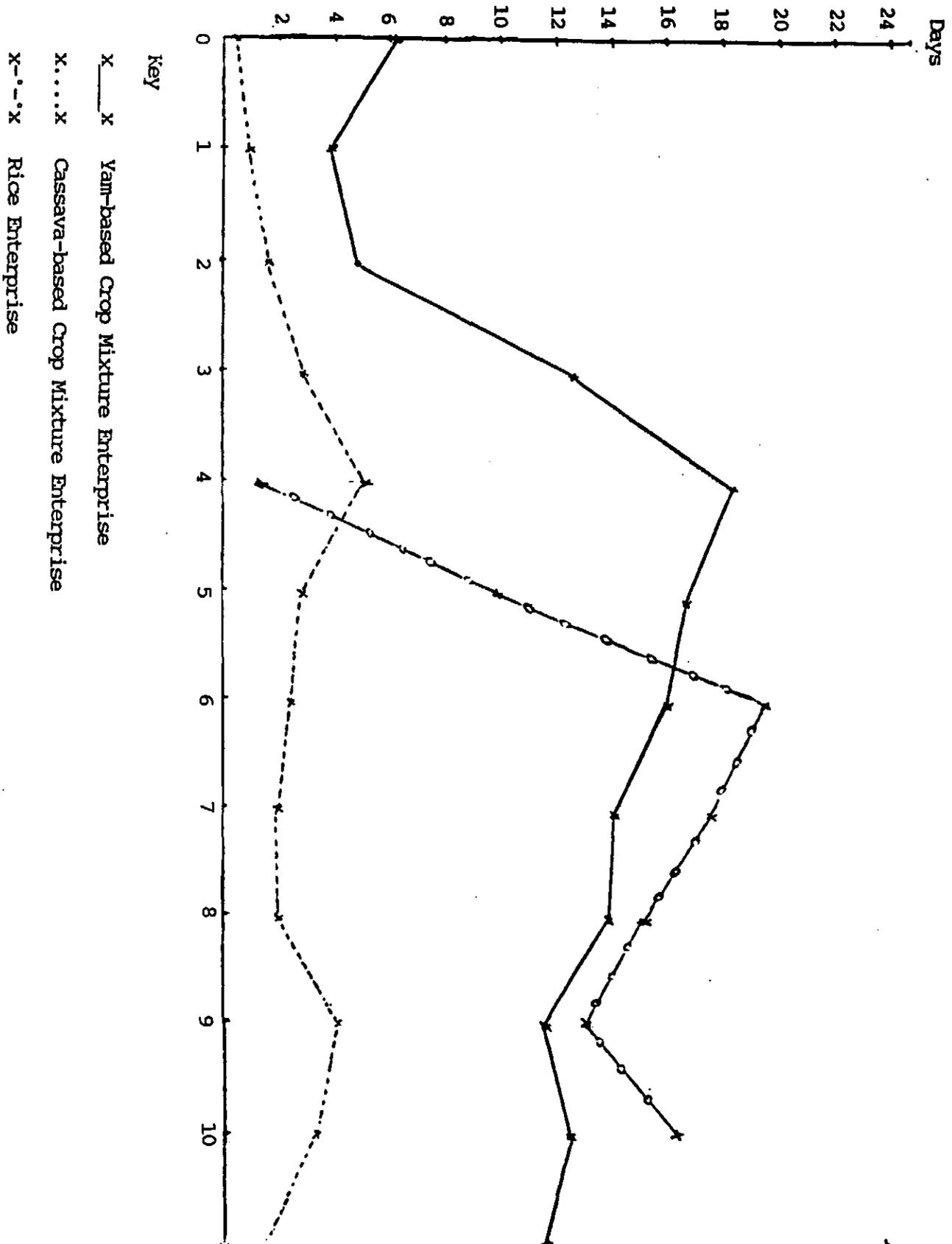


Table 1

Contribution of Farm Labor in Person Days by Sex for the  
Production of Household Crop Enterprises in the Survey Period

Labor Type	1981/82 Season				1983/84 Season			
	YBCM	CBCM	Rice	All Enterprises	YBCM	CBCM	Rice	All Enterprises
Male	205 (51)	10 (28)	98 (35)	313 (42)	260 (46)	4 (17)	36 (23)	300 (40)
Female	214 (51)	26 (72)	185 (65)	425 (58)	304 (54)	19 (83)	124 (77)	447 (60)
Male and Female	419 (100)	36 (100)	283 (100)	738 (100)	564 (100)	23 (100)	160 (100)	747 (100)

Source: Field data 1981-82 for 1983-84 farming season

Note: Figures in parentheses represent percentages on household basis.

Table 2

Source and Amount of Cash Income  
for Men and Women in the Household

Source	Men		Women		Household (Men and Women)	
	Amount (N)	%	Amount (N)	%	Total Amount (N)	%
Sale of Farm Products	785.23 (69.8%)	78.4	339.45 (30.2%)	76.0	1124.68 (100.0%)	77.6
Wages	136.00 (61.5%)	13.6	84.18 (38.5%)	18.8	220.18 (100.0%)	15.2
Other Sources	80.60 (77.4%)	8.0	23.50 (22.6%)	5.2	104.10 (100.0%)	7.2
Total	1000.83 (69.1%)	100.0	447.13 (30.9%)	100.0	1448.96 (100.0%)	100.0

Note: Figures in parentheses represent percentage of amount on household basis.

Table 3

Percentage (%) Distribution of Household Cash Expenditure by  
Items and the Proportion contributed by Men and Women

	Items of Expenditure						Total
	Provision of food	Festivals	Farm Production	Purchases/ Repair of Property	Education	Miscellaneous (community levy cash gift)	
Household (Men and Women)	24.3	14.3	50.1	5.0	4.0	2.3	100.0
Men	18.9	13.5	30.3	3.3	3.0	1.2	70.2
Women	5.4	0.8	19.8	1.7	1.0	1.1	29.8

References

Akorhe, J.A.

1981 Efficiency of Rice Production Under Alternative Rice Production Technologies in Plateau State. Unpublished M.S. thesis, University of Nigeria, Nsukka, Nigeria.

Anthony, O.B.O.

1967 The Stagnant Sector in the Nigerian Economy. Bulletin of Rural Economics and Sociology 2(3):221-228.

Bachmann, E.

1981 Yam Holdings in Southern Nigeria: Economic Assessment of Problems and Trends. Discussion Paper No.2/81, International Institute of Tropical Agriculture, Ibadan, Nigeria.

Bachmann, E. and F.E. Winch

1979 Yam Based Farming Systems in the Humid Tropics of Southern Nigeria. Discussion Paper No.2/79, International Institute of Tropical Agriculture, Ibadan, Nigeria.

Bergmann, Edith, Hellmuth Bergmann, and Jean-Jacques Schul

1980 The Role of Women in Agricultural Development Project. Quarterly Journal of International Agriculture 19(2):135-142.

Boserup, Ester

1970 Woman's Role in Economic Development. New York: St. Martins Press.

Boulding, Elise

1977 Women in the Twentieth Century World. New York: John Wiley and Sons.

Brown, Judith

1970 A Note on the Division of Labour by Sex. American Anthropologist 72(5):1073-1078.

Burfisher, M.E. and N.R. Horenstein

1984 Sex Roles in the Nigerian Tiv Farm Household. The Population Council. West Hartford, CT: Kumarian Press.

Cleave, John H.

1974 African Farmers Labour Use in Development of Small-holder Agriculture. New York: Praeger Publisher.

Darmola, et al

1962 Attitudes in Nigeria Towards Family Planning. In: The Population of Tropical Africa, ed. by Caldwell and Okonkwo. London: Longmans Publishing Company. Pp. 401-409.

Diejeomah, V.P.

1973 Rural Development in Nigeria: The Role of Fiscal Policy. In: Rural Development in Nigeria, p.97. Proceedings of the 1972 Annual Conference of Nigeria Economic Society, Ibadan.

- Ekpere, J.A., A.E. Ikpi, G. Gleason, and T. Gebremeskel  
1986 The Place of Cassava in Nigeria's Food Security, Rural Nutrition and Farm Income Generation: A Situation Analysis for Oyo State, Nigeria, p.24. International Institute of Tropical Agriculture (I.I.T.A.), Ibadan, Nigeria.
- Galletti, R., K.O.S. Baldwin, and I.O. Dina  
1956 Nigerian Cocoa Farmers: An Economic Survey of Yoruba Cocoa Farming Families. London: Oxford University Press.
- Ijere, M.O.  
1981 Leading Issues in Nigerian Rural Development. Department of Agricultural Economics, p.6. Nsukka: University of Nigeria.
- Kwatia, J.T.  
1986 Rural Cassava Processing and Utilization Centers. UNICEF I.I.T.A. Collaborative Program for Household Food Security and Nutrition, p.16. Ibadan, Nigeria.
- Okorji, E.C. and C.O.B. Obiechina  
1985 Bases for Farm Resource Allocation in the Traditional Farming System: A Comparative Study of Productivity of Farm Resources in Abakaliki Area of Anambra State. Agricultural Systems 17:197-210.
- Olayide, S.O. and J.T. Atobatele  
1980 Farm Labour Use and Nigerian Small Farmers. In: Nigerian Small Farmers: Problems and Prospects in Integrated Rural Development, pp.149-159. Ibadan: Ibadan University Press.
- Patel, A.U. and O.B.O. Anthonio  
1973 Farmers' Wives in Agricultural Development: The Nigerian Case. Seminar paper, University of Ibadan, Nigeria.
- Phillips, A.O.  
1973 Fiscal Policy and Rural Development in Nigeria. In: Rural Development in Nigeria, p.120. Proceedings of the 1972 Annual Conference of the Nigerian Economic Society, Ibadan.
- Spiro, H.M.  
1980 The Domestic and Rural Time Budgets. Discussion Paper No.6/80, International Institute of Tropical Agriculture, Ibadan, Nigeria.
- Taylor, A.  
1975 Africa's Food Producers: The Impact of Change on Rural Women. Focus: American Geographic XXV (5):1-7.

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