

Full Length Research Paper

Evaluation of the socioeconomic characteristics of rural women's time consumption on farm, non-farm and leisure activities in Ohaji/Egbema local government area of Imo State, Nigeria

Okereke H. Humble

Department of Agricultural Economics, Extension and Rural Development, Imo State University, Owerri,
Imo State, Nigeria.

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The study analysed rural women's time utilization on farm, non-farm and leisure activities in Ohaji/Egbema Local Government Area of Imo State. The study adopted random sampling technique in the selection of respondents for the study. One hundred women were randomly selected and questionnaire was the main instrument for data collection. Data collected were analysed using descriptive statistics, analysis of variance and regression analysis. The findings showed that age of the women influenced the time spent on farming activities negatively and significantly. Marital status, educational level, household size, and income level positively and significantly affected the amount of time spent on farming activities. In the case of non-farming activities, age significantly and negatively affected the amount of time spent by rural women on non-farm income generating activities. Income and educational level positively and significantly affected the amount of time spent by rural women on non-farm income generating activities. Age, marital status, educational level, and household size negatively affected the amount of time spent by rural women on leisure while income positively and significantly affected the amount of time spent by rural women on leisure. The daily average amount of time spent by rural women on farming activities, non-farming activities, and leisure were 10.81, 6.30 and 6.90 h respectively. The result of the analysis of variance revealed that there is a significant difference in the amount of time spent on farming activities, non-farming activities, and leisure by rural women. This study therefore concludes that time resource allocation and utilization of rural women is significantly dependent on their socioeconomic characteristics. Also, time utilized in farming, non-farming and leisure activities significantly differ from each other. As a way of enhancing the productivity of rural women, appropriate gender policy is necessary to enhance the welfare of the rural women and most importantly agricultural transformation is of paramount importance to reduce the drudgery of rural women.

Key words: Socioeconomic characteristics, time allocation, rural women, farming activities, non-farming activities, and leisure.

INTRODUCTION

Time is a consumable and valuable resource. Rural women spend a lot of time in managing their homes, farms and also engage in non-farm activities. Srivastava (1985) stated that all women farmers irrespective of land status of their family provide 14 to 18 h of productive physical labour in different chores, thus depicting the load of drudgery shouldered by them in day-to-day activities (Borghain and Akand, 2011). Women have always

worked and yet it is only recently that their work has become a topic of discussion among scholars and development planners (Lodha, 2006). The major characteristic of women in the developing world is their

*Corresponding author. E-mail: okereke_humble@yahoo.com

predominant role in the primary sector of the economy (Devi, 1987; Varma, 1992; Sharma, 1993). Scholars have found that women on an average work for 14 to 17 hours a day in countries of the South (Dixon, 1978; Whyte and Whyte, 1982; Afshar, 1985). The ILO Geneva Report (1975) on women power missed no words in pointing out that women work longer hours than men in market and non-market activities both in urban and rural areas of Asia, Africa and Latin America. The ILO action guide (1996) to ensure more and better jobs for women and to support poor and working women argued that in developing countries women spend 31 to 42 h per week in unpaid work while men spend 5 to 15 h in such work.

Research evidences focused that women play a significant and crucial role in agricultural development and allied fields including crop production, livestock production, horticulture, post-harvest operations, agro-social forestry etc. (Lodha, 2006). The nature and extent of women's involvement in agriculture varies greatly from region to region (Borghain and Akand, 2011). Even within a region their involvement varies widely among different ecological sub-zones, farming systems, caste, class and socio-economic status of families etc (Swaminathan, 1985). Regardless of these variations, there is hardly any activity in agricultural production in which women are not actively involved (Ferber and Spaeth, 1984; Singal, 1989; Varma, 1992).

The multiple roles played and the productive inputs made by women in terms of work hours contributed or equivalent income generated in the family are neither attended nor recorded (Debi, 1991; Varma, 1992), despite the fact that they contribute about three fourth of the labour required for agricultural operations (Lodha, 2006). The implication of women's arduous and wide ranging contribution not being counted as productive work entails a lower status for them at the personal level while at the national level it presents a distorted picture of the GNP with concomitant distortions of investment and development policies (Chabbra and Basu, 1980).

Significant progress has been made to understand women's time utilization on farming activities, off farm activities and leisure in developing countries (Dixon, 1978; Whyte and Whyte, 1982; Afshar, 1985; Ferber and Spaeth, 1984; Swaminathan, 1985; Singal, 1989; Debi, 1991; Verma, 1992; Lodha, 2006; Borgohain and Akand, 2011; Bharath et al., 2011). However, no attempt has been made to study the socioeconomic determinants of rural women's time utilization on farm, non-farm and leisure activities in rural areas of Imo State, Nigeria. This has caused a wide gap in knowledge. Filling this gap in knowledge is the focus of this paper.

METHODOLOGY

The study was carried out in Ohaji/Egbema Local Government Area (LGA) of Imo State, Nigeria. The area north, Owerri West LGA on the east and Rivers State on

the west and south. The area is divided into two larger districts namely Ohaji district and Egbema district. Ohaji/Egbema has a population of 182,538 persons (94,644 males and 87,894 females) (NBS, 2007).

Random sampling technique was employed for the selection of rural women for this study. Two communities were randomly selected from each larger district. In each community, twenty five rural women were randomly selected from the list of women in their associations obtained from the leadership of women associations in the communities. In all, four communities and one hundred women were selected. Questionnaire was the instrument for data collection. Data collected was analysed using descriptive statistics, analysis of variance and regression analysis. The implicit model of the regression is specified as follows; $Y = f(X_1, X_2, X_3, X_4, X_5, e)$. Where;

Y = Time utilized (h)

X_1 = Age (years)

X_2 = Marital Status (Dummy variable; married = 1, unmarried = 0)

X_3 = Educational level (Years spent in school) X_4 = Household Size (Persons)

X_5 = Income (Naira)

e = Error term.

RESULTS AND DISCUSSION

Amount of time utilized on farm activities, non-farm activities and leisure

The result presented in Table 1 clearly depicts that the rural women in the area are full time farmers judging by the amount of time utilized in farming activities. The result of this investigation revealed that on the average, a rural woman spent 10.81 h daily working on the farm and processing farm products. The hours worked by a rural woman can be translated to 64.84 h in a week excluding Sundays. In other words, the women in the area utilized 45.03% of the total day's time to them for agricultural production. The women in the area also engaged in non-farm activities. These non-farm activities include weaving of clothes, weaving of hair, petty trading, teaching in rural schools, crafts and other domestic chores. The result clearly depicts that the average daily time spent on non-farm activities by the women was 6.30 and 37.77 h weekly on non-farm activities. This represents 26.23% of the total time available to the rural women to utilize in a day. When added with the average time utilized in farm activities, the total time utilized in productive activities by rural women per day adds to 17.11 h. This corroborates with the findings of Srivastava (1985), Borgohain and Akand (2011) who stated that all women farmers irrespective of land status of their family provide 14 to 18 h of productive physical labour in different chores, thus depicting the load of drudgery shouldered by them in

Table 1. Average daily time utilization for farm, non-farm and leisure activities.

Week day	Farm activities mean daily time utilization (h)	Non-farm activities mean daily time utilization (h)	Leisure activities mean daily time utilization (h)
Monday	8.82	7.88	7.30
Tuesday	10.02	6.22	7.76
Wednesday	11.34	4.95	7.71
Thursday	12.11	5.14	6.75
Friday	10.62	7.45	5.93
Saturday	11.93	6.13	5.94
Total	64.84	37.77	41.39
Average	10.81	6.30	6.90
Percentage of daily average	45.03%	26.23%	28.75%

Table 2. Summary of analysis of variance.

Variation Source	DF	SS	MS	F
Between Group	2	71.98843	35.99422	29.4900 **
Within Group	15	18.30837	1.22056	
Total	17	90.29680		

** Significant at a level of 1% of probability ($p < 0.01$).

Table 3. Linear regression estimates of the socioeconomic determinants of time utilization in farming, non-farming and leisure activities.

Variable	Farming activities	Non-farming activities	Leisure activities
Intercept	-10.925 (-2.363)	1.120 (3.858)	-2.052 (-1.910)
Age (X ₁)	-0.720 (-2.078)*	-0.003 (-7.600)**	-0.186 (-2.008)*
Marital Status (X ₂)	0.473 (6.023)**	-0.009 (-0.119)	-0.084 (-0.4790)**
Education (X ₃)	0.058 (2.147)*	0.002 (2.910)**	-0.006 (-2.005)*
Household Size (X ₄)	0.912 (2.746)*	0.012 (1.775)	-0.128 (-2.06)*
Income (X ₅)	1.511 (5.233)**	0.000004 (5.359)**	0.350 (5.220)**
R ²	0.622	0.499	0.498
f-value	39.08**	23.67**	23.56**

Values in parenthesis are the t-values; ** Significant at 1% level; * Significant at 5 % level.

day-to-day activities. The study therefore revealed that shares common boundaries with Oguta LGA on the women in the area spend more time in productive activities (farming and non-farming activities). The rural women also spend some time for leisure. The leisure activities include sleeping and attending social ceremonies. The result in Table 1 clearly shows that the rural women spent 6.90 h daily on the average for leisure activities and a total of 41.39 h in a week. This represents 28.75% of the total time available to the rural women to utilize in a day. The result of the analysis of variance in Table 2 shows that there is a significant difference in the time utilized in farming activities, non-farming activities and leisure activities in the area. The result is significant

at the 1% level of probability.

Socioeconomic determinants of the time utilized in farming, non-farming and leisure activities

In order to ascertain the socioeconomic determinants of the time utilized in farming, non-farming and leisure activities, three multiple regression analyses were done for farming, non-farming and leisure activities respectively. Each regression was subjected to four functional forms- linear, semi-log, double log and exponential forms. The linear form was selected for each regression based on statistical and econometric criteria (Table 3).

The result of the regression showed that age of the women influenced the time spent on farming activities negatively and significantly. Marital status, educational level, household size, and income level positively and significantly affected the amount of time spent on farming activities. In the case of non-farming activities, age significantly and negatively affected the amount of time spent by rural women on non-farm income generating activities. Income and educational level positively and significantly affected the amount of time spent by rural women on non-farm income generating activities. Age, marital status, educational level, and household size negatively affected the amount of time spent by rural women on leisure while income positively and significantly affected the amount of time spent by rural women on leisure.

CONCLUSION AND RECOMMENDATIONS

The mean time spent on farming activities is significantly greater than the mean time spent on non-farming activities and leisure activities. The overall implication is that the rural women may be considered to be employed in on-farm and off-farm activities. The study reveals that age of the women influenced the time spent on farming activities negatively and significantly. Marital status, educational level, household size, and income level positively and significantly affected the amount of time spent on farming activities. In the case of non-farming activities, age significantly and negatively affected the amount of time spent by rural women on non-farm income generating activities. Income and educational level positively and significantly affected the amount of time spent by rural women on non-farm income generating activities. Age, marital status, educational level, and household size negatively affected the amount of time spent by rural women on leisure while income positively and significantly affected the amount of time spent by rural women on leisure.

As a way of enhancing the productivity of rural women, appropriate gender policy is necessary to enhance the welfare of the rural women and most importantly to advance their socio-political and economic rights in the society. Cognizant of the fact that the rural women are mainly engaged in farming, commensurate attention should be given to agriculture by Imo State government with a view to enhancing the rural women's income and time utilization. The potentials of the rural women in contributing to agricultural production and economic growth will be greatly enhanced with the provision of all necessary support in the form of farm inputs, rural infrastructure and more importantly educational training programmes. The Imo State government should design and develop policies that will be more directed to the needs of the rural women farmers in agricultural production like transforming agriculture with special attention to providing machineries and other equipments

that will enhance productivity of rural women and reduce drudgery. Also, there should be health education to the rural women to educate them on the importance of increasing the time for leisure so as to avoid stress related ailments.

REFERENCES

- Afshar N (1985). The Position of Women in an Iranian Village. In Heleh Afshar (ed.) *Women, Work and Ideology in the Third World*. New York: Tavistock Publication.
- Bharath KTP, Govinda GV, Khandekar N (2011). Time Utilization Pattern and Drudgery of Horticultural Farmers. *Int. J. Eng. Manage. Sci.* 2 (2): 93-96
- Borghain A, Akand AH (2011). Time Utilization Pattern of Tribal Women in Animal Husbandry. *Indian Res. J. Ext. Educ.* 11 (1): 50-56
- Chabbra R, Basu A (1980). Cited by Futehally L. *Third World Women, Women in Third World*, Bombay: Jaico Publishing House,
- Debi S (1991). Contribution of Women to Agricultural Production in Orissa. In Mahajan, V.S. (ed.) *Women's Contribution to India's Economic and Social Development*. New Delhi: Deep and Deep Publications.
- Devi LA (1987). *Rural Women: Management in Farm and Home*, New Delhi Northern Book Centre
- Dixon RB (1978). Rural Development and Women's Economic Roles in Asia. In Das M.S., Gupta V.K., *Social Status of Women in Developing Countries*, New Delhi: M.D. Publication Pvt. Ltd. 1995.
- Ferber MA, Spaeth JL (1984). Work Characteristics and Male Female Earning Gap, *American Economic Review* 74 (3): 262-263.
- ILO (1975). International Labour Organization Contribution to the United Nations Decade for Women.
- ILO (1996). Guide on Status of Women. The Hindu. New Delhi: July 30.
- Lodha N (2006). Tribal Women's Work Structure and Time Utilization Pattern in Subsistence Production. *Indian Res. J. Ext. Educ.* 6 (3): 1-5
- National Bureau of Statistics (NBS) (2007). Provisional of State and Local Government Totals of the 2006 Population Census of the Federal Republic of Nigeria. www.nigerianstat.gov.ng
- Sharma P (1993). Involvement of Women in Decision Process in the Management of Farm Household of Hill Region Uttar Pradesh, Doctoral Thesis. Baroda: MSU.
- Singal S (1989). Women's Work Pattern and Economic Contribution to Family Resource Development in Rural Households of Haryana. Unpublished Doctoral Thesis. Baroda: M.S. University, Baroda
- Srivastava JC (1985). Harnessing Technology for improving the Quality of Life of Rural Women. In: *Women and Technology*, pp. 38-74. Jain, C. (Ed). Rawat Publications, Jaipur.

Swaminathan M (1985). A Study of the Energy Used
Pattern in Two Villages of Garhwal Himalayas.

Mimeograph

Varma SK (1992). Women in Agriculture: A Socio
Economic Analysis. New Delhi: Concept Publishing
Company.

Verma OS, Malik BS (1984). Contribution of Rural Ladies
in Farm Operation. Indian J. Hortic.Sci. 15 (2): 57-59

Whyte RO, Whyte P (1982). The Women of Rural Asia.
Colorado: West View Press.