Research Article

ASSESSMENT OF WOMEN PARTICIPATION IN AGRICULTURE IN VAVUNIYA DISTRICT, SRI LANKA

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Abstract

An attempt was made to assess the women contribution towards agriculture in Vavuniya district, Sri Lanka. 60 farm family households' women were randomly selected from rural and urban area of Kovilkulam AI region of Vavuniya district in Sri Lanka and the data were collected by constructed questionnaire. The objectives of this study are to identify the factors contributing women participation in agriculture, to identify the constraints faced by the women in participating agriculture and to evaluate the women participation in decision making activity in agriculture. Minitab 15 and MS excel were used for data analysis. The level of women participation in agricultural activities was found out using chi-square test and the factors contributing for women participation in agricultural activities were identified using multiple regression analysis in urban and rural areas separately (α=0.05). The results revealed that 90% of the rural women respondents and 50% of the urban respondents participated in the agricultural activities which is a significant difference. The mean values of women participation in agricultural activities in urban and rural areas were 77 hours and 836 hours per annum respectively. The multiple regression model for women participation in urban area found that the participation of women negatively correlated with status of employment, age and education level (p=0.000). In rural area, age and educational level were negatively influencing on women participation in agricultural activities (p=0.000). R-square values of fitted regression models were 72 % and 91% in urban and rural area respectively 72% and 91% variation in respective women participation were explained by these models. The obstacles for the women in participation in agricultural activities were reported as lack of knowledge and training in agriculture field, family burden, cultural and social barriers and physical constraints. 60% of women from rural areas and 90% of women from urban areas were involved in decision making especially in the selection of crops and varieties for planting and livestock rearing. Enhancing the awareness and the technical knowledge to the women in the field of agriculture would contribute to increase income from agriculture at household level, district level and finally at national level.

Keywords: women; agriculture; Sri Lanka; Vavuniya district; women participation in agriculture

Introduction

Women play a critical role in agriculture all over the world. Along with their daily routine activities, their participation in agricultural activities enhances the standard of living. More often women's farm work are unpaid or undervalued (Tripathi, et al., 2012). Investments in agricultural research and extension systems are the key factor in the success of the new agriculture-led growth strategies of development (Mellor, 1976). In Sri Lanka, inadequate income has enforced women in small farm families to other occupations. Agriculture sector was underperforming as women encounter constraints that reduced their productivity (Doss, 2011). Nearly 29% of employed women are engaged in agriculture sector in Sri Lanka. Therefore it is inevitable to assess the women contribution towards agriculture and the constraints faced by them, not only for

the development of proper agricultural management strategies but also for the women empowerment.

In Sri Lanka, studies related women participation in agriculture sector were inadequate, hence this study was aimed to assess the women contribution towards agriculture. The objectives of this study are

1. To identify the factors contributing women participation in agriculture.
2. To identify the constraints faced by the women in participating agriculture.
3. To evaluate the women participation in decision making activity in agriculture.

Methodology

Vavuniya district was purposively selected for this study, since more than 70 % of the population involved in

agriculture and the major livelihood in this district is agriculture as well.

The study was conducted at Kovilkulam AI range in Vavuniya district of Sri Lanka since this area includes urban and rural households. Stratified random sampling was employed in obtaining the samples. Vavuniya town, Pandarikulam and Vairavapuliyankulam GN divisions were selected as urban households while Aasikulam GN division selected for rural households. 30 women from farm families were randomly selected from each urban and rural area and conducted questionnaire survey using constructed questionnaire.

The questions were aimed to obtain information regarding socio economic aspects, the time spent for agriculture, wages, activities carried out in farm, constraints in participation, source of agriculture information and the extend of participating in decision making. Multiple regression analysis was performed to identify the factors influencing women participation ($\alpha=0.05$). The participation of women in agriculture as in the form of total hours per year was used as dependent variable. Age, education level and employment status were used as explanatory variables. Number of schooling years was used for level of education. Whether they were employed in other nonfarm jobs or not was considered under the status of employment.

The functional form of multiple regression for women from urban farm households was specified as $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3$ where Y was the participation of women in agriculture; X_1 was education level; X_2 was status of employment and X_3 was age. For rural households the multiple regression equation used was $Y = \beta_0 + \beta_1X_1 + \beta_2X_2$ where Y was the participation of women in agriculture; X_1 was education level and X_2 was age.

Chi squared test was carried out to identify the association between participation level and area (urban and rural). Minitab 15 and MS Excel were used for data analysis.

Results and Discussion

The occupation status of women in farm families was analyzed and presented in Table 1.

The results revealed that 90% of the rural women respondents participated in agricultural activities whereas it was only 50% in the urban area which is a significant difference (p=0.001).

The mean values of women participation in agricultural activities in urban and rural area were 77 hours and 836 hours per annum respectively. The multiple regression model for women participation in urban area explored that the participation of women was negatively correlated with status of employment, age and education level (p=0.000).

The fitted model of rural area was participation = 3510 - 694 education - 35.2 age. In rural area, age and educational level were negatively influencing on women participation in agricultural activities (p=0.000).

The fitted model of urban area was participation = 541 - 11.7 education - 68.3 employment - 8.01 age. R-square values of fitted regression models were 72 % and 91% in urban and rural area respectively states that 72% and 91% variation in women participation in the respective area were explained by these models. From this model, it can be concluded that the education level, employment status and age were negatively correlated with participation.
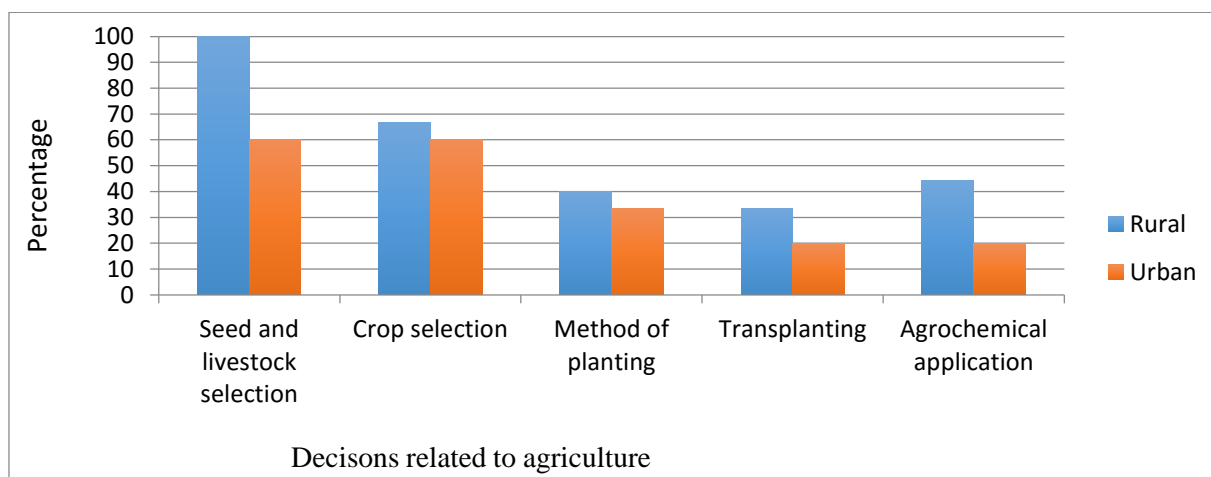
The constraints of the respondents in participating in agriculture was identified and reported below in Table 2.

The obstacles of the women in participation in agricultural activities were reported as lack of knowledge and training in agriculture field, family burden, cultural and social barriers and physical constraints. The major obstacle of the women from rural farm families in participating in agriculture was physical constraints. The lack of knowledge and training were the major obstacles of women from urban farm families. However cultural and social barriers also reported as constraints for women from urban farm families in participating in agriculture.
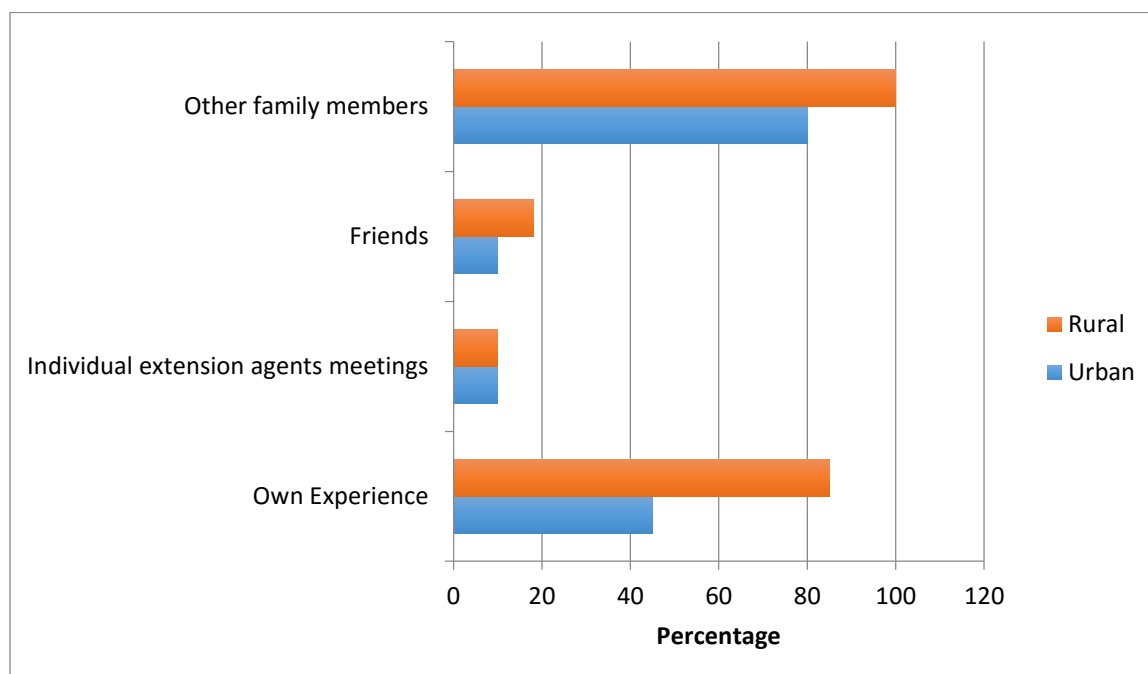
The participation in the decision making process was evaluated and results were given in Fig. 1.

Table 1: occupation of women in farm families of selected urban and rural area

	No employment	On Farm[1] only	Non-Farm[2]	Off Farm[3] only	On Farm and Off Farm
Urban	17%	50%	33%	0%	0%
Rural	10%	70%	0%	0%	20%

[1] Farm household income obtained from their own farm
[2] Farm household income obtained from working in others farm
[3] Farm household income obtained from other jobs excluding farm

Table 2: Constraints of the respondents in participating in agriculture

Constraints	Urban (%)	Rural (%)
Lack of knowledge	67	3
Lack of training	67	3
Family burden	50	67
Cultural and social barriers	50	0
Physical constraints	34	100

Fig. 1: Level of participation on decision making in agricultural activities

Fig. 2: Sources of information for the agriculture management and techniques

60% of women from rural households and 90% of women from urban households were involved in decision making especially in selection of crops and varieties for planting and livestock.

The sources of information for the agriculture management and techniques were assessed and given in Fig. 2.

Majority of the respondents gathered agricultural information from their own experience and from other

family members. Rural women were attended external educational programes and meetings more actively than the urban women.

Conclusion and Recommendations

The women from rural households significantly contributed to agriculture when compared to women from urban household, Participation depended on age, employment status and education level. The major constraints in participating in agriculture for women from rural and urban farm households were physical constraints and lack of training and knowledge respectively. 60% of women from rural households and 90% of women from urban households were involved in decision making especially in selection of crops and varieties for planting and livestock rearing. Enhancing the knowledge and technical skills to women in the field of agriculture is beneficial to increase the income from agriculture at household level, district level and finally at national level. Encouraging women participation in agriculture extension and technical programs is beneficial for the national development.

References

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