

Recreational Activities and their Impact on Poverty in Sri Lanka

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Introduction

Poverty is one of the major challenges the world faces, with massive implications that hinder sustainable development. More than 4.3 billion people out of the global population of 7.5 billion are in poverty, affected mostly from causes which are preventable with low cost and proven interventions (UNICEF, 2010). Statistics reported by the Department of Census and Statistics (DCS, 2016) indicates that 169,392 households and 843,913 persons live in poverty in Sri Lanka. Furthermore, the mean monthly income was Rs. 62,237, while the mean monthly household expenditure on recreational activities was only Rs.908 (2.5 % of total non-food expenditure).

The literature has focused extensively on income and expenditure patterns and recreational activities, and how it can affect the level of poverty. As stated by Chacón-Araya and Crow (2015), since 1988, expenses associated with recreational and leisure activities was slightly high for people in the lowest and highest income quantiles. Heckman model and Probit analysis used by Haq, et al. (2018), pointed out that the probability of the household contribution for leisure and tourism increased with favorable changes in income, level of education and women's empowerment. Similarly, household spending on tourism is influenced positively by the age of the head of household and negatively by the number of children and adults in Pakistan. However, even though there are numerous studies conducted on poverty, there is no significant study on recreational activities and their impact on poverty in Sri Lanka. As such, this study addresses this research gap, by highlighting the significance of recreational activities with in-depth insights. The new findings gathered from this research will be of immense use to Government of

Sri Lanka in formulating better policies for entrepreneurs in the business sector, who are one of the stakeholders in recreational activities in the country. Furthermore, this is an opportunity for all national stakeholders to discover untapped market segments. Thus, these insights are important for investors in the social sector including leisure and entertainment industries, covering cultural and religious activities too.

Objective

The main purpose of this study is to measure the impact of recreational activities on poverty in Sri Lanka.

Methodology

Research suggests measurement of the probability of being in the category of poor or nonpoor based on different types of recreational activities of Sri Lankan households. As such, this study is based on secondary data gathered through the DCS, with an annual sample of 21,756 households representing all 25 districts in the country. Studenmund (2016), recommends the main probit model which is appropriate for this study. Probit model is a linear probability model where the binary variable (dependent) has two possibilities such as being nonpoor or poor. It has a parameter that reflects changes in the probability of being poor to the changes in explanatory variables. This model consists the binary dependent variable (Z), taking value 1 if the family unit is poor²³ and 0 otherwise.

$$Z = \beta_0 + \beta_1 MHH + \beta_2 AHH + \beta_3 POlder + \beta_4 EHH + \beta_5 MHH + \beta_6 EMHH + \beta_7 Urban + \beta_8 Rural + \beta_9 Enter + \beta_{10} Religious + \beta_{11} Cultural + \beta_{12} Cultural + \beta_{13} Recreational + u$$

The variable MHH is a dummy variable equal to 1 if the household is male headed household, 0 for female headed household. AHH denotes the age of the household head. POlder is a ratio of household members who are above 65 years old to the total household members. EHH represents the education level of the household, MHH is the marital status of the household and EMHH denotes employee status. The variable Urban is a dummy variable equal to 1

²³ People who are living below the national poverty line (Rs. 4166 per month) are defined as poor and the rest are as non-poor.

if the household located in an urban area, 0 otherwise. Rural is a dummy variable equal to 1 if the household located in a rural area and 0 for others. Enter (Entertainment), Religious, Cultural and Recreational variables denote the total real expenditure values.

Results and Discussion

The coefficient of types of recreational activities reveals that entertainment, religious, recreational and cultural activities have negative effects on being a poor household and those recreational activities are significantly associated with poor households. The marginal effect shows that spending on entertainment activities have a much higher probability of being in a poor household by 0.004 percentage in points compared to other recreational activities. Moreover, spending on religious activities demonstrates a lower probability of being in a poor household by 0.0006 percentage in points compared to other activities. Further, spending on recreational and cultural activities exhibits equal probability of being in a poor household by 0.003 percentage points, respectively.

Table 1 reports the marginal effects of the estimated model. Accordingly a 1% increase in the education level of the household head decreases the probability of being in a poor household by 1.86 percent in points. As can be seen from the table, the highest proportion of poor (75.3%) live in the urban sector compared to those living in the rural sector. This indicates that about 25% of households in the urban sector and about 60% of rural households are nonpoor.

Table 1 Estimated results of the probit model

Variables	Estimates	Robust SE	Marginal effect (in percentage)
Constant	-0.9984	0.1368	
<i>Socio-demographic characteristics</i>			
Male_HH	0.05074	0.0522	0.0985
Age_HH	-0.00198	0.0018	-0.0040
% Older(above 65)	0.03398	0.0642	0.0697
Education_HH	-0.51250***	0.0709	-1.8612
Marital Status_HH	0.20743***	0.0532	0.3632
Employee Status_HH	-0.05085	0.0484	-0.1042
<i>Location</i>			
Urban	-0.57333***	0.0945	-0.7528
Rural	-0.17288***	0.0735	-0.3941
<i>Recreational Activities</i>			
Entertainment	-0.00179***	0.0002	-0.0036
Religious	-0.00029**	0.0001	-0.0006
Cultural	-0.00140***	0.0004	-0.0028
Recreational	-0.00137***	0.0005	-0.0028
Number of observations = 21756			
Pseudo R ² = 0.0889			
Log likelihood = -2917.645			

Note: *** significant at the 1% level, ** significant at the 5% level.; HH – Head of Household

Conclusion

This study measures the impact of different types of recreational activities and how socio-economic and demographic conditions of Sri Lankan households influence country's poverty levels. The Probit model identifies the nature of relationship between the recreational activities and level of poverty. The findings of this study demonstrate that spending on recreational activities are significantly associated with nonpoor households. Accordingly, a strong relationship exists between spending on recreational activities and nonpoor households. Furthermore, households who are located in the urban sector have

a much higher probability of being poor compared to those living in the rural sector. This study further confirms that education and marital status of the head of the household are significantly associated with poverty alleviation. Therefore, this research study provides the opportunity to both investors and policy makers (targeting the social sector including leisure and entertainment industries, covering cultural and religious activities), to further explore nonpoor households and their impact on recreational activities. Thus, it contributes towards Sri Lanka's sustainable development.

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