An Analysis of the Effect of Obudu Community Participation In Ecotourism On Poverty

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Abstract

The effect of participation of Obudu community in tourism on household's poverty forms the focus of this study. Simple random sampling was employed to select 126 participating households across 4 randomly selected communities out of 6 in Obudu Local Government Area. Descriptive statistics, Probit model and OLS Regression model were adopted for the analysis. The result showed that the pattern of participation in Obudu tourism revolve around providing transportation and accommodation/feeding services and being primarily employed in Obudu tourism Industry. Having access to tourism information, gender and household monthly income positively and significantly influenced the probability of the community people to participate in Obudu tourism while years of living in Obudu, dependency burden and membership of different associations negatively and significantly influenced participation in Obudu tourism. Also, results from the analysis showed that increase in tourism income of both active and non active participating core poor and moderate poor households in Obudu tourism will reduce poverty level. Allowing the local community members access to adequate tourism information and reduction in family sizes can improve participation in tourism. The study therefore recommend that awareness campaigns should be consistently made against early marriage, early child bearing and polygamous practice as they are the likely cause of large household size which have led to the persistence of poverty in Obudu community.

Key words: Tourism, Community participation, Poverty reduction.

INTRODUCTION

Tourism in Nigeria is not a new phenomenon. The historical development of tourism and recreation in Nigeria has been traced by Ojo (1978) cited in Aniah et al (2007) from the pre-colonial through colonial to the post colonial eras of the country. The tourism industry in Nigeria is still fairly developed when compared to those found in other countries of both the developed and developing world (Aniah et al. 2007). Many developing countries have managed to increase their participation in the global economy through development of tourism. Tourism development is increasingly viewed as an important tool in promoting economic growth, alleviating poverty, and advancing food security. Numerous studies have demonstrated that tourism can play a significant role in balanced sustainable development, and that it can be effectively harnessed to generate net benefits for the poor (UNWTO, 2002).

Tourism is a principal export for 83% of developing countries, and it is the most significant source of foreign exchange after petroleum in developing countries. Developing countries' share of international tourist arrivals more than doubled from 1973 to 2000 (UNWTO, 2002). Tourism comprises a significant part of the world's growing service sector; in sub-Saharan Africa, tourism accounts for approximately 55% of service sector exports (UNWTO, 2002).

The potential of tourism development as a contributor to economic growth and poverty reduction is derived from several unique characteristics of the tourism system (UNWTO, 2002). First, tourism represents an opportunity for economic diversification, particularly in marginal areas with few other export options. Tourists are attracted to remote areas with high values of cultural, wildlife and landscape assets. The cultural and natural heritage of developing countries is frequently based on such assets, and tourism represents an opportunity for income generation through the preservation of heritage values. Therefore, tourism enables communities that are poor in material wealth but rich in history and cultural heritage to leverage their unique assets for economic development (Honey and Gilpin, 2009).

Tourism is the only export sector where the consumer travels to the exporting country, which provides opportunities for the poor to become exporters through the sale of goods and services to foreign tourists. Tourism is also labour-intensive and supports a diverse and versatile labor market; it provides small-scale employment opportunities, which also helps to promote gender equity. There are numerous indirect benefits of tourism for the poor, including increased market access for remote areas through the development of roads, infrastructure, and communication networks.

Tourism has received considerable attention in the recent years especially "ecotourism" which has become the fastest growing sub-sector of the tourist industry, with an annual growth rate of 10-15% worldwide. Ecotourism is used as a means of economic development and environment conservation (Campbell 2002). Ormsbys et al., (2006) opined that ecotourism ventures have sustained the economies of most nations of the world for example, East African countries like Kenya, Tanzania and part of West African like Senegal.

Cross River State is endowed with great ecotourism potentials such as Obudu Ranch Resort, waterfalls, warm spring among others which have attracted both local and international tourists patronage (Aniah et al.2007). This great ecotourism potentials has afforded several tourists and visitors a unique opportunity to see the beauty of the physical features of Cross River state. Ushie (2009) noted that Obudu Ranch Resort recorded about 65,341 Nigerian tourists and 18,161 Foreign tourists in 2008. Tourism has been recognized by many scholars as being able to add greatly to the economy of the host communities and GDP of that country in general. According to Hall (2003), tourism activities in Maldives contributed 66.6% of the country's GDP and accounted for 65.9% of its exports. Roe et al, (2001) are of the opinion that tourism industry in Vanuatu has contributed 47% of the country's GDP and accounted for 73.7% of its export earnings. Despite all these benefits from tourism and high number of tourists in the State, poverty is still on the increase in Cross River State especially in Obudu.

According to National Bureau of Statistics (2007), unemployment and under-employment in Cross River State remain at high levels. For example, the national composite unemployment rates remained unchanged between 2002 and 2006, about 13% in 2002, 14% in 2003, 11.9% in 2004, 12.1% in 2005 and 12% as at 2006 (NBS, 2007). The total under-employed youth aged 15 years and older was 12% with males forming 15.2% and females constituting 9.0%. Five percent of young people aged 15 to 24 years old were under-employed, 6.2% were males and 3.9% were females (National Bureau of statistics 2007). In 2007, there was a high rate of child labour in Cross River State, children aged 5 to 14 years who worked in family businesses were 59.8% compared to only 3.2% in Bauchi State (Ingwe 2008).Over the years, various intervention have been attempted to reduce poverty in Cross River State, intervention such as CR-SEEDS-1 and CR-SEEDS-2(2005), but all these interventions failed because poverty level still remained unchanged with more than 55% of the people living in poverty coupled with its rapid population growth. (Ingwe 2008).

Traditionally the impact of tourism has been measured in terms of its contributions to Gross National Product and employment created. Often tourism's overall impact on the economy is estimated by looking at the effect of tourism expenditure through direct, indirect and induced spending using a multiplier effect approach (Jamieson et al, 2004). Tourism growth is most often measured through increased in international arrivals, length of stay, bed occupancy, tourism expenditures and the value of tourism spending. However, none of these measures provide any means of determining the scale of the impact on the poor or even the trends which result from overall growth or decline on the poor. Until recently, researchers and those engaged in tourism development have not sought to demonstrate the impact of tourism on poverty reduction, the focus has been on macro-economic impacts and its potential to bring economic growth to the poor and marginalized individuals and communities rather than on measuring and demonstrating specific impacts on poverty.

It is in this respect, that this research work has been designed to assess the effect of Obudu community participation in tourism has on reducing poverty and to find answers to the following questions. what is the socio-economic status of Obudu people? what is the pattern of community participation in tourism activities? what factors determines Obudu peoples participation in tourism? what effect do tourism has on poverty level of the people?

Methodology

Study Area

The study area was Obudu in Cross River State of Nigeria. Obudu community comprises of 6 villages, namely Anape, Okpazawge, Kegol, Keji-Ukwu, Okwamu and Apeh-Ajili. Obudu is located at an altitude of 1, 575 meters above sea level, and a unique temperature climate and vegetation with temperature ranging between 7^{0}c and 15^{0}c all year round. It is bounded to the North by Benue State, to the South by Ogoja local government area and the East by the Republic of Cameroon. It lies within Latitude 64^{0}N and longitude 91^{0}E with population of 19,668 people

The main occupation of the inhabitants of the communities is subsistence farming, some are civil servants and part-time worker, businessmen, while some engage in tourism activities in their area. Obudu people are known as peace loving people and they have strong ability to coexist with other tribes without engaging in wars or conflicts.

Sampling Technique/Data collection and Analysis

Simple random sampling technique was used for the study. Following the official map of the area, 4 communities was randomly selected out of the 6 communities in Obudu and 40 participating households in Obudu tourism was randomly selected from the four communities making a total of 160 households, but only 126 questionnaire was recovered and used for the analysis. The procedure followed was writing the names of household on cards, the cards were put into a box and reshuffle thoroughly before each drawn, this is to ensure that every households is given equal opportunity of being selected. Data was collected from primary source with the aid of structured questionnaire and interview. Field observations were also used in this study with other relevant data collection methods. The questionnaires were administered to the participating households in Obudu tourism. Data was analysed using both descriptive and inferential statistics which includes percentage and frequency distribution tables, Probit model and ordinary least square (OLS) regression model.

Model Specification:

Poverty Line. The total expenditure of each household was calculated for a month, then corrected for each household size by dividing the household total monthly expenditure by the number of people within the household.

$$Per\ capital\ expenditure = \frac{Total\ household\ monthly\ Expenditure}{Household\ Size}$$

$$Mean\ per\ capita\ household\ expenditure = \frac{Total\ per\ capita\ expenditure\ for\ all\ household}{Total\ number\ of\ household}$$

From the mean of per capita household expenditure, two lines was set relative to the standard of living in the study area.

i,   The moderate poverty line, equivalent to two thirds of the mean per capita household expenditure.

ii,   A core poverty line, equivalent to one third of the mean per capita household expenditure.

With the household's poverty line, the headcount of the poor households was estimated using

$$H = np/N$$

Where:-

H = Headcount

np = Population that falls below the poverty line (Poor households)

N = Total sample population

Determinants of Participation in Obudu Tourism (Probit model)

$$Y = f(X_1, X_2 X_3 X_4 X_5 X_6 X_7 X_8 X_9 X_{10} X_{11} X_{12} X_{13}, E_t)$$

Where Y = Participation in Obudu tourism

Active Participant = 1, 0 otherwise

X_1 = Sex of household head (a dummy) if male 1, 0 otherwise

X_1 = Age of household head (in years)

X_1 = Years of formal education of household head.

X_1 = Marital status of household head (a dummy) married 1, 0 otherwise

X_1 = Years of living in Obudu by the household head

X_1 = Dependency ratio, non-working members/working members

X_1 = Household size

X_1 = Monthly Household income (₦)

X_1 = Household head level of Experience in tourism activities (in years)

X_1 = Membership of any association of household head (a dummy) if household head is a member of any association 1, 0 otherwise

X_{11} = Access to tourism information by the household head (a dummy) 1 if household head has access to tourism information, 0 otherwise

X_{12} = Marketable skills of the household head(a dummy) if household head has marketable skill 1, 0 otherwise

X_{13} = Religion of household head (a dummy) Christianity 1, 0 otherwise

E_t = Error term

Effect of Participation in Tourism on Poverty

$$Y = f(BV_i, E_t) \qquad Where, \ i \ = \ 1, 2, \dots, n$$

V_i =   Socioeconomic Variables

$$Y = \frac{Poverty\ line - percapita\ expenditure}{Poverty\ line}$$

V_1 = Years of formal education (in years)

V_2 = Sex of household head (dummy) if male 1, otherwise 0

V_3 = Household other income (₦) per month

V_4 = Household head level of Experience in tourism activities (in years)

V_5 =   Household size

V_6 = Age of household head (years)

V_7 = Membership of any association of household head (dummy) if household head is a member of any association 1,if otherwise 0

V_8 = Marital status of household head (a dummy) married 1, others 0

V_9 =   Dependency ratio

V_{10} = Tourism income of household head. (₦) Per month

V_{11} =   Hours spent in tourism activities by the household head per month.

V_{12} =   years of living in Obudu by the household head.

V_{14} =   Religion of household head (dummy) Christianity 1, otherwise 0

V_{15} = Having access to tourism information by household head (a dummy variable) if household head has access to tourism information 1, otherwise 0

V_{15} = Marketable skills of the household head (dummy) if household head has marketable skill 1, if otherwise 0.

V_{16} = Participation (dummy) active participants1, non active participants 0.

$B's$ = coefficients. E_t = error term

Results and discussion

The socio-economic and demographic characteristics of the respondents are presented in table 1. Majority 81.7%(103) of participating households in Obudu tourism were headed by male while only 18.30%(23) of the participating households were headed by female, out of 103 participating households headed by male, 42.70% were actively participating in Obudu tourism while 57.30% were not participating actively. This shows that male headed households participate in Obudu tourism more than their female counterpart. 42.06%(53) of the households were monogamous, out of this 53 monogamous households, active participants amount to 34.0% while non-active participants amount to 66.0% while 0.79% (1) of the participants in Obudu tourism was divorced and was an active participant in Obudu tourism. Household size in this study is the number of people residing in the same house and eating from the same pot. The average size of the households surveyed in the study area was 7.

Twenty four (19.1%) of the households that are participating in Obudu tourism were of the size 1 – 4 members, out of which 29.20% are participating actively in Obudu tourism while 70.80% were not participating actively in Obudu tourism, 78 (61.9%) of the participating households in Obudu tourism were between the sizes of 5 – 9 members and among them, 52.60% were participating actively in Obudu tourism while 47.40% were not. Five (3.9%) of participating households had household size of between 15 – 19 members, out of which 60.0% of them participated actively while 40.00% were not participating actively in Obudu tourism. This shows that majority of the participating households in Obudu tourism have large household sizes. Also majority(28) of the Households had farming as their primary occupation and among these farmers, 7.10% were actively participating in Obudu tourism while 92.90% were not actively participating while minority (0.8%) of them had artist and masonry as their primary occupation. The average age of participants in Obudu tourism was 33.4; 74.5% of the households falls within the age group of 20-39, out of this, 45.7% were participating actively in Obudu tourism while 54.3% were not participating actively. Minority (1.6%) of them falls within age group of above 59, 50% of them were participating actively in Obudu tourism while the remaining 50% were not participating in Obudu tourism. This shows that participants in Obudu tourism were mainly households that are headed by younger people who are in their economic viable stage. 95.2% of the participants in Obudu tourism were Christians, out of which 45.8% were participating actively while 54.2% were not participating actively. 4.8% were not Christians but belong to different religious groups such as Islam and Traditional religion. It is believed that educational level of the households head affect the level of participation in tourism, 1.6% (2) of the households had no formal education, out of which 50% of the households were participating actively in Obudu tourism while the remaining 50% were not participating actively. The table also revealed that 53.2 (67) of the household had secondary education, out of them, 44.8% were actively participating in Obudu tourism while 55.2% were not participating actively. The average years of formal education in the study area was 12.

Majority 56.70% (72) of the households that participate in Obudu tourism had per capita income falling between the range of 1- 5,000, out of the 72 households, 45.83% were participating actively in Obudu tourism while the remaining 54.17% were not participating actively in Obudu tourism. Twenty eight(22.1%) households had per capita income falling between the range of 5,001-10,000 while very few of them 5.50%(6) had per capita income greater than 15,000, Out of the 6 households, 83.33% were participating actively in Obudu tourism while the remaining 16.67% of them were not participating actively in Obudu tourism. This shows that majority of the participants in Obudu tourism were middle income earners. The average number of years of residence in the study area was 28.4. 58.7%(74) of them, had lived in their areas between 21 – 40 years, out of which 45.9% were participating actively in Obudu tourism while 54.1% were not participating actively while least (0.8%) of them only lived above 60 years in their community.

Poverty and Households participation in Obudu Tourism

Table 2 showed that 20.63% (26) of the participating households in Obudu tourism were core poor, out of them, 38.5% of them were participating actively in Obudu tourism while the remaining 61.5% were not participating actively, 46.83% (59) of the households in Obudu tourism were moderately poor, and out of them, 49.2% of the households were participating actively in Obudu tourism while 50.8% of them were not. Also, 52.54% (41) of the

participating households in Obudu tourism were non poor, within this non poor group, 46.3% of the households were participating actively in Obudu tourism while the remaining 53.7% of them were not participating actively in Obudu tourism. This showed that majority (59) of the participating households in Obudu tourism were moderately poor while minority (26) of them were core poor.

Pattern of participation

From table 3, it could be observed that most (26.19%) of the households participated in Obudu tourism through providing transportation services to the tourists where the highest amount of money (₦1,973,000) was realized per month and highest number (15179) of hours per month was used, followed by sales of their farm produce to hotels and to the tourists. Also, some of the households still participated in Obudu tourism by being employed directly in the Obudu tourism Industry.

Determinants of Participation in Tourism

The results from the Probit Model used to examine the factors affecting participation in Obudu are presented in Table 4. An additional insight into the influence of these factors on Participation was also provided by analyzing the marginal effects, which was calculated as the partial derivatives of the non-linear probability function, evaluated at each variable sample mean.

The log-likelihood of -66.873, the pseudo R^2 of 0.2308 and the LR(Chi^2) of 40.13 (Significant at p<0.01 level), implies that the overall model is well fitted in the data and the explanatory variables used in the model were collectively able to explain the determinant of participation in Obudu tourism.

Among the included variables, household monthly income (0.0001), access to tourism information (1.290), sex (0.732), years of living in Obudu (-0.029), membership of association (-0.619) and dependency burden (-0.989) were significantly influencing participation in Obudu tourism while age (-0.165), education (-0.047), marital status (0.083), years of experience in tourism (-0.009), marketable skills (0.235) and religion (0.423) had no significant influence on participation in Obudu.

Having access to adequate information about tourism activities by the household head was positively influencing participation in Obudu tourism. The positive and significant (P< 0.01) coefficient of access to information implies that households with more access to information about tourism activities will participate in Obudu tourism than those who do not have access to this information, this is also consistent with other past research findings, Tosun (2000), according to Tosun, many community people are not participating in tourism because they are not well informed. The marginal effect from this study also showed that an additional one community member with access to tourism information increases the probability of participating in Obudu tourism by 47.4%. Household monthly income was positively influencing participation in Obudu Tourism. The positive and significant (P< 0.01) coefficient of income implies that households with greater monthly income will participate in Obudu tourism than those with less monthly income. Dependency burden, years of Living in Obudu and membership of association had negative and significant influence on Participation in Obudu tourism. This implies that as these variables increases, the probability of an individual participating in Obudu tourism decreases and vice versa.

The Effect of Participation on Poverty

The results from ordinary least square regression on both core poor and moderate poor households was used to examine the effect of Participation on Poverty of Obudu people as presented in Table (5). The influence of the included factors on poverty was also provided by analyzing the marginal effect of the factors.

Adjusted R^2 of 0.8348 and F(16, 68) of 27.54 (P< 0.0 1) implies that the overall model is well fitted to the data and the explanatory variables used in the model were collectively able to explain the effect of participation on poverty. The adjusted R^2 value shows that 83% of the variations in poverty of Obudu people can be explained by the included variables.

The result of ordinary least square on both the core poor and moderate poor households showed that among the included variables, Age (-0.0860), household size (.16353), hours put into tourism (0.0027), years in

Obudu (-0.0492), tourism income (0.0001),access to information (-.11910) and income from other source order than tourism (-0.00002) were significant and positively influenced poverty in Obudu. On the other hand, sex (0.5882), education (-0.0717), marital status (-0.0286), dependency burden (0.7565), years of experience (0.0201), membership of association (0.1591), marketable skill (0.5463), Religion (1.9206) and active participation (-0.1500) were not significantly affecting poverty of the people.

Table 5 revealed that household size had a positive (.16353) and significant (P< 0.01) relationship with poverty of Obudu people. The marginal effect from this study showed that keeping other factors constant, 1% increase in households' size will increase the poverty of people by 16.4%. Another thing found in the result which is against the theory, was that keeping other factors constant, as the number of hours spent in tourism activities is increasing, poverty increase as well. This may be due to improper utilization of those hours by the people. This possibility deserves greater exploration. The overall effect shows that 1% increase in the hours spent in Obudu tourism increases the poverty of the people by 0.27%.

In conformity with a priori expectation, tourism income, income from other sources and access to tourism information had negative and significant influence on the poverty of participants. This implies that as these variables increases, the poverty of the participants in Obudu decreases and vice versa. OLS regression result showed that their tourism income had a negative (-0.0001) and significant (P<0.01) with their poverty. The marginal effect from this study showed that keeping other factors constant, an increase in tourism income of the people by 1% would be associated with a 0.01% decrease in their poverty. The negative and significant (P<0.05) coefficient of access to information implies that if the people really have access to adequate information about tourism they will participate more and poverty will definitely reduce through their participation. This is also consistent with other past research findings (Tosun, 2000 and Nozipho, 2000).The marginal effect from this study showed that keeping other factors constant, 1% increase in the number of people that have access to tourism information will reduce their poverty by 11.9%. The study also showed that income from other source had a negative (-0.00002) and significant (P<0.01) relationship with the poverty of Obudu people. This means that as the income from other sources order than tourism increases, the poverty of the people decreases as well. The marginal effect from this study showed that keeping other things constant, 1% increase in the income from other source will decrease the poverty of the people by 0.002%.

Conclusion and Recommendation

Some studies also demonstrated that tourism had impacted positively on the economies of different countries thereby reducing their poverty (Tosun, 2000; Kibicho, 2008; Honeck, 2008) among others. However, this study found out also that local community participation in Obudu tourism had some effect on their poverty as 1% increase in tourism income of both active and non-active participating core poor and moderate poor households in Obudu tourism reduces their poverty by 0.01%. Based on the result, the following major conclusions are reached.

Households headed by male participate in Obudu tourism more than the ones headed by female; Participation in Obudu tourism revolves around providing transportation and accommodation services and being employed in the Obudu tourism industry. Having access to tourism information, sex and households monthly income positively and significantly influenced participation in Obudu tourism while membership of different association, dependency ratio and years of living in Obudu negatively and significantly influenced participation in Obudu tourism. 1% increase in tourism income of both active and non-active participating core poor and moderate poor households in Obudu tourism will reduce their poverty by 0.01% as practiced at the time of this study.

The study therefore recommend that awareness campaigns should be consistently made against early marriage, early child bearing and polygamous practice as they are the likely cause of large household size which have led to the persistence poverty in Obudu community. Also access to information/knowledge about tourism activities should be allowed to Obudu community people and for the households without enough access to these knowledge, a possible approach to encourage their active participation is by providing them with economic benefit (loans) among others.

Reference

Aniah, E. J. Eja, E. Iwara and Edu, E. (2007). Tinapa Tourism and Business resort, a model for the socio-economic development of Cross River State: constraint and Temporal Perspectives. Tropical focus, vol & N0.3, pp .131.

Campbell, L.M. (2002). Ecotourism in rural developing communities. Annals of Tourism Research, 26(3) pp. 534-553.

Roe. D, Ashley, C. & Godwin, (2001). Pro-poor Tourism Strategies: Making Tourism work for the Poor London. Overseas Development Institute, UK.

Hall, C.M. (2003). Plitics and Place: An analysis of power in tourism communities, Oxford, England, 99-114.

Honeck, D. (2008). LDC poverty alleviation and the Doha development agenda: Is tourism being neglected? World Trade Organization, Manuscript dated 12 August 2008.

Honey, M. & Gilpin, R. (2009). Tourism in the Developing World: Promoting Peace and Reducing Poverty. Washington: United States Institute for Peace.

Ingwe (2008). The nature of Development Plans in Cross River state.

Jamieson W., H. Godwin and C. Edmunds (2004). Contribution of tourism to poverty alleviation: pro-poor tourism and the challenge of measuring impacts, United Nations Economic and Social Commission for Asia and The pacific, UNESCAP.

Kibicho, W. (2008). Community-based Tourism: A factor cluster segmentation approach. Journal of Sustainably Tourism, 16(2), 211-231.

NBS. (2007). Information Bullentin Abuja.

Nozipho, P.M. (2000). Community Participation in Tourism Development at Kwangcolosi Kwazulu-natal. M.Sc. Thesis, University of Zululand.

Ormshy, A. and Mannle, K. (2006). Ecotourism benefits and the role of local guides at Masola National park. Madagascar: Journal of Sustainable Tourism 14(3) pp. 271 – 287.

Tosun, C. (2000). Limits to community participation I the tourism development process in developing countries, Tourism management, vol.21, 613-633.

UNWTO. (2002). Tourism and Poverty Alleviation. Madrid: United Nations World Tourism Organization..

Ushie, M.A. (2009). Level of Domestic and International Patronage of Obudu Ranch Resort: Paper presented to University of Calaber Nigeria.

Appendix

Table 1: **Distribution of Respondents According to some Socioeconomic Characteristics**

Distribution	Frequency	Percentage	Participating Status (%)	
			Active	Non Active
Sex				
Male	103	81.70	42.7	52.30
Female	23	18.30	60.90	39.10
Marital Status				
Married polygamous	11	8.73	54.50	45.50
Married monogmous	53	42.06	34.00	66.00
Divorced	1	0.79	0.00	0.00
Seperated	7	5.56	43.90	57.10
Widow	6	4.76	66.70	33.30
Single	48	38.09	54.20	45.80
Household Size				
1-4	24	19.10	29.20	70.80
5-9	78	61.90	52.60	47.40
10-14	19	15.10	36.80	63.20
15-19	5	3.90	60.00	40.00
Age				
20-39	94	74.5	45.70	54.30
40-59	30	23.90	46.70	53.30
>50	2	1.60	50.00	50.00
Primary Ocupation				
Artist	1	0.80	100	0.00
Hotel operator	22	17.50	63.60	36.40
Civil servant	25	19.80	92.00	8.00
Taxi driving	14	11.10	92.90	7.10
Farming	28	22.2	7.20	92.90
Masonry	1	0.8	0.00	100.00
Okada riding	16	12.7	6.20	93.80
Schooling	6	4.8	0.00	100
Teaching	13	10.3	30.80	69.20
Educational Level				
No formal education	2	1.6	50.00	50.00
Primary education	16	12.70	43.8	56.20
Secondary education	67	53.20	44.8	55.20
Tertiary education	41	32.60	48.8	51.20
Per capital Income				
1-5000	72	56.7	45.83	54.17
5001-10000	28	22.10	42.86	57.14
10001-15000	20	15.70	40.00	60.00
>15000	6	5.50	83.33	16.67
Religion				
Christianity	120	92.2	45.80	54.20
Others (Muslims and Traditional	6	4.8	50.00	50.00
Duration of reside				
1-20	31	24.6	41.90	58.10
21-40	74	58.70	45.90	54.10
41-60	20	15.90	55.00	45.00
>60	1	0.8	100	
Total	126	100		

Source: Field Survey, 2011

Table 2: Distribution of Households by Poverty Status of Household Head

Poverty Status	Frequency	Percentage	Participating	status (%)
			Active	Non-active
Core poor	26	20.63	38.5	61.5
Moderate poor	59	46.83	49.2	50.8
Non poor	41	32.54	46.3	53.7
Total	126	100	49.2	50.8

Source:FieldSurvey,2011

Table 3: Distribution of Households Based on Pattern of Participation in Obudu Tourism

Services	Freq.	Percet.	Amount realized/ Month (₦)	Percent of amount realised	Hour Worked/ month	Hour Worked/ month	Per hour income (₦)
Transport	33	26.19	1,973,000	36.62	15179	34.13	130
Accommodation/ Feeding	7	5.56	620,000	11.51	5139	11.56	121
Photography	4	3.17	133,367	2.48	1530	3.44	87
Photocopies	1	0.79	30,000	0.56	360	0.81	83
Entertainment in tourism	10	7.94	160,667	2.98	1140	2.56	141
Hair dressing	1	0.79	44,000	0.82	360	0.81	122
Employment in tourism	18	14.29	630,000	11.69	8010	18.01	79
Laundry	5	3.97	163,000	3.03	882	1.98	185
Shop owners	7	5.56	233,000	4.32	3270	7.35	71
Sales of handicraft	3	2.38	34,500	0.64	720	1.62	48
Sales of souvenirs	3	2.38	133,333	2.47	720	1.62	185
Sales of farm produce	32	25.40	1,176,500	21.83	6619	14.89	178
Others(tour guide ad loaders)	2	1.59	57,000	1.06	540	1.21	106
Total	126	100	5,388,367	100	44469	100	1536

Source: Field Survey,2011

Table 4: Probit Regression Result of Determinants of Participation in Obudu Tourism.

Variables	Estimated coeff.	Standard Error	Z-value	Marginal effect
Sex	0.732	0.355	2.06**	0.284**
Age	0.165	0.111	-1.48	-0.655
Education	-0.047	0.521	-0.90	-0.018
Marital status	0.083	0.328	0.25	0.032
Years in Obudu	-0.029	0.014	-1.96**	-0.114**
Dependency burden	-0.989	0.344	-2.87***	-0.390***
Household size	-0.067	0.058	-1.14	-0.026
Monthly income	0.0001	0.000	2.81***	0.0001***
years of experience.	-0.009	0.035	-0.27	-0.003
Members of asso	-0.619	0.317	-1.95**	-0.242**
Access to info	1.290	0.349	3.70***	0.474***
marketable skills	0.235	0.389	0.60	0.917
Religion	0.423	0.705	0.60	0.158
Constant	4.088	2.260	1.81***	
No of observation	126			
Log likelihood	-66.873			
LR chi2(14)	40.13***			
Pseudo R^2	0.2308			

Source: Field survey, 2011

Note * $P<0.1$ and ** $P<0.05$, *** $P<0.01$.

Table 5: OLS Result of the Effect of Participation on both Core and Moderate Poor Households

Variables	Estimated coef.	Stand error	t-values	Marginal effect.
Education	-0.0717	0.0921	-0.78	-0.0717
Sex	0.5882	0.5974	0.98	0.56462
Other income	0.00002	0.0000	1.70*	0.00002*
Years of experienc	0.0201	0.0566	0.35	0.0201
Household size	.16353	0.1162	14.07***	1.6353***
Age	-0.0860	0.0426	-2.02**	0.0860**
Membership of aso	0.1591	0.5405	0.29	0.1591
Marital status	-0.0286	0.5559	-0.05	-0.0286
Dependcy burden	0.7565	0.6990	1.08	0.7565
Tourism income	-0.0001	0.0000	-3.24***	-0.0001***
Hours spent	0.0027	0.0014	1.90*	0.0027*
Years in obudu	-0.0492	0.0267	-1.84*	-0.0492*
Religion	1.9206	1.5579	1.23	1.9206
Access to info	-.11910	0.5991	-1.99**	-1.1910**
Marketable skill	0.5463	0.6709	0.81	0.5463
Participation	-0.1500	0.5856	-0.26	-0.1500
Constant	-3.1095	2.4590	-1.26	
No of observation	85			
F(16, 68)	27.54*			
R^2	0.8663			
Adj R^2	0.8348			
Root MSE	1.9544			

Source: Field survey,2011.

Note * P<0.1, ** P<0.05, *** P<0.01

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