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A Comparative Study of Extension Programme Benefits to Residents at Yankari National Park, Nigeria and Hluhluwe – Umfolozi Park, South Africa

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Abstract

The study investigated and compared the extension activities and the benefits of these activities to residents at Yankari National Park (YNP), Nigeria and Hluhluwe–Umfolozi Park (UHP), South Africa. Socio-economic characteristics of residents of both parks were also examined. Data were collected from randomly selected 10 communities around Yankari National Parks and 4 communities around Hluhluwe-Umfolozi Park with 8 respondents purposively selected from each community. Descriptive analysis, Analysis of Variance (ANOVA) and Chi-square were used to analyse the data. The results show that respondents from Yankari National Park were hunters (23.8%), cattle farmers (18.7%) or unemployed (22.5%), while at Hluhluwe – Umfolozi Park; residents were mostly traders (46.9%). In Yankari National Park, extension activities were mainly community development while in Hluhluwe-Umfolozi, activities were improvement of residents' traditional skills in arts and crafts. There were significant differences between respondents in Yankari and Umfolozi Parks as regards annual income, market opportunities and economic status. While only 24.4% of respondents in Yankari National Park had improved economic status from extension activities, a higher percentage (81.3%) was obtained for Hluhluwe – Umfolozi Park. Moreover, more residents participate in decision-making of extension activities in Hluhluwe Umfolozi Park (87.5%) than in Yankari National Park (26.3%). To improve the economic status of residents around parks and to avoid conflicts, residents should be involved in the decision-making of extension activities.

Key words: National Park, Extension, Communities, Residents, Economic Benefits

Introduction

The philosophy of extension service according to Sinkaiye (2005) is helping households to help themselves in improving their standard of living and well being. However, Braimoh and Oladele (2000) indicated that extension as an educational process has the dual goal of bringing information and technology to the rural populace and teaching them how to use these to boost productivity, alleviate poverty and sustain rural livelihoods through wealth creation and improvement in the quality of life. According to Windapo (1998), successful extension work is feasible where there is reciprocal relationship between the extension works.

This means that extension requires that the extension workers be committed to the welfare of the beneficiaries.

Group participation in extension has been increasingly valued as very crucial in any meaningful extension work. According to Kokomoda and Ayanda (2002), people's participation in rural development programmes is a way to make the programmes successful especially for solving problems of rural people. Participation generally confers some benefits, helps to secure the consent and cooperation of people. According to Eze and Igbokwe (1997), group involvement in extension activities ensures economy of state, appropriate need determination, increase in the interest of rural dwellers in extension programmes and overall socio-economic impact of extension on the communities.

A National Park is a relatively large area of land or sea where one or several ecosystems are not materially altered by human exploitation and occupation, where plant and animal species, geomorphologic sites and habitats are of special scientific, educative and recreative interest and which contains a natural landscape or great beauty (Nigeria National Park, 2002). National Parks are therefore natural ecosystems with unique attributes classified in the highest category of protected areas. The rural dwellers' dependence on natural sources for food, fibre and medicine demands that societies pay much attention to the protection and conservation of the ecosystem. National parks therefore play the role of conservation of selective and representative sample of the ecosystem (Nigeria National Park, 2002).

The role of extension to the communities surrounding the conservation areas cannot be over emphasized. This is because conservation areas in Nigeria and South Africa for example were previously established through enforcement and compulsory expulsion of local communities. However Parks and other conservation areas need to recognize their links with and dependence on local communities as they are inextricably tied for better for worse (Dowling and Page, 2002). Local people therefore are to be included in the park planning and management programme and where possible contribute to or facilitate economic development. As a result, integrating local community's needs, lifestyle and activities is necessary to avoid conflict and problems for eco-tourism resource.

Armah (2000) therefore indicates that community extension brings in the vital linkage of people's participation to conservation, and that without this the mission of parks would simply be unachievable. Community extension in Hluhluwe-Umfolozi Park, South Africa is carried out through the Social Ecology Programme, while at the Yankari National Park, Nigeria, Support Zone Development Programme (SZDP) and Local Empowerment and Environmental Management Programme (LEEMP) are the major approaches. Msmang (2000) suggests that community extension approaches should be participatory, community-oriented and educational.

Analysis of the benefits of the different community extension approaches in Yankari National Park, Nigeria and Hluhluwe-Umfolozi Park, South Africa will generate useful information that could lead to improvement in the management of parks in developing countries. The study therefore aimed to compare the perceived benefits of community extension activities in Hluhluwe-Umfolozi Park, South Africa and Yankari National Park, Nigeria. Specifically, the study aimed to: (i) compare the socio-economic characteristics (such as sex, educational background, income per annum and occupation) of residents of the two parks; (ii) examine the differences in the extension activities of the two parks, and; (iii) identify the difference, if any in the residents' perceived benefits of community extension in the two parks. The

hypothesis that there were no significant differences between the two parks in terms of residents' benefits (such as market opportunity, income, and economic status) was tested.

Materials and Methods

The study was conducted in Yankari National Park, Nigeria and Hluhluwe-Umfolozi Park, South Africa within July 2003 and October, 2004. The Yankari National Park is one of the parks in Nigeria with high tourist inflow and high variety of wildlife. South Africa is one of the African countries with well developed park systems which earn considerable amount of foreign exchange in tourism. Hluhluwe-Umfolozi Park was chosen because it is one of the major parks in South Africa. The Yankari National Park of Nigeria and Hluhluwe-Umfolozi Park of South Africa are both situated in the savannah biome characterised by grassy ground layer and a distinct upper layer of woody plants. Also both parks have viable extension programmes for the neighbouring communities.

The Hluhluwe-Umfolozi Park covers a total area of about 96,000 hectares in the Kwazulu Natal Province of South Africa. The Park is renowned for its wide variety of bird and animal which includes the 'big-five' (Elephant, Lion, Leopard, Rhinoceros and Buffalo) and comprises of Hluhluwe and Umfolozi Game Reserves, which are the oldest reserves in Africa, and the Corridor Reserve. On the other hand, the Yankari National Park in Nigeria occupies an area of about 2,244sq kilometres in the North East of Nigeria and it is one of the parks with the highest tourists' flow. Waterbuck is the most numerous large animal in the park.

The two National Parks being established by forceful ejection of community settlers are embedded within the community settlements. The twenty- eight communities in Yankari National Park and the eleven in Hluhluwe-Umfolozi Park are walking distances to the parks.

A two-stage sampling technique was used for the study. The first was the random selection of communities surrounding each of the parks. Out of 28 communities around Yankari National Park, 10 (36%) were selected while 4 were randomly selected from the 11 communities around Hluhluwe-Umfolozi Park. The second stage was the purposive selection of 8 respondents representing leaders of Community Based Organizations (CBO) from each selected community, as the CBO leaders are the decision makers in the community extension programmes. In all, a total of 112 respondents made up of 80 respondents from Yankari National Park and 32 respondents from Hluhluwe-Umfolozi Park were used for the study.

Both structured questionnaire and interview schedule were used for collecting data for the study. The instruments solicited information on socio-economic characteristics (such as sex, educational background, income per annum, occupation etc), extension activities, perceived benefits from extension services and presence of human/wildlife conflicts in the parks. Data were analysed using descriptive statistics, which include frequency and percentages. Analysis of variance (ANOVA) was used to identify differences between the two parks, in terms of market opportunity, residents' income and their economic status.

Results and Discussion

Socio-economic Characteristics of Respondents

Table 1 shows the distribution of socio-economic characteristics of the respondents in the two parks. The result shows that the age of most leaders of Community-Based Organisation

involved in the extension activities from both parks were above 35 years with 66.2% from Yankari National Park and 65.6% from Hluhluwe-Umfolozi Park. In terms of gender participation in extension activities, more females from Hluhluwe-Umfolozi Park communities(46.8%) were involved than in Yankari National Park (36.3%).

The result also shows that respondents from Hluhluwe-Umfolozi Park are more literate than those from Yankari National Park, as respondents with no formal education do not exist in Hluhluwe-Umfolozi Park, while about 11.2% did not have any formal education in Yankari National Park. About 46.9% of respondents in Hluhluwe-Umfolozi Park are traders while residents in Yankari National Park are either hunters (23.8%) or unemployed (22.5%). Since no respondent in Hluhluwe-Umfolozi was unemployed, it can be deduced that residents at Hluhluwe-Umfolozi Park are more economically empowered than those in Yankari National Park. This is also reflected in Table 2 where majority of the respondents at Hluhluwe-Umfolozi Park (59.2%) earn above R20, 000 per annum while only about 28.7% at Yankari National Park earn between R500 – 2,450 per annum.

Extension activities and methods of contact

The results in Table 3 show that most of the extension activities at Yankari National Park are community development activities such as improvement of roads, provision of drugs, construction of wells and boreholes etc, while those from Hluhluwe-Umfolozi Park are non-community based activities but improvement of arts and crafts making and providing opportunities for marketing. The implication of this is that community residents surrounding Hluhluwe-Umfolozi Park have their traditional skills and talents enhanced and developed thus resulting in more economic empowerment. Less effort were directed towards community development as various tiers of government take care of this. This is also in line with the result from Table 2 which shows that respondents' income per annum for Hluhluwe-Umfolozi Park community residents is quite higher than Yankari. All the respondents at Hluhluwe-Umfolozi Park were aware of extension activities, while about 23.7% were not aware of any extension activity in Yankari National Park. However, respondents from both parks perceived the extension method and frequency of contact with the respondents to be similar as 65% and 65.6% indicated the method of contact was personal and 67.5% and 62.4% indicated frequency of contact as monthly in Yankari and Hluhluwe-Umfolozi Parks, respectively.

Majority of the respondents at Yankari (73.7%) indicated that the Park system dictates the nature of extension activities, which is in contrast to the suggestion of Armah (2000) that the process of community extension must be participatory and community oriented. In contrast, extension activities at Hluhluwe-Umfolozi Park are directed towards meeting the needs of the residents as majority (87.5%) of the respondents indicated that the residents decide extension activities.

Respondents' perceived benefits from community extension activities

Table 4 clearly shows that majority of the respondents from Hluhluwe-Umfolozi Park perceived that the extension activities have led to increased income (81.3%) and improved economic status (71.9%). This result is also further supported with the analysis of variance in Table 5 which shows that there were significant differences between the two parks in terms of respondents' market opportunity ($F = 69.328$; $p < 0.05$), income ($F = 80.850$; $p < 0.05$) and economic status ($F = 30.468$; $p < 0.05$).

Respondents from this Park also indicated that extension benefits are through improvement of arts and crafts (46.8%) and provision of marketing opportunities for arts and crafts (25.0%). However, only a small proportion of the respondents at Yankari National Park indicated increased income (41.4%) and improved economic status (30.0%). This is in line with the result from Table 3, which revealed that some of the respondents at Yankari National Park were not aware of the extension activities.

Existence of conflicts over natural resource use in Yankari National Park and Hluhluwe-Umfolozi Park

Result in Table 6 reveals that while a large proportion of respondents (70.0%) at Yankari National Park indicated the presence of conflict among the residents and the park system over wildlife use, only a few of the respondents (6.3%) at Hluhluwe-Umfolozi Park indicated the existence of conflict among residents and the Park system over the use of wildlife and land. The conflict in Yankari Park might however not be unconnected with the fact that majority of the residents are hunters and cattle farmers.

Conclusion and recommendations

Based on the findings of the study the following the following considerations are made. There are differences in the extension activities and benefits to residents of Yankari National Park and Hluhluwe-Umfolozi Park. The study has also shown that participation of communities in decision-making of extension activities is more beneficial to the communities than their non-involvement as reflected at Hluhluwe-Umfolozi Park, and Community extension programmes focussed on developing the traditional skills and talents of residents result more into economic empowerment than those focussed on community development.

Based on these conclusions, it is recommended that:

- In community extension planning, full involvement of the community is required at every stage of planning and management whereby their concerns are incorporated into the decision–making process taking into consideration the local community's attitudes and feelings.
- Community extension planning in Yankari National Park should be focussed more on development of traditional skills and talent rather than community development.
- Adult education programme should be organized for residents around the park to improve their literacy level so as to assist residents in improving their information needs and thereby improve their economic status.

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Table 1: Distribution of Respondents according to socio-economic characteristics

Variables		YNP (N=80) Freq.	%	HUP (N=32) Freq.	%
Age:	25-35 years	27	33.8	11	34.4
	35 years and above	53	66.2	21	65.6
Sex:	Male	51	63.7	17	53.2
	Female	29	36.3	15	46.8
Marital Status:	Married	61	76.2	14	43.7
	Single	19	23.8	18	56.3
Educational Qualification:					
	No Formal Education	9	11.2	-	-
	Primary Education	26	32.5	6	18.7
	Secondary Education	39	48.8	18	56.3
	Diploma and above	6	7.5	8	25.0
Occupation:	Hunting	19	23.8	5	15.6
	Cattle Rearing	15	18.7	2	6.3
	Farming	14	17.5	9	28.1
	Trading/Marketing	10	12.5	15	46.9
	Civil Service	4	5.0	1	3.1
	Unemployed	18	22.5	-	-

Source: Field Survey (2003)

Table 2: Distribution of respondents according to income per annum

Yankari Park N = 80			Hluhluwe- Umfolozi Park N = 32		
Income	Freq.	%	Income	Freq.	%
N10,000 – 49,000	23	28.7	R1,000 – 4,900	1	3.1
N50,000 – 99,000	16	20.0	R,5,000 – 9,900	3	9.4
N100,000 – 149,000	20	25.0	R,10,000 – 14,900	4	12.7
N150,000–199,000	16	20.0	R15,000 – 19,900	5	15.6
N200,000 and above	5	6.3	R20,000 and above	19	59.2

R1. 0 = N20. 00, R= South African Rands, N= Nigerian Naira.
Source: Field Survey (2003)

Table 3: Distribution of respondent according to extension activities and methods of contact

	YNP (N= 80)		HUP (N = 32)	
Extension activities	Freq	%	Freq	%
Conservation education in schools and community	29	36.3	4	12.5
Improvement of roads	11	13.7	-	-
Provision of drugs	2	2.5	-	-
Building of schools	4	5.0	-	-
Construction of wells and boreholes	7	8.8	-	-
Provision of agro-processing equipment	8	10.0	-	-
Improvement of arts and craft making	-	-	8	25.0
Provision of marketing opportunities	-	-	20	62.5
None of the above	19	23.7	-	-
Method of contact				
Radio and television	4	5.0	2	6.3
Newspaper	-	-	1	3.1
Campaigns	24	30.1	8	25.0
Personal contact	52	65.0	21	65.6
Frequency of contact				
Weekly	1	1.3	2	6.3
Monthly	54	67.5	20	62.4
Quarterly	6	7.5	2	62.3
Bi-monthly	14	17.5	8	25.0
Not at all	5	6.2	-	-
Who decides extension activities				
Park system	59	73.7	4	12.5
Residents	21	26.3	28	87.5

Source: *Field Survey (2003)*

Table 4: Distribution of respondents according to perceived benefits from community extension

	YNP (N = 80)		HUP (N = 32)	
Benefits	Freq	%	Freq	%
Improved poultry management	4	5.0	-	-
Improved farming method	2	10.0	-	-
Enhanced trading/marketing	5	6.3	3	9.4
Employment	22	27.5	6	18.8
Improvement of arts and crafts	-	-	15	46.8
Provision of marketing opportunities	-	-	8	25.0
Increased income	33	41.4	23	71.9
Improved economic status	24	30	26	81.3

N is greater than 80 in YNP and 32 in HUP due to multiple responses
Source: Field Survey (2003)

Table 5: Analysis of Variance showing differences between perceived benefits in Yankari and Hluhluwe-Umfolozi Park (ANOVA)

		Sum of Squares	Degree of freedom	Mean square	F-Value	Significance level
Market opportunity	Between groups	5.022	1	5.022	69.328*	0.000
	Within groups	9.969	110	0.072		
	Total	12.991	111			
Income	Between groups	107.508	1	107.508	80.850*	0.000
	Within groups	146.269	110	1.330		
	Total	253.777	111			
Economic Status	Between groups	6.004	1	6.004	30.468*	0.000
	Within groups	21.675	110	0.197		
	Total	27.679	111			

**Significant at P < 0.05*
Source: Data Analysis (2004)

Table 6: Distribution of respondents on existence of conflicts over natural resource use in Yankari National Park (YNP) and Hluhluwe-Umfolozi Park (HUP)

	YNP		HUP	
	Freq.	%	Freq.	%
Existence of conflict of wildlife use	56	70.0	2	6.3
Existence of conflict over land use	24	30.0	2	6.3

Source: Field Survey (2003)