Ecotourism for Sustainable Development: A Case Study about Ecotourism Management in Bwiam Village – The Gambia

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Abstract: In many underdeveloped countries, sustainable development offers a different path from conventional economic growth to achieve a better quality of life. Such an alternative approach is the pursuit of ecotourism instead of conventional tourism. Ecotourism focuses on preserving nature and culture and on economic and cultural benefits accruing to the local communities. Thus, this study investigated how to manage a successful ecotourism project in Bwiam, The Gambia. Descriptive research was carried out by developing questionnaires and distributing them online on different social media platforms. The collected data were coded and analyzed using IBM SPSS v26. The findings show that a large portion of the respondents attended elementary school with the age range from 21 to 30. The estimation of Cronbach alpha is 0.652 for eight things which is far above 0.6 in Table 3. The regression model in Table 5 shows that the F value is substantial at 12.914 with significance of P = 0.000.

Key words - Ecotourism, community participation, sustainable development, communities, strategy

I. INTRODUCTION

Ecotourism provides an alternative path for development, emphasizing local economies and ecosystems, conservation of resources, and avoidance of waste production. It is perceived as an excellent tool for promoting sustainable development in developing countries (Singh, 2014). In its best implementation, it can alleviate economic inequalities, diversify the local economy, improve education and health of the local population, enhance community cohesion and pride in their cultural and natural heritage, and decrease the overall environmental footprint of tourism (Singh, 2014). Ever since the United Nations declared 2002 to be the International Year of Ecotourism and held the World Ecotourism Summit in Québec in the same year, Ecotourism has become a prominent global sustainable development (Walter, 2010). Ecotourism is one of the fastest developing sectors of tourism, and much research is going on in this domain of tourism and sustainable development.

Many natural resources in developing countries are under significant threat partly because of the needs of growing human populations and economies and partly because of the lack of proper regulation and management (McNeely, 1988). As a result, human health and well-being suffer because environmental conditions are directly and indirectly related to human beings’ health and well-being (Chivan and Bernstein, 2010).

The implementation of this growing realization into the international agenda began with United Nations Conference on the Human Environment (UNCHE) held in 1972 (also called the Stockholm Conference). The resulting Stockholm Declaration stated people’s fundamental right to live “in an environment of a quality that permits a life of dignity and well-being,” which is thus the first international recognition of the health dimension of environmental issues. Since then, the necessity of an integrated approach to development compatible with the need to protect the environment for the benefit of human health has been repeatedly reaffirmed (Lajaunie, Morand and Binot, 2015).
Sustainable development is then a process for meeting human development goals while sustaining natural systems’ ability to continue to provide the natural resources and ecosystem services upon which the economy and society depend (Wikipedia, 2016).

This concept of “sustainable development” was first introduced by the International Union for Conservation of Nature and Natural Resources (IUCN) in 1980, and the resulting rules of “Environmentally Sound and Sustainable Development” became more recognized principles during the 1980s. In 1987, the Brundtland Commission defined sustainable development as “a development that meets the present’s needs without compromising future generations’ ability to meet their own needs” (Grober, 2007).

The concept of sustainable development entered the global stage during the United Nations Conference on Environment and Development (UNCED) (also called the Earth Summit) held in 1992 in Rio de Janeiro (Grober, 2007). The United Nations presented sustainable development as their strategic concept for shaping – and indeed saving – the planet’s inhabitants’ future. It thus promised to become the key-word for describing a new balance between the use and the preservation of nature’s potentials and resources (Kang and Kim, 2000).

The Gambia is a small West African country with about 2,347,706 million people in 2019 (World Bank, 2019), with 11,285 sq. km, bounded by Senegal, with a narrow Atlantic coastline. It has diverse ecosystems around the central Gambia River and abundant wildlife in its Kiang West National Park and Bao Bolong Wetland Reserve, including monkeys, hippos, and rare bird species (The Commonwealth, 2018).

West Africa is among the most linguistically diverse areas on earth, primarily due to peoples’ movements over the centuries. The current population in the Gambia is estimated to be 2.348 million in 2019. Gambia’s official language and is spoken in schools and public offices. The Department of Parks and Wildlife Management (DPWM) is responsible for the conservation, management, and sustainable use of the Gambia’s wildlife resources and the protected area system and other wilderness areas, which form essential habitat for wildlife and a source of livelihood for adjacent local communities (Environment Climate Change & Wildlife, 2014).

A review of economic and environmental problems was conducted and its socio-economic development. One of the most rapid environmental changes in sub-Saharan Africa is the economic development changes in land use from one form to another (Brink and Eva, 2009).

The Gambia environmental concerns include deforestation, desertification, and water pollution. Deforestation is the most severe problem, with slash-and-burn agriculture the principal cause (Encyclopedia, 2018). In the 1950s, 34,000 hectares were set aside as forest reserves, but by 1972, 11% of these reserves had been cleared. During 1981-1985, deforestation averaged 2,000 hectares (5,000 acres) per year and only 9% of Gambia’s forests have survived the expansion of agricultural land and the use of trees for fuel. In 2001, only 2% of The Gambia’s total land area was formally protected (Encyclopedia, 2018). Desertification of agricultural lands has also affected large parts of the country due to overuse and overgrazing and a 30% decrease in rainfall over the past 30 years (Encyclopedia, 2018).

The protection of aquatic habitats, such as rivers and wetlands, and the related problem of access to clean and safe drinking water is another major problem in many developing countries. Water pollution is often of particular concern in coastal zones. Common types of pollution and environmental destruction in coastal zones include industrial waste; urban waste, land construction, dam development, mangrove conversion, coral mining, and canalization within wetlands (Palaniappan et al., 2010).

In the Gambia, water pollution is a severe environmental problem that affects aquatic ecosystems and agriculture, and people dependent on this water for irrigation and drinking. The Gambia has about three cubic kilometers of renewable water resources, of which 91% are already used for farming (Ndye-Isatou, 1998). One reason for water pollution is the lack of adequate sanitation facilities; e.g., only 53% of the people in the rural areas have clean drinking water and polluted water is responsible for life-threatening diseases that contribute to high infant mortality rates (Gibson, 2017).

Another serious problem facing many West African countries is the water supply for tourism resorts, which consume vast amounts of water because they are not well monitored or managed. Therefore, the unequal use of freshwater by conventional tourists in The Gambia causes local conflicts, exacerbates poverty, and increases diseases (Shryock, 2012). The unregulated water consumption at Gambia’s tourist resorts threatens its residents’ water access and livelihoods. The main problem is that this water is considered free at most times and even considered unlimited, which means that tourists are not paying for what they consume because “a vast majority of the water meters on the hotels are found not to be working” (Shryock, 2012).

Due to habitat changes and poaching, The Gambia’s wildlife is also threatened. In 2001, four of the country’s 117 mammal species and 280 bird species were threatened (Shryock, 2012). In this research objective, an apprehensive and best management approach will be studied on the ecotourism project in Bwiam, The Gambia, and how it can best benefit the local human
community. The challenges and opportunities will be evaluated on the sustainable development, with awareness level and readiness of Bwiam village residents to initiate and sustain Ecotourism.

II. LITERATURE REVIEW

Ecotourism is an essential part of sustainable development because traditional tourism is unsustainable. Unless we achieve sustainability, other efforts to achieve the MDGs and the new SDGs will falter because public health will always suffer from environmental destruction and pollution. Local ecotourism projects can improve local economic activity and community cohesion at a smaller scale, enabling communities to better afford and maintain medical and public health facilities and personnel for the longer-term future. Ecotourism, a new concept but broadly hailed tourism alternative (Eshetu, 2014), has a high potential to be an instrument for rural economic development and resource conservation.

Despite bringing much-needed increases in revenue and development, the worldwide growing tourist industry is also responsible for the overuse of natural resources (e.g., habitat destruction, water exploitation) and waste production (e.g., water pollution, air pollution, household waste disposal). Moreover, big operators often own traditional tourism, with many profits not staying within the local communities or developing countries, but instead benefiting investors outside the developing countries, contributing to economic inequality between countries.

While Ecotourism is interrelated with the overall growth of tourism, it is also a strategy that attempts to guarantee the sustainability of tourism and is thus facilitating the growth of sustainable tourism all over the world. For example, by broadly designating virgin rain forests as protected areas, Ecotourism played a role to settle disputes between managers in charge of conserving rain forests on the one side and native people who had no other options than to use the rain forests and to consume wildlife on the other side (Kang and Kim, 2000).

Ever since the United Nations declared 2002 to be the International Year of Ecotourism and held the World Ecotourism Summit in Québec in the same year, Ecotourism has become a prominent global sustainable development (Walter, 2010).

Ecotourism is often perceived as an excellent tool for promoting sustainable development in developing countries. Many experts view Ecotourism as a viable way to protect the natural environment and create social and economic benefits for local communities (Singh, 2014) (. Buchsbaum, 2004).

Ecotourism also realizes that the continued maintenance of healthy, functional ecosystems with high biodiversity is an essential part of protecting a country’s environment and well-being. However, traditional economic growth, which ordinary tourism is part of, generally harms or destroys natural ecosystems. The ecosystems become not just a source of providing natural resources (e.g., food, fibers, medicines) to local communities, but also provide so-called cultural ecosystem services, such as the enjoyment people get from seeing wild plants and animals, the relaxation and well-being derived from being in nature, and the educational, recreational, spiritual, and even religious benefits from interacting with ecosystems (Wolf and Robbins, 2015).

Ecotourism can contribute to the economic development and the conservation of protected areas by generating revenues that can be sustainably used to manage protected areas and provide local employment and a sense of community ownership. Ecotourism should promote natural resources conservation and provide financial gains for the host country and the local people to be successful.

III. RESEARCH METHODOLOGY

3.1 Population and Sample
This research paper presents a descriptive analysis based on the nature of the described research phenomena, such as the communities, individuals. A short research questionnaire was designed based on the respondent’s socio-demographic – gender, age, education, occupation, and general information on the ecotourism project in Bwiam village. The total number of respondents in this study is 148.

3.2 Data collection
This was a short one to four weeks study and to achieve the objectives, this study used questionnaires with 9 questions which were distributed online on different social media platforms. The collected data were coded and analyzed using IBM SPSS v26.

3.3 Conceptual Framework
The conceptual model below shows the relationship of essential variables selected for this research. The dependent variable is Sustainable Development (SD), and the independent variables are Eco-Tourism Initiatives (ETI) and Awareness and Readiness (AR) as shown in Figure 1.
Fig. 1. Hypotheses derived from the research question is as follows:

H1: Ecotourism initiatives to play a significant and positive role in the enhancement of sustainable development.

H2: Ecotourism opportunities as a significant tool in the perceptions of the residents.

IV. RESEARCH FINDINGS

4.1 Respondents profile

The extent of female respondents was 44% compared to the portrayal of men at 56% (Fig. 2). The all-out 148 respondents have a higher portion of males in the town Bwiam since females were less planned to inquire.

4.2 Age Profile

The example involved generally in the youthful and middle age gatherings of respondents since the overwhelming age gathering was 31 to 40 year at 41 (26.4%) of respondents within this age gathering. Also, the other prevailing age gathering was 21-30 years of age. In this manner, the bunch contributes about 26.4% of the example with 44 members.

Table 1. Gender age group

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 20 years</td>
<td>14</td>
<td>9.5</td>
</tr>
<tr>
<td>21-30 years</td>
<td>39</td>
<td>26.4</td>
</tr>
<tr>
<td>31-40 years</td>
<td>41</td>
<td>27.7</td>
</tr>
<tr>
<td>41-50 years</td>
<td>32</td>
<td>21.6</td>
</tr>
<tr>
<td>51-60 years</td>
<td>13</td>
<td>8.8</td>
</tr>
<tr>
<td>Above 60 years</td>
<td>9</td>
<td>6</td>
</tr>
</tbody>
</table>

4.3 Education

The example involved, for the most part, graduate respondents since the overwhelming capability was essential at 30% of respondents lie in this education run. The other prevailing education class was secondary school as gathering contributes about 25% of the example with 37 members as shown in Fig. 3.
Fig. 3. Respondents level of education

Fig. 4 show the occupation of respondent sample comprised mostly employed respondents since the dominant qualification was elementary of 30% of respondents lie in this occupation range. Moreover, the other dominant occupation category was business as a group, contribute about 30% of the sample with 44 participants.

Fig. 4. Occupation distribution

4.5 Descriptive Analysis

The mean score of a 5-point Likert scale is 2.5; therefore, the scale means is taken as 2.5 for this research. The values of means for dependent variables are as Ecotourism creates growth (ECG) is 3.39, for Local community development (LCD) is 2.80, for supportive of the ecotourism project (SEP) is 4.00, and for creating employment opportunities (CEO) is 2.98. All these values are above 2.5 as shown in Table 2. Therefore, the respondents agreed with the facts discussed in the items of these variables. On the other hand, the independent variables poverty reduction (PR) mean is 2.1, MLP is 3.35, foreign reserves growth (FRG) is 3.12, and EPN is 3.11. All these values except PR are above the scale mean of 2.5. Similarly, the data’s central tendency as high as the standard deviation was below 1 for half of the variables.

Table 2. Descriptive analysis on the measures

<table>
<thead>
<tr>
<th>N</th>
<th>Statistic</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCD</td>
<td>148</td>
<td>1</td>
<td>5</td>
<td>2.80</td>
<td>.114</td>
<td>1.388</td>
<td>.605</td>
</tr>
<tr>
<td>SEP</td>
<td>148</td>
<td>1</td>
<td>5</td>
<td>4.00</td>
<td>.088</td>
<td>1.075</td>
<td>-1.364</td>
</tr>
<tr>
<td>CEO</td>
<td>148</td>
<td>1</td>
<td>4</td>
<td>2.98</td>
<td>.072</td>
<td>.877</td>
<td>-.329</td>
</tr>
<tr>
<td>PR</td>
<td>148</td>
<td>1</td>
<td>4</td>
<td>2.13</td>
<td>.056</td>
<td>.683</td>
<td>.612</td>
</tr>
<tr>
<td>MLP</td>
<td>148</td>
<td>1</td>
<td>6</td>
<td>3.35</td>
<td>.132</td>
<td>1.611</td>
<td>.203</td>
</tr>
<tr>
<td>FRG</td>
<td>148</td>
<td>2</td>
<td>4</td>
<td>3.12</td>
<td>.053</td>
<td>.644</td>
<td>-.338</td>
</tr>
<tr>
<td>EPN</td>
<td>148</td>
<td>2</td>
<td>4</td>
<td>3.11</td>
<td>.043</td>
<td>.519</td>
<td>-.297</td>
</tr>
<tr>
<td>ECG</td>
<td>148</td>
<td>1</td>
<td>5</td>
<td>3.39</td>
<td>.110</td>
<td>1.333</td>
<td>-.335</td>
</tr>
</tbody>
</table>
The skewness is minimum for SEP at -1.364 at .082 and maximum for PR at .612. The scenes of other variables FRG, EPN, and ECG are also negative but stays positive for the rest of the constructs. The kurtosis is negative for all variables except for PR, which is .901. The maximum kurtosis is found for MLP at -1.403, and the minimum is found for PR, which is .901.

5.6 Reliability Analysis

The reliability measurements show a Cronbach alpha’s estimation of above .652 for 8 items (Table 3). The instruments are exceptionally dependable and contain inner consistency. The high estimation of Cronbach alpha shows that the exploration instrument can be utilized in the examination rehashed with an alternate example.

Table 3. Reliable analysis on the relevant measures

<table>
<thead>
<tr>
<th>Case Processing Summary</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valid</td>
<td>138</td>
<td>99.3</td>
</tr>
<tr>
<td>Excluded</td>
<td>1</td>
<td>.7</td>
</tr>
<tr>
<td>Total</td>
<td>139</td>
<td>100.0</td>
</tr>
</tbody>
</table>

a. List wise deletion based on all variables in the procedure.

Table 4 shows the combined R of the model with a .596, or ECG dependency on independent variables is 59.6%. The adjusted R square is .355 or 35.5%, which is more reliable in multiple regression models.

Table 4. Adjusted R. model test

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.596a</td>
<td>.355</td>
<td>.327</td>
<td>1.093</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), EPN, CEO, MLP, PR, SEP, LCD
b. Dependent Variable: ECG

The ANOVA table shows (Table 5) the best fit of the regression model in the present research such that the F value is substantial at 12.914 with significance of .000. Hence, the threshold level of significance is met with a high Fisher index.

Table 5. Anova analysis of variances

<table>
<thead>
<tr>
<th>Anova</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Regression</td>
<td>92.580</td>
<td>6</td>
<td>15.430</td>
<td>12.914</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>168.467</td>
<td>141</td>
<td>1.195</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>261.047</td>
<td>147</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: ECG
b. Predictors: (Constant), EPN, CEO, MLP, PR, SEP, LCD

V. RECOMMENDATIONS

Even though the Bwiam ecotourism project has numerous positive effects and has made an endeavor that shows a specific level of self-manageability, some activities can improve the project. Recommended measures that would upgrade the productivity, beneficial effects, and manageability of the Bwiam Ecotourism project are:

Thus, creating a well-characterized inward administration structure builds up a framework for the project partners and members.

This will enable linkages to be framed between various levels and geographic regions of the project. What are more, tasks and critical thinking will run more efficiently with a set structure and characterized hierarchy of leadership. Every individual straightforwardly engaged with the project ought to be considered responsible for their obligations and obligations inside
the project. Increasing and empowering learning sharing all through the community and with guests. Continual checking and assessment of the project.

Mindfulness and comprehension of the Bwiam ecotourism project are fundamental to the nearby networks’ venture and support, representing the deciding moment for this nature’s project. Besides, training for nearby networks on all parts of the ecotourism project, including the executive’s procedures, planning, and promoting, would be valuable in streamlining the members’ limit. The project’s inner structure ought to be outstanding and unmistakably characterized for every one of the partners.

Kept observing and assessment of the project will be fundamental to keep up the suitable conveying limit. Distinguishing proof of guest conveying limits has been done at various ecotourism goals with a standard evaluation of the project’s advantages, expenses, and manageability level. Changes per approach and behaviors could be refreshed, and the productivity and accomplishment of the project be improved and kept up. The Bwiam ecotourism project can keep on being a fruitful undertaking when overseen in a soul of investment and participation.

Natural Environment Safety - The severe issue in Bwiam is the irregularity of the project with the region’s surface. In this manner, it is recommended that the district, just as other related associations, not give development licenses without getting an organized exhort from the arranging and condition specialists. The examination indicated that many trees in the Bwiam area had been cut with no legitimate consent. The creator of this examination proposes the association of characteristic safeguarding to prepare the neighborhood indigenous to be in contact with that association and advise them about such episodes. They can utilize a portion of the intrigued local people like a nature monitor at the next level. Finally, they can label ID numbers on the district’s old trees to have a precise insight about them and set up surveillance cameras at explicit focuses within 24-hourly access to the entire zone.

VI CONCLUSIONS

Ecotourism keeps up an uncommon job in creating countries since it builds up the very things misused by different types of tourism. It offers potential strategies for lightening various issues, from contamination to needliness. This is because the very heart of Ecotourism is affectability and certified enthusiasm for social and environmental circumstances. Regardless of the numerous issues with tourism, there is bounty to be increased through capable practices. The researcher has discovered an entirely honorable exertion to set up a reliable ecotourism program all through The Gambia. Be that as it may, Ecotourism’s accomplishment requires backing and help at numerous levels, changing from global to the neighborhood. Few Gambians had the option to characterize Ecotourism, comprehend in the tourism business’s strength and significance of social and ecological mindfulness.

Considering everything, Sustainable Ecotourism can give an option economic establishment, yet it does not happen naturally or without social and ecological effects. On the off chance that it is to be sustainable, neighborhood occupants must be permitted to catch, pretty much, a lot of the economic multipliers created by tourism. Effective, sustainable Ecotourism requires nearby cooperation being developed, arranging, and outside help with an essential framework, preparing, and capacity. The community association is likewise fundamental for looking at unfriendly effects on neighborhood inhabitants who live in zones experiencing sustainable ecotourism advancement.

REFERENCES