

TOURISM CLUSTERS IN SOUTH-SOUTH NIGERIA

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ABSTRACT

This study seeks to evolve a hierarchical grouping of tourism points in the South-South geopolitical zone in Nigeria in order to provide a workable framework for tourism planning and management in the region. Data were collected on the functional attributes of thirty existing tourism points using a checklist containing twenty tourism structures. Factor Analysis was applied to investigate the functional similarity of the tourism points and to generate tourism clusters based on these similarities as captured in the factor scores. Results showed a four-level hierarchical ordering of tourism points. They include the first – order tourism cluster with very high functional attributes; second-order tourism cluster with the high level of functionality; third-order tourism cluster with low functional status and the fourth-order tourism cluster with a very low level of functionality. In the light of these findings, tourism planners and managers in Nigeria and indeed globally can strategically adopt the “tourism cluster” arrangement as an instrument for planning and developing regional tourism structures in the country.

Keywords: Tourism Structures; Tourism; Tourism Cluster; Tourism Planning; South-South Nigeria

INTRODUCTION

Tourism cluster refers to the agglomeration of tourism points based on a predetermined factor(s) for the purpose of planning and managing regional tourism (Wang, Zhang & Wu, 2014). In most part of the world, the tourism cluster has been utilised as a veritable tool for effective organisation and managing of tourism (Wang, Zhang & Wu, 2014). However, the framework applied in the designation of tourism cluster differs across geographical space and among researchers. Specifically, some researchers have applied the principle of “Natural region” to designate the tourism cluster using geographical proximity of tourism point within a given region. For instance, Wang, Zhang & Wu, (2014) developed two-level tourism for Naniing region in China using the Euclidean distance between three hundred and seventeen tourism points. In a similar work, Jinghu, Jungeng and Yibo (2015) developed a three-level tourism cluster for “grade A” tourism points in China. They employed the Nearest Neighbour Analysis (NNA) to create four tourism clusters in the area.

Wu (2011) analysed the spatial structure of five hundred and nine resources-based attractions in eight geographical regions and thirty-one provinces in China. The study employed the Nearest Neighbour Index (NNI), Geographic Concentration Index, Gini co-efficient and Lorenze Curve. Findings revealed a low Nearest Neighbour Index (NNI) value of 0.57 representing an agglomeration pattern of distribution for the eight geographical regions and asymmetric distribution for the thirty-one provinces. The Lorenz Curve showed that more than half of the five hundred and nine tourist's attractions concentrated in nine provinces.

However, most of the China-based studies have been criticized for over-relying on single summary indices such as the Nearest Neighbour Index, the Geographic Concentration Index and the Gini coefficient. Deller Tsai, Marcouiller and English (2001) believed that the Nearest Neighbour Index is more suitable for analyzing the structure of phenomenon spread over the homogenous zone and that the Principal Component or Factor Analysis is a preferred approach for assessing the spatial structure of tourism elements. Furthermore, the use of a single element of tourism-namely tourist attraction for the analysis limits the chances of gaining insight into the total tourism products of the regions (Kim Marcouiller and Deller, 2005). Vasiliadis and Kobotis (2005) argued that the Nearest Neighbor Analysis can serve as a tool for understanding the nature of tourist zones and subsequently aid in planning better utilization of those zones. The authors applied the Nearest Neighbour Analysis to assess the distributional pattern of tourist attraction in Macedonia. The essence was to discern and develop tourism clusters of varying possibilities for development. Findings indicated a significant "gathering" of tourist attraction in the lake area of Prespes as well as others in West Macedonia. Each of the tourism points (attraction) were further assessed in terms of their tourism attributes and visitor preferences. Deng and Dyre (2014) believed Vasiliadis and Kobotis (2005) offered some illumination into the structure of such tourism in that it allows for mixing of tourism attraction and other attributes of the points with the characteristics of the visitor's attitude/preferences. Moreover, the approach can assist in the planning procedure and the development of tourism activities in geographical regions.

Outside China, studies on tourism structure are largely based on the use of Geographic Information Systems (GIS), the Analytic Hierarchy Process (AHP), Standard deviation and the Principal/Factor analysis. For instance, Deng and Dyre (2014) examined how tourism resources are spatially distributed across fifty-five counties in West Virginia, United States. The study was designed to create a tourism resource inventory database at the county level, and to spatially examine tourism resource distribution patterns across all counties, based on the tourism resource quantity as well as on the quality. Based on the data collected for that study, a four-level distribution pattern (that is, level 1 – very high, level 2 - high, level 3 – low, level 4 – very low) was created for two groups of tourism resources (natural and cultural) in the United States. The methodology for generating the pattern was based on the standard deviation of the distribution and mapped using geographic information systems. Findings showed that nature-based tourism resources were largely concentrated in the eastern and central part of West Virginia while cultural resources failed to exhibit a distinct clustering pattern. As Spotts (2015) observed, the study succeeded where others failed to objectively classify tourism resources. However, the number of tourism resources included in the analysis was grossly limited and thereby short-circuited the chances of an elaborate tourism planning in the region.

For this reason, Kim, Marcouiller and Deller (2005) argued that the principal/factor analysis provides the most analytical framework for creating an in-depth regional tourism pattern since it allows for the inclusion of an unlimited number of tourism resources in the analysis. For example, Spotts (2007) classified Michigan's tourism resources into five groups using factor analysis: urban tourism resources, general wildland tourism resources, general coastal tourism resources, parkland tourism resources, Lake Michigan coastal tourism resources, and canoeing/riding tourism resources. Kim, Marcouiller and Deller (2005) also employed the principal components analysis to group tourist attraction as land-based, river-based, lake-based, warm-weather-based and cold-weather-based. In another study in Mexico, Valdez, Cruz and Velasco (2009) applied the factor analysis to identify the factors that govern the pattern of tourism among forty-two selected tourism destinations spread across ten tourism regions. The study used an initial two hundred selected attributes of the sampled destination to generate five groups of destination attributes namely: tourists attraction, quality of service provided, accessibility, tourists accommodation offer and size of the economy. Furthermore, a composite index of tourism competitiveness was evolved based on the aggregated factor scores for each destination. In this way, the relative performance of each destination was ascertained.

In Nigeria, and the South-South region in particular, the need to develop a workable framework for planning and organising tourism in the region has been overwhelming. This is anchored on the renewed government effort at harnessing the tourism structures of the region for rural development. This study, therefore, seeks to develop a workable framework and a road map for tourism development using tourism cluster.

STUDY AREA

The study area is the South-South Geopolitical Zone of Nigeria. It comprises three coastal States: Akwa Ibom, Cross River and Rivers State. The three States were chosen for the study based on consideration of contiguity, the relative concentration of major tourism activities in the region and the evidence of robust tourism drive by the various State governments. The study area is located between latitudes 40201 and 70 North and Longitudes 60201 and 80301 East (Fig. 1).



Figure 2: Tourism Points in the Study Area

RESULTS AND DISCUSSION

Functional Attributes of Tourism Points in the Study Area

Factor Analysis was used to reduce the twenty initial structures of tourism into six main structures in order to dissolve the problem of multi-co-linearity as well as enhancing the data interpretation. The factor scores on the six emergent structures were used to assess the performance or functionality of tourism points. Finally, the aggregated factor scores were used to derive a four-level hierarchical cluster of tourism points for the study area. Table 1 displays the factor scores of tourism points on the six main structures of tourism. They include tourism attraction, transport and general infrastructure, tourism marketing, tourism service, tourists accommodation and security. In this case, the factor scores represent quantitatively the functional level of tourism points on each structure.

Table 1: Distribution of Factor Scores of the main Tourism structures

S/ N	Tourism Point	Factors (Main Structures)						Aggre gate score
		1 Touris m Attrac tion	2 Trans port and Gen. Infra.	3 touris m Marke ting	4 Tour ism Servi ce	5 Tourists Accommo dation	6 Security and Communi cation	
1	Inua Eyet Ikot(AKS)	-0.47	2.38	-1.29	-0.27	0.63	0.36	0.66
2	Nwaniba	-0.20	1.25	0.85	0.76	0.49	0.39	3.49
3	Oban	-0.25	1.63	0.59	0.42	0.15	0.42	3.02
4	Use Ikot Oku	-0.78	-0.72	-0.63	0.50	-1.29	-0.57	-3.49
5	Atabong	0.02	1.36	-1.23	-1.92	-0.73	-0.36	-3.86
6	Ishiet	-0.10	-0.72	-1.34	-0.35	-2.24	-0.18	-3.07
7	Adiabo(CRS)	3.02	1.36	1.04	1.02	1.95	0.76	9.15
8	Agbokim	-0.58	1.34	1.17	-0.34	-1.43	0.65	-1.11
9	Alok	-0.63	1.28	0.89	-1.47	0.44	-0.44	-1.57
10	Baunchor	-0.12	-0.58	1.76	-0.29	0.64	-0.63	1.23
11	Becheve	1.89	0.74	1.16	2.02	1.74	0.53	8.08
12	Ebom	-0.54	-0.82	0.96	-0.47	-1.30	0.03	-2.14
13	Iko Esai	-0.46	1.23	1.52	0.23	0.18	0.21	1.49
14	Akpap Okoyong	-0.94	-1.26	0.64	0.51	0.53	0.46	-0.06
15	Okpoma	-1.29	0.20	0.67	-0.55	-2.28	0.20	-1.10

16	Susanfang	-0.78	0.08	0.95	-1.07	-0.24	0.40	-0.66
17	Aningeji	-0.04	-1.43	1.38	-0.77	-0.22	0.25	-0.83
18	Abonema(Rivers)	0.62	-1.11	-0.46	0.68	0.38	0.27	0.38
19	Andoni	-0.19	-0.13	-1.18	0.10	1.04	0.68	0.32
20	Bonny	1.76	-1.10	-0.57	0.91	-0.71	0.24	0.53
21	Finima	-0.43	-0.48	-0.36	1.62	0.78	0.33	1.46
22	Opobo	-0.93	0.26	-1.14	0.74	0.54	0.62	0.09
23	Tai	-0.83	0.67	-0.12	1.59	1.10	0.13	2.54
24	Ikuru	1.57	-0.61	-0.28	-1.41	0.31	0.28	-0.21
25	Degema	0.67	-0.78	-1.00	-0.32	0.88	0.27	-0.28
26	Orashi	0.14	-0.65	-0.76	0.53	0.46	-0.71	-4.99
27	Buguma	-0.61	-0.70	-0.91	0.70	0.83	0.52	-0.17
28	Ifoko	-0.80	-0.19	-0.63	-1.04	1.71	0.55	-0.40
29	Isaka	1.23	-0.78	-1.01	-1.48	0.26	0.60	-0.71
30	Biseni	0.11	-0.62	-0.66	0.82	-2.54	0.36	-2.53

Source: Data Analysis by Authors, 2019

Based on Table 1, the functional attributes of the thirty tourism points can be examined. In the next paragraph, an attempt has been made to present and examine the performance of tourism points on the six factors (tourism structures) using the factor scores.

Functional Attributes of Tourism Points on Tourism Attraction/Equipment

(i) Tourism attraction/ Equipment

As data in Table 1 indicated, the factor scores on factor 1 (tourism attraction) ranged between -1.29 to 3.02. However, only 10 tourism points representing 33.3% had positive scores on this factor. These included (in descending order): Adiabo in Cross River (3.02), Becheve in Cross River (1.89), Bonny in Rivers (1.76), Ikuru in Rivers (1.57), Isaka in Rivers (1.23), Degema in Rivers (0.67), Abonema in Rivers (0.62), Orashi in Rivers (0.14), Biseni in Rivers (0.11), and Atabong in Akwa Ibom (0.02). Using a cut-off mark of 1.00 to assess the performance of tourism points would mean that only four tourism points have performed well on this factor. The implication of this result is that tourism planners and other stakeholders need to invest in creating diversities of attraction in these tourism points. Because tourist attractions are the main object that draws tourists to a given locality and therefore deserves priority attention in the study area.

i. Transport and General Infrastructure

The factor scores on factor 2 (transport and general infrastructure) ranged between -1.43 to 2.38. Though 13 tourism points representing 43.3% of the total had positive scores on this factor, only 7 had the pass mark of 1.00 and above. Those with positive scores included: Inua Eyan Ikot in Akwa Ibom (2.38), Nwaniba in Akwa Ibom (1.25), Oban in Cross River (1.63), Ishiet in Akwa Ibom (1.34), Adiabo in Cross River (1.28), Atabong in Akwa Ibom (1.36) Iko

Esai in Cross River (1.23), Becheve in Cross River (0.74), Tai in Rivers (0.67), Alok in Cross River (0.36), Okpoma in Cross River (0.2), Susan-fang in Cross River (0.08) and Opobo in

Rivers (0.26). The abysmally poor performance on this factor can be linked to the low level of infrastructure provision in South-South Nigeria. Most rural locations exist in the study area without basic amenities such as road, water and waste facility.

ii. Tourism Marketing

A majority of the tourist points did not own a website or run a regular television advert to persuade and win potential tourists to their destination. Only 13 tourism points had positive scores on the marketing factor and only five had scores of 1.00 and above. Tourism points with positive scores included: Baunchor in Cross River (1.76), Iko Esai in Cross River (1.52), Aningeji in CRS (1.38), Becheve in CRS (1.16), Adiabo in CRS (1.04), Agbokim in CRS (1.17), Oban in CRS (0.59), Ebom in CRS (0.96), Nwaniba in AKS (0.85), Alok in CRS (0.89), Susan-fang in CRS (0.95), Okpoma in CRS (0.67) and Akpap Okoyong in CRS (0.64).

iii. Tourism Service

The performance of tourism points on the tourism service factor was found to be on average as 50% of tourist points had positive scores. However, only five tourists points performed above the pass level of 1.00 score. Tourism points with positive scores included: Adiabo in CRS (1:02), Nwaniba in AKS (0.76), Buguma in Rivers (0.70), Biseni in Rivers (0.82), Orashi in Rivers (0.53), Opobo in Rivers (0.74), Bonny in Rivers (0.91), Andoni in Rivers (0.10), Abonema in Rivers (0.68), Akpap Okoyong in CRS (0.51), Iko Esai in CRS (0.23), Oban in CRS (0.42) and Use Ikot Oku in AKS (0.50). The performance of tourist points on the service factor hinges on the amount of retail outlets, restaurants, souvenirs shop and other services that are necessary to satisfy a tourist's need. Improving the service status of tourist points would, therefore, require a deliberate policy at empowering locales to develop small and medium scale enterprises (SMSE) in rural areas.

iv. Tourist Accommodation and Health Facility

The factor scores on the accommodation and health facility factor ranged between -2.54 to 1.71. Based on the cut-off mark of 1.00; only six tourism points performed well on the accommodation and health factor. However, more than 60% of tourism points had positive scores largely due to the inclusion of health facility. Majority of rural localities in Nigeria have a primary health centre or health post in line with the Goal number 5 of the defunct Millennium Development Goals. However, the accommodation component has segregated the tourism points as many tourists points cannot access either a hotel, motel, suites, guest house or lodge within 5km of their radius. Tourism points with positive scores included: Becheve in CRS (1.74), Ifoko in Rivers (1.71), Nwaniba in AKS (0.49), Adiabo in CRS (1.95), Andoni in Rivers (1.04), Tai in Rivers (1.10), Degema in Rivers (0.88), Buguma in Rivers (0.83), Akpap Okoyong in CRS (0.53), Baunchor in CRS (0.64), Inua Eyet Ikot in AKS (0.63), Alok in CRS (0.44), Oban in CRS (0.15), Ikot Esai in CRS (0.18), Abonema in Rivers (0.38), Finima in Rivers (0.78), Opobo in Rivers (0.54), Orashi in Rivers (0.46), Isaka in Rivers (0.26) and Ikuru in Rivers (0.31).

v. Security and Communication

The factor scores on security and communications ranged between -0.71 to 0.76. The low range of scores indicated that tourism points performed uniformly on security and communication. This is so because almost all the tourism points had a police station/post, local vigilante group and a GSM service. The provision of security and communication apparatuses for tourists is sacrosanct as no visitor would risk travelling to areas whose security situation is tensed and fragile. On the whole, over 83% of tourism points had positive scores on security and communications.

For the study area as a whole, the overall clustering of tourism points was done by aggregating the factor scores on the six main factors (that is, $F1 + F2 + F3 + F4 + F5 + F6 =$ Overall Functionality) as displayed in Table 2 and Figure 3.

Table 2: Classification of Tourism Points based on Aggregate

Range of Score	No. of Tourism Points with the range of score	Percentage of Tourism Points with the range of score	Remarks
< 0.30	18	60.0	Very low endowed tourism points
0.30 – 0.99	4	13.3	Low endowed tourism points
1.00 – 3.49	6	20.0	Highly endowed tourism points
> 3.49	2	6.7	Very Highly endowed tourism points
Total	30	100.0	

As data in Table 2 indicates, only two (6.7%) tourism points were highly endowed with tourism structure and could compete with other destinations. Whereas 60.0% of tourism points were very lowly endowed (that is, highly disadvantaged) with the necessary structure that drives tourism. Deficiency in tourism structures portends serious danger for the tourism sector and regional tourism development in Nigeria and the South-South in particular. Figure 3 shows the tourism cluster of the study area.

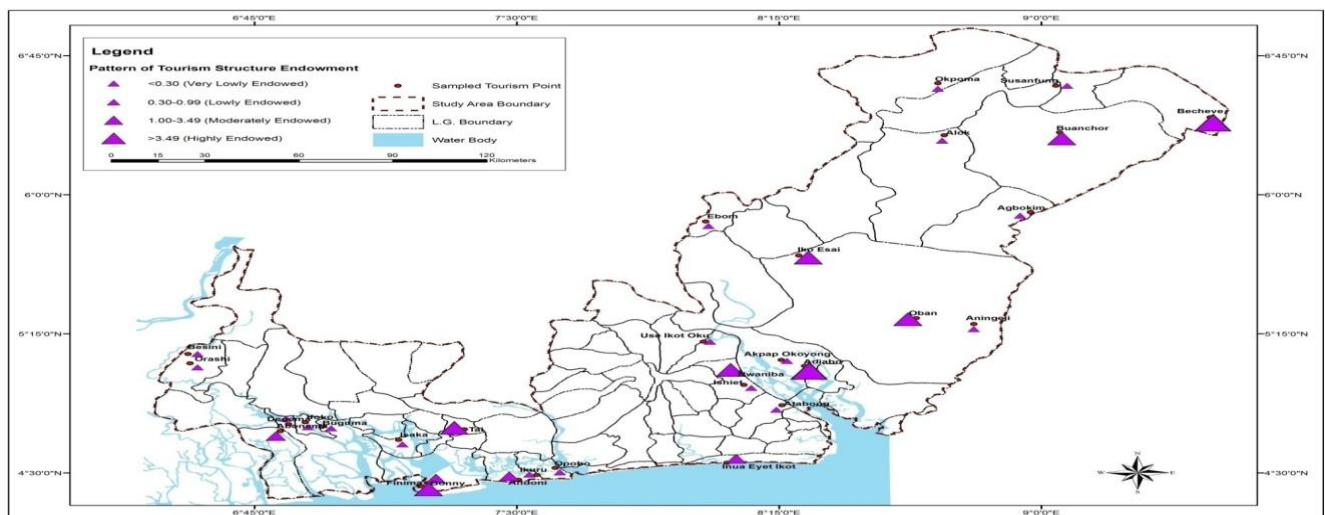


Figure 3: Distribution of Tourism Clusters in the study area

Tourism Clusters in the Study Area and Their Planning Needs.

The distribution of tourism structures as observed in the study area has high implication for evaluating the competitiveness of the tourism points. As figures 3 and 4 indicate, the clustering of tourism points demonstrates a four-level hierarchical arrangement. In the first level are the first- order tourism points (Becheve and Adiabo in Cross River State) with a very high endowment of tourism structures. These two tourism points have a competitive advantage over other tourism points in the region because of the relatively very high stock of tourism structures. They are both connected to the nearest urban centre (Obudu and Calabar respectively) on paved roads and they have the shortest travel time to the nearest urban centre. They have a relative abundance of tourism services, accommodation, infrastructure and diversities of both natural and created attractions. They are by far the most attractive tourism points in the study area.

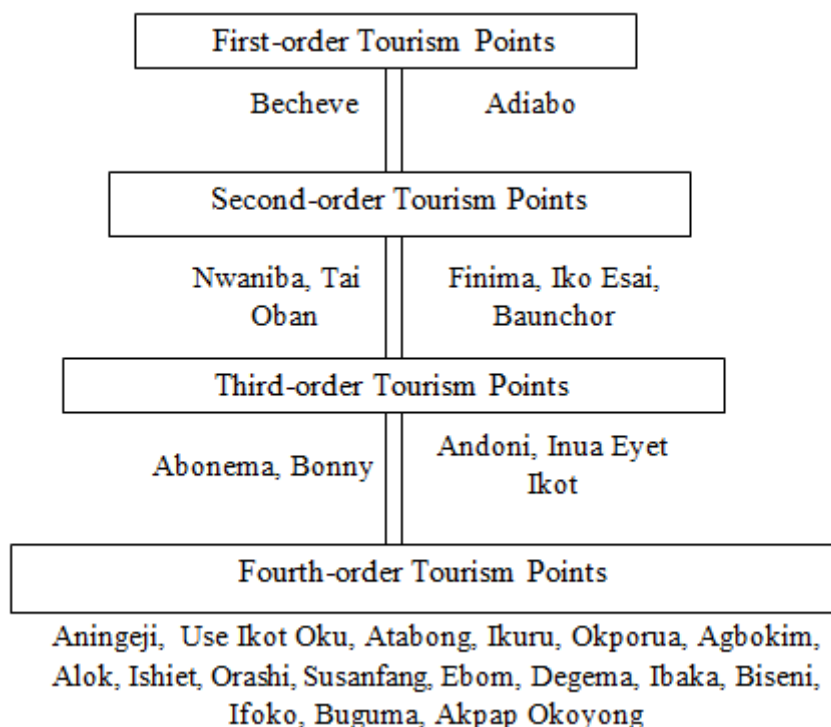


Figure 4: Hierarchical Arrangement of Tourism points

Source: Authors, 2019

Down the hierarchy are the second-order tourism points. They included: Finima, Tai (in River State), Nwaniba (in Akwa Ibom State) Iko Esai, Oban and Baunchor (in Cross River State). These tourism points were highly endowed with tourism structures. The second-order tourism points have a less competitive advantage compared to the first order of tourism points. These tourism points require intervention in the area of tourism services, marketing

structures, and created attractions. There is a need for deliberate effort towards creating more attractions and enabling an environment for the emergence of more tourism services. Additionally, a stronger drive on tourism marketing would enhance the competitiveness of the second-order tourism points. The third-order tourism points were lowly endowed with tourism structures. They include Bonny, Abonema, Andoni and Inua Eyet Ikot. These tourism points require significant intervention in infrastructure, security, transport and create attraction. Enhancing the competitiveness of these points would require creating further transportation infrastructure in roads and taxi/motor-cycle terminals that would improve transport services and the general accessibility to those points. Their relative location to the coast requires priority attention on security and the provision of infrastructure. Though the third-order tourism points have enormous beautiful natural attractions, their stock of created attractions is lean and requires intervention. The fourth-order tourism points were very lowly endowed with tourism structures. They constituted up to sixty per cent of sample tourism in the study area and by far require intervention in all aspects of tourism structure. Though the fourth-order tourism points possess a great deal of well-developed natural attractions, they require other complementary tourism structures to enhance their competitiveness.

It is important for rural tourism planners and other stakeholders to give priority attention to the tourism structure that is deficient in order to enhance tourism pattern of the study area.

CONCLUSION AND RECOMMENDATIONS

It is important to note that the observed hierarchical ordering of tourism points would serve as a framework for planning and managing tourism structures in the study areas. Already, the existing clustering of tourism points based on political zoning by the Cross River tourism Bureau in 2007 cannot be effective as a planning tool since such zoning was not based on empirical assessment of the spread of tourism structures in the state.

In this study, a re-conceptualization of tourism clusters has been put forward. Tourism clusters should be created based on functional characteristics of tourism destinations. In this sense, as findings of this study have shown, the grouping of tourism points should be based on the distribution of tourism structures. This concept would enable stakeholders in tourism planning to evolve policies and programme based on the need, strength and weaknesses identified in each tourism cluster. At the moment, existing tourism clusters are created based on geographical location lacking the fundamental planning elements that have been captured in the proposed functional basis of clustering.

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