

Canonical Models for Evaluating Tourism and Socio-Economic Development in Nigeria

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ABSTRACT

This paper seeks to generate empirical models for evaluating the link between tourism and socio-economic development. Thirty tourist destinations were randomly sampled. Checklist, Direct Observation, key informant and secondary sources were used for data collection. A parsimonious description of both tourism and socio-economic development data was achieved with the aid of Factor Analysis. The Canonical Correlation Analysis was used to link the pairs of tourism and socio-economic component of the tourist destinations in order to generate Canonical Functions that optimally demonstrate the link between the two constructs. Three Canonical Functions representing: (i) the connection between tourism and population stability (ii) the link between tourism and livelihood improvement and (iii) the link between tourism and industrialization were generated. These Canonical Functions are the model by which tourism and socio-economic landscape of Nigeria can be reshaped.

Keywords: *Canonical Models; tourism; socio-economic Development; Canonical Correlation; Factor Analysis; Canonical Function .*

1. INTRODUCTION

Nigeria is in dire need of a sustainable development model outside the oil and gas sector. Successive government in Nigeria had experimented with different sectorial

approach to transforming her economy, and lifts her people out of socio-economic quagmire (Odeleye and Oyekanmi, 2020). Most of the sectors including agriculture have not generated the desired socio-economic development for the Nigeria State. Several African countries including Nigeria are fast realizing the huge potentials in the tourism sector as catalyst for driving socio-economic development (UNWTO, 2018). Nigeria has one of the richest cultural and natural endowments that are yet to be fully harnessed for tourism and socio-economic development. there are at least, 101 tourist attractions in Nigeria, spread across the six geopolitical zones and spanning different types of tourism assets such as rocks, plateau, hills, springs, lakes, water falls, beaches, museums, shrines, cultural festivals, parks, garden, game reserves, zoo, (Federal Office of Statistics, 2018). It is evident that the tourism sector contributed 10.4% to global GDP in 2018 alone (WTCC, 2022).

Apart from forming linkages with other sectors such as entertainment, transportation and housing, the tourism sector contributes significantly to employment generation, providing 10% of all jobs globally. Furthermore, the 2030 projections show that tourism is expected to grow further, rapidly through consistent increase in global tourist's amount to 1.8 billion by 2030, representing 3.3% yearly growth (UNWTO, 2019). However, the WTTC (2023) report on Nigeria's tourism sector indicates that tourism contribution to GDP in Nigeria is forecasted to grow at an average of 5.4% between 2023 and 2024. This means that tourism alone would contribute up to ₦12.3 trillion to GDP by 2032, representing 4.9% of the total economy. In view of the catalytic nature of tourism, researchers have attempted to generate both theoretical and empirical frameworks upon which tourism impacts can be minimized (Bankole, 2002; Ayodele et al. 2019; James and Essien, 2019, Yusuf and Akinde, 2020). Studies by Ayodele et al. (2019) were based on the least square method of regression and yields significant results for tourism modeling. However, the multi-sectorial linkages between tourism and other development sectors of the economy were not captured. It is believed that Canonical Correlation offers the most appropriate technique for modeling the multi-sectorial linkage between tourism and other components of the economy (Udofia, 2015).

Canonical Correlation Analysis (Cancorr) in a multivariate Statistical model that examines the maximum linear relationship between two sets of multiple dependents variables and multiple independent variables. The first step of the Cancorr is to derive one or more Canonical Functions. Each function consists of a pair of variates; one as independent variables and the other as dependent variables. The first Function extracted would account for the maximum amount of variance in

the two sets of variables, that is the first pair of Canonical variates exhibit the highest inter- correlation possible between the two sets of variables. The second pair of Canonical variate derived would accounts for the maximum amount of “leftover” variance. In this study, the Cancorr was used to examine the different ways tourism could be linked with socio- economic development as well as testing the null hypothesis that “tourism does not share significant variance with socio- economic development in the study area”.

2. MATERIALS AND METHOD

2.1 Description of the 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 4°2'01" and 7° North and Longitudes 6°2'01" and 8°3'01" East (Fig1).

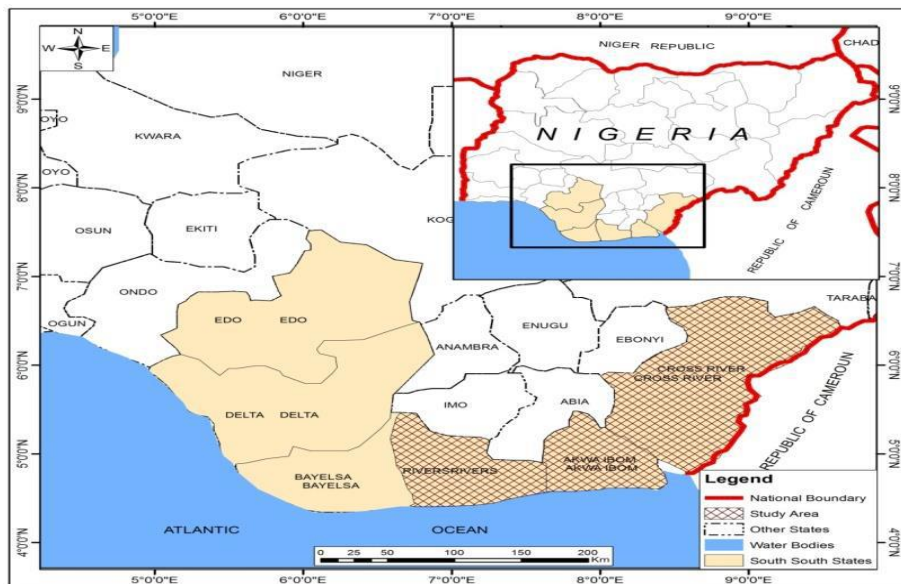


Figure 1: Location of the Study Area on the Map of the South-South Zone of Nigeria.

It occupies a total landmass of 37.663km² with a population of 11,994,574 (NPC, 2006). The study used a sample of 30 tourism destinations selected from a population of 81 tourism destination in south- south Nigeria. A sampling frame obtained from the relevant government authorities guided the selection of sample on the basis of randomness.

2.2 Data Requirement

Two sets of data were used for the study. Data set one was those related to tourism and was designated as the independent variables. These are displayed in Table I.

Table I: Tourism Data (Independent Variables)

Variables Code	Variable Definition
X ₁	Types of attraction
X ₂	Number of tour guide
X ₃	Number of retail shop
X ₄	Number of souvenir shop
X ₅	Number of tourist sign post
X ₆	Number of restaurant
X ₇	Number of accommodation
X ₈	Water supply for tourists
X ₉	Electricity supply for tourists
X ₁₀	Television Advert for tourist destination
X ₁₁	Health facility for tourist
X ₁₂	Type of Access Road
X ₁₃	Type of transport service
X ₁₄	Tourist information center
X ₁₅	Police security post
X ₁₆	Local vigilante security for tourist
X ₁₇	Waste facility at tourist destination
X ₁₈	Tourist Destination Website
X ₁₉	Mobile communication facility for tourist
X ₂₀	Television Advert for tourist destination

To generate the above data, a checklist was designed and used to take stock of available tourism facilities in the study area. Through direct observation and oral interview with local tourism officers, trained field assistants were able to obtain firsthand information on the tourism facilities. Secondary data gleaned from tourism brochure, tourism map and Annual Tourism report, obtained from the States' Tourism Board were used to complement those from the primary sources.

Data set II were the measures of Socio-economic development. It consists of 14 variables designated as dependent variables. These variables were carefully selected from literature. Secondary data were essentially used as measures of Socio-economic development. They were sourced from the Household Socio-economic survey conducted in 2022 and reported by the National Bureau of Statistics (NBS), South-South Zonal Office in Calabar, Cross River State. The measures of Socio-economic development are displayed in Table 2.

Table 2: Measures of Socio-economic Development (Dependent Variables)

Variables Code	Definition of Variable
Y ₁	Percent of household employed in tourism
Y ₂	Percent of household employed in transportation
Y ₃	Percent of household employed at tourism site
Y ₄	Percent of household earning above National Minimum Wage
Y ₅	Percent of household living in zinc - concrete home
Y ₆	Percent of household having access to recreational facilities
Y ₇	Percent of household having access to electricity
Y ₈	Percent of household having access to mobile communication
Y ₉	Percent of household having access to the internet
Y ₁₀	Percent of household having access to safe water
Y ₁₁	Percent of household with out - migrant
Y ₁₂	Number of Agro - processing industry
Y ₁₃	Number of craft industry
Y ₁₄	Number of trained tour guide

Regarding the techniques of data analysis, two multivariate Statistics were utilized. These are: Factor Analysis and the Canonical Correlation Analysis (Cancorr). Before the Canonical Correlation Analysis was conducted, Factor Analysis was first conducted with the raw data to identify the underlying dimensions of the two

constructs: tourism and socio-economic development, as well as achieving parsimonious description of the variables.

Specifically, the R-Mode Factor model on the Statistical Package for Social Science (SPSS) version 25.0 using the Varimax Rotation method was employed to achieve a Parsimonious description of the dependent and independent variables.

Further analysis was conducted using Cancorr to link the multiple dependent variables and multiple independent variables. The first step of the Cancorr is to derive one or more Canonical Functions. Each Function consists of a pair of variates, one as independent variables and the other as dependent variables. The first function extracted would account for the maximum amount of variance in the two sets of variables. That is, the first pair of canonical variates exhibits the highest inter-correlation possible between the two sets of variables. The second pair of canonical variates derived would account for the maximum amount of “leftover” variance. There are two criteria for selecting the Canonical Function to interpret:

- i. Level of Significance of the Function (Wilks Lamba); and
- ii. Magnitude of the Canonical Correlation if the Canonical relationship is statistically significant and the magnitudes of the Canonical root acceptable, further interpretation of the results will need to be made.

3. RESULTS AND DISCUSSION

3.1. Parsimonious Description of Tourism Data

This study used Factor Analysis to reduce the tourism and Socio-economic variables and then proceed to use the Factor sores generated for the new variables to conduct the Canonical Correlation Analysis. Table 3 displays the “new variables” (also called factors) and their loadings for the tourism data (independent variables). The initial variables (20 of them) (see table 2) were reduced to six (6) Factors that define the tourism structure of the area.

Table 3: Tourism Factor and their Loading

Variable code	Variable definition	Factors						Communalit y
		1	2	3	4	5	6	
X1	Types of attraction	.82						.71
X2	Number of tour guide	.65						.79
X3	Number of retail shop				.54			.64
X4	Number of souvenir shop	.68						.84
X5	Number of tourist sign post	.60						.63
X6	Number of restaurant				.69			.77
X7	Number of accommodation					.60		.84
X8	Water supply for tourists		.75					.79
X9	Electricity supply for tourists		.77					.66
X10	Television Advert for tourist destination							.81
X11	Health facility for tourist		.69			.69		.86
X12	Type of Access Road		.67					.57
X13	Type of transport service							.68
X14	Tourist information center							.79
X15	Police security post						.70	.75
X16	Local vigilante security for tourist						.58	.77
X17	Waste facility at tourist destination							.82
X18	Tourist Destination Website			.96				.88
X19	Mobile communication facility for tourist						.85	.94
X20	Television Advert for tourist destination			.96				.94
	Eigen value	6.119	2.87	2.39	1.508	1.396	1.242	
	% Variance	30.5	14.3	11.9	7.5	6.9	6.2	
	cumulative	30.5	44.9	56.9	64.4	71.4	77.6	

Source: SPSS Analysis

The naming of the factors was based on their Factor loadings on the initial variables. The rule was that only variables with loadings of ± 0.50 and above were used for naming the new variable (factor). Accordingly, the factors were named as follows:

Factor 1 – Tourists attraction/Equipment (X_1)

Factor 2 – Transport/ general infrastructure (X_2)

Factor 3 – Transport destination marketing (X_3)

Factor 4 – Tourism service (X_4)

Factor 5 – Tourists accommodation and health (X_5)

Factor 6 – Tourists security and communication facilities (X_6)

The factor scores which indicate the performance of the Tourist Destinations on the Factors are displayed in Table 4.



Table 4: Distribution of factor scores (for Independent Variable)

S/N	Tourism Destination	Factors					
		1	2	3	4	5	6
		Tourism Attraction	Transport and Gen. Infra.	Tourism Marketing	Tourism Service	Tourists Accommodation	Security and Comm.
1	Inua Eyet Ikot	-.047	2.38	-1.29	-0.27	0.63	0.36
2	Nwaniba	-0.20	1.25	0.85	0.76	0.49	0.39
3	Oban	0.25	1.63	0.59	0.42	0.15	0.42
4	Use Ikot Oku	-0.78	-0.72	-0.63	0.50	-1.29	-0.57
5	Atanong	0.02	1.36	-1.23	-1.92	-0.73	-0.36
6	Ishiet	-0.10	-0.72	-1.34	-0.35	-2.24	-0.18
7	Adiabo	3.02	1.36	1.04	1.02	1.95	0.76
8	Agbokim	-0.58	1.34	1.17	-0.34	-1.43	0.65
9	Alok	-0.63	1.28	0.89	-1.47	0.44	-0.44
10	Baunchor	-0.12	-0.58	1.76	-0.29	0.64	-0.63
11	Becheve	1.89	0.74	1.16	2.02	1.74	0.53
12	Ebom	-0.54	-0.82	0.96	-0.47	-1.30	0.03
13	Iko Esai	-0.46	1.25	1.52	0.23	0.18	0.21
14	Akpap Okoyong	-0.94	-1.26	0.64	0.51	0.53	0.46
15	Okpoma	-1.29	0.20	0.67	-0.55	-2.28	0.20
16	Susanfang	-0.78	0.08	0.95	-1.07	-0.24	0.40
17	Aningeji	-0.04	-1.43	1.38	-0.77	-0.22	0.25
18	Abonema	0.62	-1.11	-0.46	0.68	0.38	0.27
19	Andoni	-0.19	-0.13	-1.18	0.10	1.04	0.68
20	Bonny	1.76	-1.10	-0.57	0.91	-0.71	0.24
21	Finima	-0.43	-0.48	-0.36	1.62	0.78	0.33
22	Opobo	-0.93	0.26	-1.14	0.74	0.54	0.62
23	Tai	-0.83	0.67	-0.12	1.59	1.10	0.13
24	Ikuru	1.57	-0.61	-0.28	-1.41	0.31	0.28
25	Degema	0.67	-0.78	-1.00	-0.32	0.88	0.27
26	Orashi	0.14	-0.65	-0.76	0.53	0.46	-0.71
27	Buguma	-0.61	-0.70	-0.91	0.70	0.83	0.52
28	Ifoko	-0.80	-0.19	-0.63	-1.04	1.71	0.55
29	Isaka	1.23	-0.78	-1.01	-1.48	0.26	0.60
30	Biseni	0.11	-0.62	-0.66	0.82	-2.54	0.36

Source: SPSS Analysis



3.2 Parsimonious Description of Socio-economic Development Data

In order to achieve a parsimonious description of the socio-economic development data for the study area, Factor analysis was performed on the initial 14 variables (see Table). The result show 5 Factors which represent the initial 14 variables. The five factors accounted for 84.4% of variance in the original data set.

Furthermore, the communality values were highly loaded, indicating the suitability of the variables included in the analysis. The size of the eigenvalue (1.00 and above) determined the inclusion of the factors in the model and variable loadings + or – 0.50 and above was used for the factor naming. Table 4 displays the five selected factors and factor loadings for the socio-economic development data.

Table 4: Socio-economic Development Factors and Their Loadings

Var. code	Definition	Factors					communality
		1	2	3	4	5	
Y ₁	Percent of household employed in tourism		.78				.92
Y ₂	Percent of household employed in transportation		.52				.83
Y ₃	Percent of household employed at tourism site	.87	.77				.89
Y ₄	Percent of household earning above National Minimum Wage						.84
Y ₅	Percent of household living in zinc - concrete home	.81					.91
Y ₆	Percent of household having access to recreational facilities		.68				.78
Y ₇	Percent of household having access to electricity	.91					.84
Y ₈	Percent of household having access to mobile communication				-.83		.83
Y ₉	Percent of household having access to the internet				.93		.60
Y ₁₀	Percent of household having access to safe water	.80					.89
Y ₁₁	Percent of household with out - migrant			-.65			.89
Y ₁₂	Number of Agro - processing industry					.70	.79
Y ₁₃	Number of craft industry					.87	.92
Y ₁₄	Number of trained tour guide					-.78	.83
Eigen value		5.821	2.409	1.29	1.218	1.085	
% Variance		41.5	17.2	9.2	8.2	7.2	
cumulative		41.5	58.7	67.9	76.7	84.4	

Source: SPSS Analysis

Essentially, therefore, the identity of the new factors was as follows:

Factor 1 – Income/living standard (Y 1)

Factor 2 – Employment (Y2)

Factor 3 – Recreation/Population stability (Y3)

Factor 4 – Social Connection (Y4)

Factor 5 – Rural industrialization (Y5)



The Factor scores that show the performance of tourists' destinations on the five factors are displayed in Table 5.

Table 5: Distribution of Factor Scores (for Dependent Variable)

S/N	Tourists Destination	Factors				
		1	2	3	4	5
		Income /Living Standard	employment	Recreation And pop. Stab.	Social connection	Rural Industry
1	Inua Eyet Ikot	-1.02	-1.25	1.24	0.89	1.16
2	Nwaniba	1.13	-1.57	304	0.14	0.04
3	Oban	0.37	1.25	1.21	0.02	-0.98
4	Use Ikot Oku	-1.18	-0.26	-1.29	0.26	-0.67
5	Atanong	-1.46	0.31	0.19	-1.29	1.63
6	Ishiet	-1.33	0.80	-0.08	-0.96	1.67
7	Adiabo	-0.28	1.93	1.60	1.47	-0.22
8	Agbokim	-0.88	0.38	-0.09	0.04	-0.89
9	Alok	-1.24	-0.11	-0.03	0.78	-0.67
10	Baunchor	-0.84	0.40	0.16	0.02	-1.22
11	Becheve	0.48	2.42	1.49	1.51	0.66
12	Ebom	-0.46	-0.07	0.58	-1.12	0.17
13	Iko Esai	1.06	0.58	0.01	-1.50	-1.99
14	Akpap Okoyong	-0.13	0.04	0.83	-2.95	-1.04
15	Okpoma	-0.52	-0.49	-0.49	-0.63	-0.90
16	Susanfang	-0.88	-0.61	-0.42	-0.13	-1.08
17	Aningeji	-0.68	0.35	-0.29	0.69	-1.10
18	Abonema	0.10	-0.42	-0.67	0.50	0.58
19	Andoni	-0.66	-0.90	-0.13	-0.08	0.95
20	Bonny	1.39	0.10	-0.45	-0.66	0.48
21	Finima	0.10	-0.70	-0.05	-0.75	0.63
22	Opobo	0.82	-0.25	-0.57	0.81	0.63
23	Tai	0.73	2.53	-1.92	-0.71	1.55
24	Ikuru	-0.06	-0.62	-0.44	0.96	-0.55
25	Degema	1.71	-0.15	0.36	0.91	-0.64
26	Orashi	0.70	-0.86	-0.41	-0.14	1.00
27	Buguma	1.73	-0.92	-0.39	-0.61	1.26
28	Ifoko	2.01	-0.32	-0.71	0.28	-0.86
29	Isaka	0.15	-0.57	-0.39	1.08	0.56
30	Biseni	-0.87	-0.99	-0.71	1.18	-0.16

Source: SPSS Analysis



3.3 Linkage between Tourism and Socio- economic Development

The major thrust of this paper is to demonstrate the link between set of tourism data (as independent variable) and set of socio- economic development data (as dependent variable) using Canonical Correlation Analysis and to generate models that can serve as framework for regional tourism and socio- economic development for developing nation such as Nigeria. The initial results obtained through parsimonious description of the tourism and socio- economic data based in Factor Analysis were used as input data for the Cancorr. As data in Table 6 indicated, three Canonical Functions were selected to demonstrate the link between the two data sets: tourism and socio- economic development. The choice of three Canonical Functions was based on the magnitude of the Canonical Correlation and the level of statistical significance of the Canonical Functions. Canonical Correlation measures the correlation between pairs of canonical varieties in the two data sets.

Accordingly, the first, second and third canonical functions had a canonical correlation of 0.92, 0.82, and 0.72 respectively and are significant on the Wilk Lamba, Rillai, Lawley Hotelling and Roy Greatest Root test text ($\rho < 0.05$ on all the four test texts) see Table 7.

Table 6: Canonical Structures for Tourism and Socio- economic Development Interrelationships

Variable Code	Variable Name	Canonical Function		
		1	2	3
Criteria variable (P): Socio- economic Development				
Y1	Income/ living standard	-.12	.55	.82
Y2	Employment opportunities	.58	.26	-.12
Y3	Recreation/ population stability	.63	.23	-.14
Y4	Social connection and networking	.66	.37	-.18
Y5	Rural Industry/ human capacity	.45	.65	.52
Predictor Variable (q): Tourism				
X1	Tourists attraction	.84	.57	-.15
X2	Transportation/ general infrastructure	.43	.33	-.76
X3	Tourism marketing	.81	-.43	.34
X4	Tourism services/ equipment	.21	.51	.29
X5	Tourist accommodation	-.33	.32	.74
X6	Security/ communication apparatus	.55	-.07	-.18
Canonical correlations		.92	.82	.62

Source: SPSS Analysis

Table 7: Test of Significance of the Selected Canonical Correlations

Test Text	Statistics	df 1	df 2	F	Sign.
Wilk Lambda	.021567	30	78	4.182	0.000
Pillar Trace	2.14762	30	115	2.886	0.000
Lawley-Hotelling Frace	9.11469	30	87	5.286	0.000
Roy Greatest Root	6.02691	60	23	23.103	0.000

Source: SPSS Analysis

The three Canonical Functions represent the canonical models that explain the linkage between tourism pattern and socio-economic development of tourists' destinations. Based on the canonical structure loadings displayed in Table 6, the characteristics of the three canonical functions (models) are now presented:

i. Characteristics of Canonical Function 1

The first canonical function reveals the highest significant correlation between tourism pattern and socio-economic attributes of tourism destinations ($r_1 = 0.92$, $p > 0.05$). However, using a cut-off point of 0.50 the link between tourism and socio-economic development was assessed. On the criteria data set, employment (Y2) achieved a high loading (.58) alongside recreation/population stability (.63) and social correlation (.66). On the predictor data set, tourists attraction (X1) loaded highly (.84) together with tourism marketing (.81) and security/communication (.55). Specifically, the joint structure revealed the link between employment opportunities and pattern of tourism attraction. The positive relationship meant that employment opportunities was likely to increase with increasing types of attraction in a given tourist destination. The reason is simple. In as much as tourists attraction remains the focal point and the central motivating force for tourist visits, it means that creating diversities of attraction within a given tourism destination would create a multiplier effect in terms of increase visitors presence at the destination and increased employment opportunities directly or indirectly. In other words, the more enhanced the pattern of tourists attraction is the more generative a tourist's destination would be in terms of employment.

Furthermore, the positive correlation between recreation/population stability (Y3) and tourists' attraction (X1) revealed how diversities of attraction can create recreational opportunities for the people, contributes to reducing out-migration and ultimately stabilize population. The link between social connection (Y4) and the

pattern of security/communication revealed the extent to which providing Communication structure such as the GSM connection mast can improve the social awareness and interaction between people and the global society. On the whole, canonical Function 1 demonstrated the link between core tourism structures attraction and communication and the basic components of socio-economic development-employment and recreation. The model representing Canonical Function I shown graphically in Figure 2.

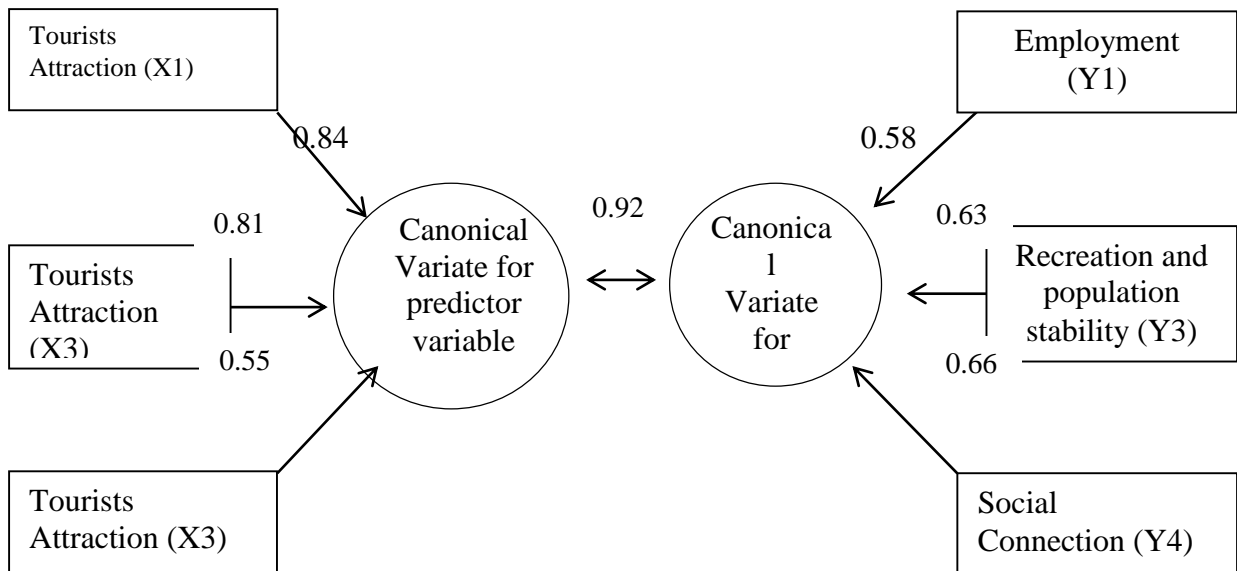


Figure 2: Canonical Model 1
Source: Data Analysis by Authors

ii. Characteristics of Canonical Function 2

The second canonical function having a relatively high canonical correlation of 0.82 ($P < 0.05$) revealed the link between income and living conditions of the people (.55), rural industry (.65) and the pattern of tourist service (.51) and tourists attraction (.57). This correlation showed the significant direct relationship between provision of tourist services and advancing household income. What this implied was that households living in areas where tourist services such as restaurants, retailing and sales of souvenirs are needed would have the advantage of increasing



their income through non-farming source like rural industries (Craft and agro-processing). Furthermore, multiplying tourists attractions can generate paid employment at attraction site which could translate to increased household income.

It is important to note that household income sources in Nigeria are largely land based and unsustainable arising from continuous change in the environment. Essentially therefore, Canonical Function 2 provided the theoretical model for transforming a largely monolithic economy to a diversified economy anchored on service provision. The graphical presentation of Canonical Function 2 is shown in Figure 3.

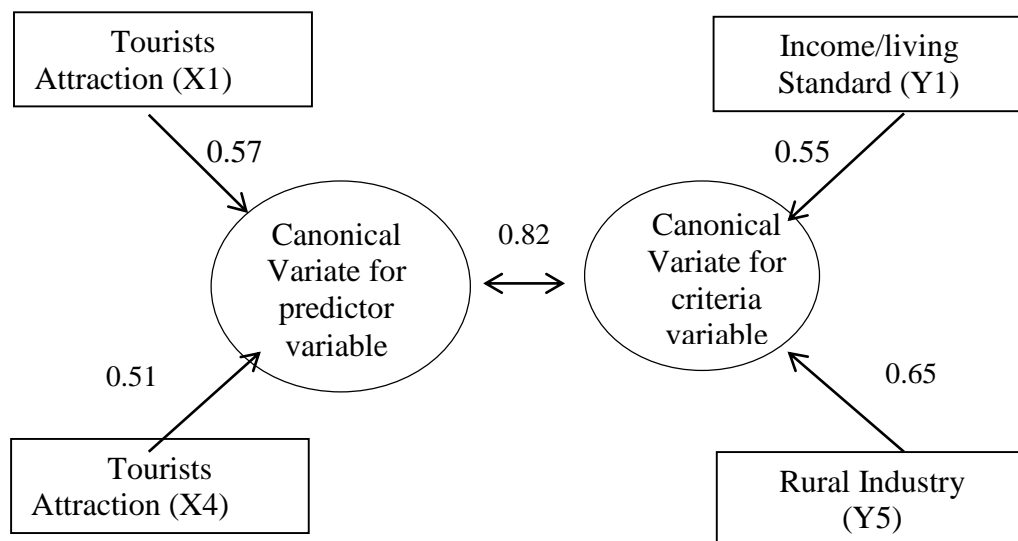


Figure 3: Canonical Model 2
Source: Data Analysis by Authors

iii. Characteristics of Canonical Function 3

The third canonical function with a correlation of 0.62 which was significant at 0.05 significance level indicated a strong positive correlation between tourism accommodation (.74) and transportation/general infrastructure ((.76) on the predictor data set and income/household living conditions and rural industry/capacity building (.52) on the criteria data set. Transport/infrastructure such as roads, electricity, water and other amenities have direct link with household's standard of living. This is so because, infrastructure provided at tourists points would serve the needs of tourists

on one hand and the host population on the other hand. Moreover, transportation services are sources of generating additional income for the host population. Additionally, the location of accommodation such as hotels, guest houses and other types of accommodation in or close to tourists points provide opportunity for generating further income for members of the host community who are employed in such establishment. Figure 4 displays the graphical model of Canonical Functions 3.

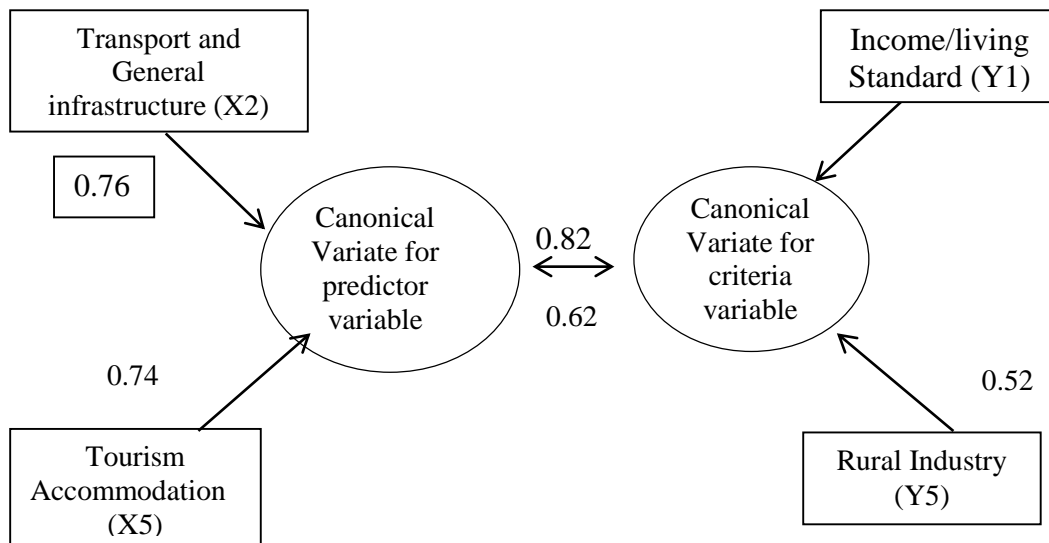


Figure 4: Canonical Model 3

Source: Data Analysis by Authors

A null hypothesis indicating that Tourism does not share significant variance with socio-economic development of tourist destination was earlier advanced in this research. However, data in Table 7 indicated canonical function ($r_1 = 0.92$, $r_2 = 0.82$, $r_3 = 0.62$) were tested on four different tests (Wilk Lambda, Pillai Trace, Lawley-Hotelling Trace and Roy Greatest Root). Results showed that the F-value obtained in the four test were high enough for rejecting the null hypothesis (Wilk Lambda: $F = 4.185$, $p < 0.05$; Pillai Trace: $F = 2.866$, $p < 0.05$; Lawley-Hotelling: $F = 5.286$, $p < 0.05$; Roy Greatest Root: $F = 23.103$, $p < 0.05$). This implied that there was significant relationship between tourism and socio-economic development.

4. CONCLUSION

The three canonical models generated in this study have demonstrated the link between tourism and socio- economic development. In other words, socio- economic changes in developing nations can be achieved through deliberate efforts at establishing tourism structures. This study has shown that there is a positive relationship between tourism and creation of non- farming employment as well as generation of non- farming income in developing economies such as Nigeria.

Furthermore, the stability of the population is critical to socio- economic development. Findings of this study have shown that providing recreational/Sports facilities in communities can help minimize rural- urban drift and stabilize population especially in rural areas. In view of these findings, it is recommended that priority attention be paid on the development of tourism structure that is highly generative in terms of employment, recreation, and industrialization and population stability.

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