IJRAR.ORG E-ISSN: 2348-1269, P-ISSN: 2349-5138

INTERNATIONAL JOURNAL OF RESEARCH AND ANALYTICAL REVIEWS (IJRAR) | IJRAR.ORG

An International Open Access, Peer-reviewed, Refereed Journal

FACTOR THAT DETERMINES THE CHALLENGES OF HARNESSING THE REGIONAL DEVELOPMENT POTENTIALS OF TOWNS ALONG MAJOR INLAND WATER WAYS OF NIGERIA

[1]Ugwuoke Hillary Ugochukwu, Msc. URP

[2]Dr. (Mrs) Ugwu Lucy Nkiru, Ph.D

[2]Department of Urban and Regional Planning, Faculty of Environmental Technology, Federal University of Technology, Owerri, Imo State, Nigeria

[2]Department of Urban and Regional Planning, Faculty of Environmental Sciences, Enugu State University of Science and Technology, Enugu, Nigeria

Abstract:

There are a lot of factors confronting all efforts towards harnessing the regional development potentials of towns along major inland water ways of Nigeria. These factors appear unabated for many years now and have contributed majorly in underdevelopment of towns along major inland water ways of Nigeria. This research is therefore aimed at examining the challenges of harnessing the regional development potentials of towns along major inland water ways of Nigeria with a view to addressing them. Survey research design method was employed in this study. Data used in this study were collected from both secondary and primary sources. Secondary data were obtained from published material on challenges of regional development potentials of towns along major inland water ways of Nigeria. The primary data were collected with the aid of structured questionnaire. The research-developed questionnaire was validated by a statistician and three lecturers who were all experts in the field. The questions were structured using 5-point likert scale. Reliability of the test instrument was determined using Cranach Alpha which yielded a correlation co-efficient of 0.95. A pilot survey was carried out to test the clarity of the questions on the questionnaire. Principle component analysis (PCA) was used to significantly identify and classify the challenges of harnessing the regional development potentials of towns along major inland water ways of Nigeria. PCA was used to transform the whole variables of the challenges of harnessing the regional development potentials of towns along major inland water ways of Nigeria into a more concise form. The general challenges of harnessing the regional development potentials of towns along major inland water ways of Nigeria with their factor loading values were: lack of veritable tools for regional development (0.97), bad governance (0.99), corruption (0.98), cultural factor (0.98) and lack of interest by government (0.98). The general implication of the research findings indicate that the challenges of harnessing these potentials for regional development are enormous. Base on the research findings, this study recommends that Nigerian government should take urgent steps in dealing with enormous challenges confronting all efforts towards harnessing the regional development potentials of towns along major inland water ways of Nigeria.

Keywords: Regional; Development; Regional Development; harnessing the Regional Development; Challenges of harnessing the Regional Development; Towns along Major Inland Water Ways.

I. INTRODUCTION

Waterway towns are among the most complex, vulnerable and sensitive of all natural ecosystems, and their management presents various problems and difficulties especially in our era of climate change in which waterway towns and populations face a range of serious threats (including rising sea levels). The comparative advantages and fragile equilibrium of some towns along inland waterways have already been seriously undermined, with their most important natural elements now facing the threat of extinction due to disastrously erroneous human interferences. Given the experience of European Union and United Nation programs and projects initiated and run by other international organizations which have shown that implementing sustainable urban and spatial development in the waterway towns is anything but easy, there is clearly a great need for coordinated action and co-operation at the transnational and international level (Beriatos and Papageorgiou 2010).

Regional planning has not enjoyed the same recognition and impetus as economic development planning in Nigeria. The main weakness of development planning however has been that the National Development Plans (NDPs) and other plans were mainly sectoral and fiscal allocation plans lacking in spatial context. This was realised to have been the major reason for the failure of the first and second National Development Plans. Attempt was made in the third national development plan to introduce some aspect of regional and locational considerations. Because of the poor regional planning, development efforts have tended to increase rather than decrease regional inequalities. Development has been urban bias and detrimental to the rural areas. (Dung-Gwom 2010).

Water transportation that is supposed to serve as a major means of transportation in Nigeria is neglected and undervalue. Necessary infrastructures for inland transport in the country are lacking. Many Nigerian roads that are to serve as alternatives to water transportation are in deplorable condition too. The major towns where the river channels passed across were supposed to be hubs of economic activities but have not recorded enough progress as envisaged. There are few research works on the challenges of harnessing regional development potentials of towns along major inland water ways of Nigeria, hence the need for this research.

II. RESEARCH METHODOLOGY

Variables on the challenges of harnessing the regional development potentials of towns in major inland water ways were sourced from Isidiho and Sabra (2017). The study adopted the survey research design. Stratified simple random sampling technique was used to select the respondents that were sampled. Using random sampling, three towns each were selected from each of the containers without replacement to represent the six towns that formed six strata for the study using six towns; Akassa (Brass town) in Bayelsa state, Warri in Delta state, Onitsha in Anambra state, Lokoja in Kogi state, Makurdi in Benue and Baro (Agaie town) in Niger state to equally represent the Southern and Northern Nigeria

Data was sourced through questionnaire. The questions were structured using 5-point Likert scale as follows: not at all = 1, low = 2, moderate = 3, high = 4 and finally to very high = 5. For the study, moderate was adopted as a mean score. Above average (moderate) is considered significant and below average (moderate) is considered as not significant. A total of 1661 copies of validated questionnaires were administered to towns in major inland water ways of Nigeria. Reliability of the test instrument was determined using Cranach Alpha which yielded a correlation co-efficient of 0.95. A pilot survey was carried out to test the clarity of the questions on the questionnaire. Data from this source was used in testing the hypotheses as well as providing secondary data on variation in regional development potentials of towns along major inland water ways of Nigeria. Direct observation was also employed in this study to obtain the variation in regional development potentials of towns along major inland water ways of Nigeria.

The sample frame for this study was determined by projecting the 2006 population census figure to 2020 (1,641,011 to 1,993,662) and dividing the projected population of towns in major inland water ways of Nigeria by six which is the average household size. This presented 332,277 households as the sample frame. The main reason for using 2006 population census was because it was the last population census conducted in Nigeria. The sample size for this study was determined using Williams (1978) formula which Kerlinger and Lee (1992) adopted from population of towns in major inland water ways of Nigeria (sample frame). This formula paved way for calculation of the sample size. This formula was also adopted in determining sample sizes in Okosun et. al. (2019) where 0.5% was used as the appropriate percentage of population sampled.

The stratified simple random sampling technique was used to select the respondents that were sampled. Two containers that represent the Southern and Northern Nigeria were provided. Nineteen towns in major inland water ways of Nigeria were written separately in pieces of papers and were then put in the 2 containers according to their region. Using random sampling, three towns each were selected from each of the containers without replacement to represent the six towns that formed six strata for the study using six towns; Akassa (Brass town) in Bayelsa state, Warri in Delta state, Onitsha in Anambra state, Lokoja in Kogi state, Makurdi in Benue and Baro (Agaie town) in Niger state to equally represent the Southern and Northern Nigeria.

Principle component analysis (PCA) was used to significantly identify and classify the challenges of harnessing the regional development potentials of towns along major inland water ways of Nigeria. PCA was used to transform the original variables on the challenges of harnessing regional development potentials of towns along major inland water ways of Nigeria into a more manageable number.

Principle component analysis (PCA) was used to significantly identify and classify the regional development potentials of towns along major inland water ways of Nigeria.

Mathematically, PCA is expressed as:

$F = \sum_{j=1}^{n} W_j X_j = W_1 X_1 + W_2 X_2 + \cdots + W_n X_n$ ... ... (1)

Where:

W_1 - W_n = factor weights.

X_1 - X_n = original variables

The PCA formula was applied as thus:

$F = \sum_{j=i}^{n}$ CHRDPTIW = W_1 lrd + W_2 enp + W_3 ymv + W_4 uic + W_5 lmv + W_6 cor + W_7 agi + W_8 irl + W_9 lof + W_{10} agg + W_{11} mop + W_{12} poi + W_{13} lvl + W_{14} eth + W_{15} reb + W_{16} aba + W_{17} pol + W_{18} lfs + W_{19} spc + W_{20} spo + W_{21} lod + W_{22} lpl + W_{23} lpi + W_{24} lfi + W_{25} ins…….. (3)

Where:

CHRDPTIW = Challenges of Harnessing the Regional Development Potentials of Towns in Major Inland Water Ways of Nigeria

lrd = Lack of regional development plan

enp = Environmental problems

ymv = Youth militancy and violence

uic = Use of incompetent contractors

lmv = Lack of adequate monitoring and evaluation

cor = Corruption

agi = Apathy of the government as a result of ignorance

irl = Inadequate regulation and law

lof = Lack of fund

agg = Absence of Good Governance

mop = Misplacement of Priorities

poi = Political Instability

lvl = Lack of visionary leaders

eth = Ethnicity

reb = Religious bias

aba = Abandonment

pol = Politics

lfs = Lack of Feasibility study

spc = Siphoning of public funds by contractors

spo = Siphoning of public funds by public officials

lod = Lack of dredging

lpl = Lack of private sector Investment

lpi = Lack of public sector Investment

lfi = Lack of foreign direct Investment

ins = Insecurity

III. RESULTS

All Households in towns along major inland water ways of Nigeria

The Principal Component Analysis (PCA) result identified and classified all challenges of harnessing the regional development potentials of towns along major inland water ways of Nigeria into 5 components. Component 1 was loaded significantly on 12 factors as distinct from other challenges of harnessing the regional development potentials of towns along major inland water ways of Nigeria. These are: lack of regional development plan (0.958), lack of adequate monitoring and evaluation (0.944), inadequate regulation and law (0.630), lack of fund (0.966), absence of good governance (0.959), lack of visionary leaders (0.955), lack of feasibility study (0.962), lack of dredging (0.964), lack of private sector investment (0.959), lack of public sector investment (0.966), lack of foreign direct investment (0.963) and insecurity (0.959).

It has Eigen value of 10.551 and explained 42.205 percent of challenges of harnessing the regional development potentials of towns along major inland water ways of Nigeria. Component 1 is an index for measuring lack of veritable tools for regional development in towns along major inland water ways of Nigeria. The defining variable is lack of fund. (See table 1).

Component 2 was loaded significantly on 6 factors as distinct from other challenges of harnessing the regional development potentials of towns along major inland water ways of Nigeria. These are: environmental problems (0.984), youth militancy and violence (0.978), siphoning of public funds by contractors (0.985), siphoning of public funds by public officials (0.970), abandonment (0.981) and political instability (0.985).

It has Eigen value of 5.965 and explained 23.861 percent of challenges of harnessing the regional development potentials of towns along major inland water ways of Nigeria. Component 2 is an index for measuring bad governance in towns along major inland water ways of Nigeria. The defining variable is siphoning of public funds by contractors. (See table 1).

Component 3 was loaded significantly on 3 factors as distinct from other challenges of harnessing the regional development potentials of towns along major inland water ways of Nigeria. These are: use of incompetent contractors (0.985), politics (0.983) and corruption (0.982).

It has Eigen value of 2.991 and explained 11.966 percent of challenges of harnessing the regional development potentials of towns along major inland water ways of Nigeria. Component 3 is an index for measuring corruption in towns along major inland water ways of Nigeria. The defining variable is use of incompetent contractors. (See table 1).

Component 4 was loaded significantly on 2 factors as distinct from other challenges of harnessing the regional development potentials of towns along major inland water ways of Nigeria. These are: ethnicity (0.980) and religious bias (0.980).

It has Eigen value of 2.293 and explained 9.171 percent of challenges of harnessing the regional development potentials of towns along major inland water ways of Nigeria. Component 4 is an index for measuring cultural factor in towns along major inland water ways of Nigeria. The defining variable is ethnicity. (See table 1).

Component 5 was loaded significantly on 2 factors as distinct from other challenges of harnessing the regional development potentials of towns along major inland water ways of Nigeria. These are: misplacement of priorities (0.982) and apathy of the government as a result of ignorance (0.981).

It has Eigen value of 2.089 and explained 8.356 percent of challenges of harnessing the regional development potentials of towns along major inland water ways of Nigeria. Component 5 is an index for measuring lack of interest by government in towns along major inland water ways of Nigeria. The defining variable is misplacement of priorities. (See table 1).

In overall, challenges of harnessing the regional development potentials of towns along major inland water ways of Nigeria were identified and classified as follows: lack of veritable tools for regional development, bad governance, corruption, cultural factor and lack of interest by government.

They accounted for 95.56 percent of challenges of harnessing the regional development potentials of towns along major inland water ways of Nigeria.

Table 1: Challenges of Harnessing the Regional Development Potentials of Towns along Major Inland Water Ways of Nigeria.

Challenges of Harnessing the Regional Development Potentials of Towns along Major Inland Water Ways of Nigeria	Component				
	1	2	3	4	5
Lack of regional development plan	.958				
Environmental problems		.984			
Youth militancy and violence		.978			
Use of incompetent contractors			.985		
Lack of adequate monitoring and evaluation	.944				
Corruption			.982		
Apathy of the government as a result of ignorance					.981
Inadequate regulation and law	.630				
Lack of fund	.966				
Absence of Good Governance	.959				
Misplacement of Priorities					.982
Political Instability		.985			
Lack of visionary leaders	.955				
Ethnicity				.980	
Religious bias				.980	
Abandonment		.981			
Politics			.983		
Lack of Feasibility study	.962				
Siphoning of public funds by contractors		.985			
Siphoning of public funds by public officials		.970			
Lack of dredging	.964				
Lack of private sector Investment	.959				
Lack of public sector Investment	.966				
Lack of foreign direct Investment	.963				

Insecurity	.959				
Eigen Value	10.551	5.965	2.991	2.293	2.089
% of Variance	42.205	23.861	11.966	9.171	8.356

Sources: Researcher's Field Work 2021.

IV DISCUSSION

The Principal Component Analysis (PCA) result identified and classified all challenges of harnessing the regional development potentials of towns along major inland water ways of Nigeria into 5 factors. These factors are lack of veritable tools for regional development, bad governance, corruption, cultural factor and lack of interest by government. The implications of this result with respect to each of the 5 identified challenges of harnessing the regional development potentials of towns along major inland water ways are as follows:

Lack of Veritable Tools for Regional Development: This is the first most observed challenge of harnessing the regional development potentials in towns along major inland water ways of Nigeria (42.22 percent). It comprised of lack of regional development, lack of adequate monitoring and evaluation, inadequate regulation and law, lack of fund, absence of good governance, lack of visionary leaders, lack of feasibility study, lack of dredging, lack of private sector investment, lack of public sector investment, lack of foreign direct investment and insecurity.

Among these 12 identified factors of lack of veritable tools for regional development, lack of fund (0.966) was most observed challenge of harnessing the regional development potentials in towns along major inland water ways of Nigeria. It was followed in descending order by lack of public sector investment (0.966), lack of dredging (0.964), lack of foreign direct investment (0.963), lack of feasibility study (0.962), inadequate regulation and law (0.630), absence of good governance (0.959), lack of private sector investment (0.959), insecurity (0.959), lack of regional development plan (0.958), lack of visionary leaders (0.955) and lack of adequate monitoring and evaluation (0.944).

This is an indication that lack of veritable tools for regional development (42.22 percent) is a significant challenge of harnessing the regional development potentials in towns along major inland water ways of Nigeria.

Bad Governance: This is the second most observed challenge of harnessing the regional development potentials in towns along major inland water ways of Nigeria (23.86 percent). It comprised of environmental problems, youth militancy and violence, siphoning of public funds by contractors, siphoning of public funds by public officials, abandonment and political instability

Among these 6 identified factors of bad governance, siphoning of public funds by contractors (0.985) was most observed challenge of harnessing the regional development potentials in towns along major inland water ways of Nigeria. It was followed in descending order by political instability (0.985), environmental problems (0.984), abandonment (0.981), youth militancy and violence (0.978) and siphoning of public funds by public officials (0.970),

This is an indication that bad governance (23.86 percent) is a significant challenge of harnessing the regional development potentials in towns along major inland water ways of Nigeria.

Corruption: This is the third most observed challenge of harnessing the regional development potentials in towns along major inland water ways of Nigeria (11.97 percent). It comprised of use of incompetent contractors, politics and corruption.

Among these 3 identified factors of corruption, use of incompetent contractors (0.985) was most observed challenge of harnessing the regional development potentials in towns along major inland water ways of Nigeria. It was followed in descending order by politics (0.983) and corruption (0.982).

This is an indication that corruption (11.97 percent) is a significant challenge of harnessing the regional development potentials in towns along major inland water ways of Nigeria.

Cultural Factor: This is the fourth most observed challenge of harnessing the regional development potentials in towns along major inland water ways of Nigeria (9.17 percent). It comprised of ethnicity and religious bias.

Among these 2 identified factors of cultural factor, ethnicity (0.980) was most observed challenge of harnessing the regional development potentials in towns along major inland water ways of Nigeria. It was followed in descending order by religious bias (0.980).

This is an indication that cultural factor (9.17 percent) is a significant challenge of harnessing the regional development potentials in towns along major inland water ways of Nigeria.

Lack of Interest by Government: This is the least most observed challenge of harnessing the regional development potentials in towns along major inland water ways of Nigeria (8.36 percent). It comprised of misplacement of priorities and apathy of the government as a result of ignorance.

Among these 2 identified factors of lack of interest by government, misplacement of priorities (0.982) was most observed challenge of harnessing the regional development potentials in towns along major inland water ways of Nigeria. It was followed in descending order by apathy of the government as a result of ignorance (0.981).

This is an indication that lack of interest by government. (8.36 percent) is a significant challenge of harnessing the regional development potentials in towns along major inland water ways of Nigeria.

V. RECOMMENDATIONS

Base on the research findings, this study recommends that Nigerian government should take urgent steps in dealing with enormous challenges confronting all efforts towards harnessing the regional development potentials of towns along major inland water ways of Nigeria.

VI. CONCLUSION

There are a lot of factors confronting all efforts towards harnessing the regional development potentials of towns along major inland water ways of Nigeria. These factors appear unabated for many years now and have contributed majorly in underdevelopment of towns along major inland water ways of Nigeria.

REFERENCES

Beriatos, E. and Papageorgiou, M. (2010). Sustainable planning of the coastal zone in Mediterranean 46th ISOCARP Congress. Available on http://www.isocarp.net/Data/case_studies/1727.pdf

Dung-Gwom, J. Y. (2010) Evaluation of the Present Government Agenda on Development as Regional Planning Exercise Vision 20:2020 and Nigerian National Physical Planning. The Town Planners Registration Council and Nigerian Institute of Town Planners; Mandatory Continuing Professional Development Program MCPDP, 15-59.

Isidiho, A. O. and Sabra M. S. (2017). Challenges Facing Niger Delta Development Commission (NDDC) Projects in Imo State and Niger Delta Region in Nigeria. International Journal of Humanities and Social Science, 5(6), 37

Kerlinger F. N, Lee H. P. (2000), "Foundations of Behavioral Research", Fourth edition, Wadsworth, U.S.A.

Okosun Andrew Eraga, Nwachukwu Maxwell Umunna, Ogbazi Joy Ukamaka, Jiburum Uloma and Okeke Donald Chiuba. (2019). Analysis of Factors that Influence Land Use Dynamics in Nigeria. Journal of Architectural Drawing, 4(2), 1–14. http://doi.org/10.5281/zenodo.3560610

Williams B (1978), "A Sample of Sampling", New York.