



# INTERNATIONAL CONFERENCE ON AFRICAN DEVELOPMENT STRATEGIES

## THEME

Advancing Sustainable Strategies for African Development

## OBJECTIVE

The emphasis of the conference is on premium quality, theoretical as well as applied research on issues relating to contemporary issues that affects the development of the African Continent. Conference participants are expected to assess the impact of current growth strategies in Africa, discuss successes and lessons learned, and identifying remaining gaps, challenges, and emerging issues.

**DATE:** 22nd - 23rd July, 2020

**VENUE:** Gombe State University, Nigeria

**TIME:** 10:00 am

## CONFERENCE PANEL

**Prof. Yusufu Ali Zoaka**  
University of Abuja, Nigeria

**Prof. Nathaniel Ozigbo**  
University of Abuja, Nigeria

**Prof. Agnes Antai**  
University of Calabar, Nigeria

**Prof. Thomas Traynor**  
Wright State University, USA

**Prof. Fatile Jacob Olufemi**  
Lagos State University, Nigeria

**Prof. Lars Kolvereid**  
Bodo Graduate School of Business, Norway

**Engr. (Dr.) Diji Chucks**  
Kampala International University

**Sr. Prof. Ezeh Mary-Noelle Ethel Ngozi**  
Chukwuemeka Odumegwu Ojukwu  
University, Anambra State, Nigeria

**Dr. Bassey Anam**  
University of Calabar, Nigeria

**Dr. Babajide Veronica**  
University of Lagos, Nigeria

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# **INTERNATIONAL CONFERENCE ON AFRICAN DEVELOPMENT STRATEGIES**

## **CONFERENCE PROGRAMME**

### **DAY ONE – Wednesday 22nd July, 2020**

#### **OPENING SESSION/PLENARY**

Conference Registration	- 8:00am – 9:00am
Opening Prayer/Welcome Remark	- 9:00am – 9:15am
Institutional Brief/Chairman's Opening Remark	- 9:15am – 9:30am
Research Training	- 9:30am – 12noon
Launch Break/Group Photograph	- 12noon – 1:00pm
Plenary Session	- 1:00pm – 4:00pm
Policy Review Session	- 4:00pm – 5:00pm

### **DAY TWO – Thursday 23rd July, 2020**

#### **OPENING SESSION/PLENARY**

Conference Registration	- 8:00am – 9:00am
Opening Prayer/Welcome Remark	- 9:00am – 9:15am
Institutional Brief/Chairman's Opening Remark	- 9:15am – 9:30am
Research Training	- 9:30am – 12noon
Launch Break/Group Photograph	- 12noon – 1:00pm
Plenary Session	- 1:00pm – 4:00pm
Policy Review Session	- 4:00pm – 5:00pm



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Given this day 22nd February, 2019 at the University of Dar Es Salaam, Tanzania

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 Director - IIPRDS & UN-African IP-SDGs  
 University of Calabar-Nigeria

**Paul Henderson**  
 United Nations Research Consultant  
 New York, United States

Project Coordinators  
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Dated this day 5th November, 2019  
 University of Ghana, Accra



**Professor Havindra Kumar**  
 former Vice Chancellor  
 Ombudsman, Swarni Vivekanand,  
 Subharati University, Meerut, India.

**Dr. Bassey Anam**  
 Director, IIPRDS  
 University of Calabar,  
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# Contents

	<b>Abstracts Title/Author(s)</b>
1	<b>A Pandemic Amid a Pandemic: An Examination of the Rising Cases of Rape in Nigeria During the Lockdown Occasioned by Corona Virus.</b> Maina Williams Apikins
2	<b>The Nigerian Transportation Industry: A Critical Appraisal of its Nature, Characteristics and Development</b> Maina Williams Apikins
3	<b>Mapping of the Spatial Distribution Pattern of Health Care Facilities in Bauchi Metropolis, Using Geographic Information System Bauchi, Bauchi State, Nigeria</b> <sup>1</sup> Abah Sunday Ochebo, <sup>2</sup> Ayuba Nuhu Moris, <sup>3</sup> Mohammed Oshomah Kashetu & <sup>4</sup> Haruna Dadi
4	<b>Evaluation of Local Government Performances: A Study of Bauchi State</b> Abdulrahman Abdullahi
5	<b>Adopting Energy Efficiency: A Path for Sustainable Energy Development in Nigerian Power Sector</b> <sup>1</sup> Engr. Musa Umar & <sup>2</sup> Engr. John Nweke
6	<b>Utilization of Information and Communication Technology (ICT) in Some Selected University Libraries in North East Zone, Nigeria</b> <sup>1</sup> Aisha Ali Kafama & <sup>2</sup> Bukola Agboola
7	<b>Solar Energy Potential in Nigeria; Alternative Source to Electric Power Generation</b> <sup>1</sup> John Nweke & <sup>2</sup> Umar Musa
8	<b>Can Rural Grazing Area Settlement be the Solution? Interrogating the Nexus between Climate Change, Transhumance and Food Security in Nigeria</b> <sup>1</sup> Abada, Ifeanyichukwu Michael & <sup>2</sup> Omeh, Paul Hezekiah
9	<b>On Piece-Wise Modelling of Survival Data with Time Changing Covariate Function</b> <sup>1</sup> Omaku, Peter Enesi & <sup>2</sup> J. S Ibinayin

# Contents

	<b>Abstracts</b>	<b>Title/Author(s)</b>
10	<b>Promoting Quality Education for Job Creation in Nigeria, Challenge and the Way Forward</b>	Mrs. Jummia Alfred Onen
11	<b>An Assessment on the Effect of Irrigation Interval on the Growth and Yield of Amaranthus (<i>Amaranthus Cruentus</i>)</b>	Abdullahi Mohammed



# Conference Abstracts

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## A Pandemic Amid a Pandemic: An Examination of the Rising Cases of Rape in Nigeria During the Lockdown Occasioned by Corona Virus

**Maina Williams Apikins**

*Nigerian Institute of Transport Technology,*

*An Affiliate of Ahmadu Bello University Zaria, Kaduna State*

### Abstract

The outbreak of Pandemic Diseases is not new in the world, from the profile of previous pandemics there were Smallpox, Cholera, Yellow-Fever, SAARS, HIV/AIDS, Ebola etc. Since the outbreak of Covid-19, a novel of Corona virus family, in Wuhan, China, in November, 2019, the world has known no peace. The pandemic spread like wild fire through human-to-human transmissions from Continent to Continents, with humungous humanitarian catastrophes. It momentarily brought global hegemonic powers to their knees, and reduced science and technology to naught. As at 22<sup>nd</sup> June, 2020, the diseases had infected 8, 843, 418 people globally, while 465, 475 people have died of it (JHU, 2020). As a remedial measure to curtail its importation and contagiousness, Nations, States at national and sub-national levels shot their borders, there was an unprecedented lockdown globally. Nigeria's index case, was an Italian industrialist who arrived Lagos from Milan, Italy on the 25<sup>th</sup> of February, 2020. Amid the lockdown, the "rape pandemic" increased exponentially in Nigeria; consequently, within this scope, the paper examine the reasons for the rise in rape crimes, the surrounding myths, the impacts on the victims, rape prevention, and it will suggest methodologies to stem the tide. The Study is qualitative, and within the context of the Development theory, thematic data on the problematique were descriptively presented and analysed.

**Keywords:** *Corona Virus Pandemic, Rising Cases of Rape, Nigeria, Women and young girls*

## The Nigerian Transportation Industry: A Critical Appraisal of its Nature, Characteristics and Development

**Maina Williams Apikins**

*Nigerian Institute of Transport Technology,*

*An Affiliate of Ahmadu Bello University Zaria, Kaduna State*

### Abstract

The basic necessities of life, namely, food, clothes and shelter are impossible to achieve in any society without transportation; consequently, the movement of people, goods, services and information has always been fundamental components of human societies. Hence, transportation is said to be as old as Man. Developing the transport industry has been a continuous challenge to satisfy mobility needs, to prop economic development, and to participate in the global economy. The constant phenomenon of scarce human and material resources, as well as, the indispensable need for the exchange of goods and services had justified the importance of transportation in human history as a catalyst for development. The Development theory was utilized as a framework for analysis, while the resources obtained through Secondary method provided immense insights on the research problem. Upon a critical appraisal, the paper observed that the industry is heterogenous in nature, and each sector responds to different incentives and stimuli. Lastly, the paper concludes that the Nigerian transportation industry has metamorphosed from primitive locomotion to an ultimate jet speed; thus for the developmental strides to be sustained and improved upon in tandem with global best practices, the bulk of activities in the industry must be privately driven, and it must be fully integrated, and propelled by technology.

**Keywords:** *Nigerian Transportation Industry, Development, Multi-modal, Characteristics, Nature*

## Mapping of the Spatial Distribution Pattern of Health Care Facilities in Bauchi Metropolis, Using Geographic Information System Bauchi, Bauchi State, Nigeria

<sup>1</sup>Abah Sunday Ochepo, <sup>2</sup>Ayuba Nuhu Moris,

<sup>3</sup>Mohammed Oshomah Kashetu & <sup>4</sup>Haruna Dadi

<sup>1,3&4</sup>*Department of Surveying and Geo in Formatics, Federal Polytechnic Bauchi*

<sup>2</sup>*Ministry of Land and Survey Bauchi*

### Abstract

Health is the physical, mental, and social well-being, and as a resources for living a full life. It refers not only to the absence of disease, but the ability to recover and bounce back from illness and other problems. The purpose of this research is to mapped out the spatial distribution pattern of health facilities in Bauchi metropolis for both the public and the private sector. The research problem under consideration in this study focuses on the lack of accurate map and robust spatial database of health facilities that exist in Bauchi metropolis. This can certainly assist policy makers make informed decisions for the overall benefits of the public. The objectives include mapping, creation of a spatial database of healthcare facilities and analyzing using Arc GIS 10.4 the distribution pattern of the facilities. Methods used include geocoding of the healthcare facilities spatial and attribute query as well as average nearest neighbor index. The result includes the cartographic display of sixty two (62) healthcare facilities, clustered pattern of the health facilities and robust spatial database of the existing healthcare facilities. Thus, it has been concluded that the existing healthcare facilities are in some few areas at the detriment of other areas. The spatial database developed will enable decision makers to improve future planning of the healthcare facilities. Finally, this research recommended that both private and public healthcare providers should adopt effective use of spatial database for easy planning and improves access to general public.

**Keywords:** *Mapping, GIS and Geo-coding*

## Evaluation of Local Government Performances: A Study of Bauchi State

**Abdulrahman Abdullahi**

*Department of Public Administration,*

*Faculty of Social and Management Sciences, Bauchi State University, Gadau*

### Abstract

The paper intended to measure performance of local government councils in Bauchi State. There is a growing need for holding government entities accountable to public in this democratic dispensation. People need change in the ways and manners government operated over the years. The study found out that, despite billions of naira allocated to local government areas in the state through State/Local government Joint Account, they were not able to harness and channel these resources to grass-root development due to state government undue interference. All the six local government areas so far studied were able to spend less than 50% of their capital allocations. The researcher utilized Multi-stage sampling technique: Cluster sampling was used to divide the state in to three (3) clusters while purposive sampling technique was used to select two Local Governments; one rural one urban from each cluster (senatorial district). The study utilized secondary source of data and ratio was used to analyse the data. The researcher recommended the scrap of the State/Local Government Joint Account to ensure sovereignty and financial autonomy of local government areas. Also Local governments' performance rating institution should be created to evaluate and measure performance of Local Government across the nation.

**Keywords:** *Local Government, Performance Measurement and Statutory Allocation*

## Adopting Energy Efficiency: A Path for Sustainable Energy Development in Nigerian Power Sector

<sup>1</sup>Engr. Musa Umar & <sup>2</sup>Engr. John Nweke

*Department of Electrical and Electronic Engineering Technology  
Federal Polytechnic Kaura Namoda, Zamfara State*

### Abstract

Energy consumption has grown incredibly fast over the last few decades. We are in danger of using up the planets natural resources of destroying vital habitats and polluting the air we need to breathe. A research conducted recently shows that, up to half of the energy currently consumed can be saved in the country if energy is efficiently utilized. The processes of extraction, conversion, and utilization of energy is prone to wastages, and the consequence of such waste could directly leads to environmental degradation, faster depletion of energy resources and increased cost of energy products and services. Energy utilization in Nigeria is far from efficient, forest and woodland reserves are being depleted for heating and cooking purposes using traditional stoves of very less efficiency. From the electrical power perspective, inefficient electrical appliances (lighting, refrigeration, air conditioning, motors, fans etc) in the residential, commercial and industrial sectors in the face of inadequate has aggravated the demand-supply imbalance of electrical power. More particularly, the residential building sector which is the highest energy consumption sector of the economy, and is associated with energy efficiency problems. It accounts for about 50% or more of annual electricity power consumption with an associated problem of wastage due to lack of energy saving measures in place. This paper assesses possible ways to efficient energy utilization for sustainable energy development in Nigerian economy sector.

**Keywords:** *Energy utilization, Sustainable development, Efficient energy, Energy, Power sector*



## Utilization of Information and Communication Technology (ICT) in Some Selected University Libraries in North East Zone, Nigeria

<sup>1</sup>Aisha Ali Kafama & <sup>2</sup>Bukola Agboola

<sup>1</sup>Department of Library & Information Science, University of Maiduguri, Borno State

<sup>2</sup>University Library, Federal University Gashua, Yobe State

### Abstract

This study examines the utilization of information and communication technology in some selected university libraries in Northeast zone, Nigeria. Utilization is the application of ICT in providing library services in university libraries such as email services, circulation services, serials services, collection development services, cataloguing and classification services. The study was guided by two (2) objectives, two (2) research questions. Survey research design was adopted for the study and data was gathered through the instrument of a questionnaire. The target population for the study is 21,477 and the sample size is 1090 registered library users in selected university libraries under study. Systematic sampling technique was used for the selection of three university libraries (Abubakar Tafawa Balewa University Library Bauchi (ATBU), Goodluck Jonathan Library, Yobe State University Damaturu, (YSU), and Ramat Library University of Maiduguri). Data were analyzed through descriptive statistics of frequency counts and percentage. Based on the findings, two (2) recommendations were formulated for improvement. Conclusively, the university managements in collaboration with the library management should make ICT utilization easy for its patrons in ensuring stable connectivity of internet.

**Keywords:** *Utilization, Networking, Internet Connectivity, Capacity Building and ICT*

## Solar Energy Potential in Nigeria; Alternative Source to Electric Power Generation

<sup>1</sup>John Nweke & <sup>2</sup>Umar Musa

<sup>1&2</sup>*Department of Electrical and Electronic Engineering,  
Federal Polytechnic Kaura-Namoda, Zamfara, Nigeria*

### Abstract

Renewable energy resources in Nigeria especially Solar Energy have a lot of potential due to the high sunshine irradiation in the country. The total annual average of total solar radiation varies from the coastal latitudes from about 3.5 KWhm<sup>2</sup>/day to the semi-arid areas in the far north with 7kWhm<sup>2</sup>/day. However, Nigeria receives solar radiation at a rate of about 19.8 MJm<sup>2</sup>/day. The average sunshine hours in the country are estimated to be six hours per day, and solar radiation is quite well distributed. In Nigeria, since solar radiation is at an average rate of about 5.5 KWhm<sup>2</sup>/day and approximately covers one percent of the country's landmass area of 923,773km<sup>2</sup>, then solar electricity generation is possible. This potential is underutilized in Nigeria contrary to present innovation based on clean energy exploration. Although there are off-grid utilizations of this natural potential high solar irradiation especially in the Northern region, the Nigerian power system is not yet grid-connected with solar renewable energy...The paper reviewed the potential endowment of solar renewable source energy and the need to harvest it for electric power generation. This will produce an improved power supply in the country Also, this review will invariably, provides a benchmark for policymakers and energy investors' keen interest to promote solar source power generation in the country

**Keywords:** *Solar, Irradiation, Power, Potential, Generation*

## Can Rural Grazing Area Settlement be the Solution? Interrogating the Nexus between Climate Change, Transhumance and Food Security in Nigeria

<sup>1</sup>Abada, Ifeanyichukwu Michael & <sup>2</sup>Omeh, Paul Hezekiah

<sup>1&2</sup>Department of Political Science,

University of Nigeria, Nsukka, Enugu State, Nigeria

### Abstract

The constant and ever increasing changes in the atmospheric and ozone layer formations have implicated on desertification as a result of changes in climatic conditions over time. Thus, induced by both natural and man-made factors, climate change variability brings grave threats such as land degradation, poor crop yields and conservations and desertification for pastoral activities. The lack and shrinkage on the availability of water, pasture and grazing zones for pastoralists have prompted the herders' movement from arid areas in the Northern hemisphere to the River Benue and other southern states of the country for sustenance. Such downward movement of the herders has triggered conflicts between the indigenous farmers and the pastoral over the destruction of farms by the later which leads to food scarcity and loss of life and property. The paper interrogated the nexus between climatic change variability on the pastoral activities and its implication on food production in Nigeria. The paper appropriated documentary method, and data were ostensibly generated through secondary sources of data collection and analyzed in content. The theoretical framework of analysis for the study is anchored on the theory of Eco-violence as propounded by Thomas Homer-Dixon in 1998. The findings of the study had significantly revealed that the struggle for limited natural resources has aggravated conflicts, reduction in incomes that accrue to farmers and low food production for human life sustenance. The paper recommended among others the establishment of Ruga settlement at Sambisa forest, enforcement of laws on carbon marketing, training of pastoralists in forage conservation techniques, introduction of Nanotechnology and breeding of livestock that can adapt in harsh climatic condition.

**Keywords:** *Climate change, Livestock, Ruga Settlement, Security, Transhumance*

## On Piece-Wise Modelling of Survival Data with Time Changing Covariate Function

<sup>1</sup>Omaku, Peter Enesi & <sup>2</sup>J. S Ibinayin

<sup>1&2</sup>Department of Mathematics & Statistics,  
Federal Polytechnic Nasarawa – Nigeria

### Abstract

Survival analysis involve the set of statistical techniques or procedures used to study time until an event occurs, these techniques are not without some conditions. One of the basic assumptions is that, to enable a straight forward interpretation of hazard rates of subject's covariate(s) on some reference categories or in situations where variables are continuous in nature, the hazard rates must be constant through time “also known as the proportional hazard assumption” for cox regression. This assumption is often violated in medical practice where subject's vital statistics or measures are often time varying, as their medical situations changes with time. This paper under study a modification of Piece wise survival model, where three levels of Weibull distribution were assumed for baseline hazards, the sensitivity of the baselines were accessed under several censoring percentages (0%, 25%, 50%, & 75%) and sample sizes ( $n=100$ ,  $n=500$  &  $n=1000$ ), for when models were Single parametric (SPM) and when partitioned – Piece wise Parametric Model (PPM). A Piece-wise Bayesian hazard model with structured additive predictors in which the functional form of time varying covariate was incorporated in a non-proportional hazards framework was developed, capable of incorporating complex situations in a more flexible framework. Analysis was done utilizing MCMC simulation technique. Results revealed on comparison that the PPM outperformed the SPM with smaller DIC values and larger predictive powers with the LPML criterion and consistently so throughout all simulations.

**Keywords:** *Time varying covariates, Proportional hazard, Violation, Piece-wise survival model, Piece-wise parametric model, Single parametric model*

## Promoting Quality Education for Job Creation in Nigeria, Challenge and the Way Forward

**Mrs. Jummia Alfred Onen**

*College of Education Science and Technology Bama,  
Borno State, Nigeria*

### Abstract

Education is viewed as most important instrument for change, progress and development. Throughout human development, education remains the most important agent of social transformation and conservation and indeed the most significant means by which the experiences all human communities are transmitted across generations. This paper is going to highlight how access to quality education will help in creating jobs for our teeming youths after graduation from colleges, polytechnics and university. At the course of discussion, the paper is also going to enumerate the challenges and possible way forward.

**Keywords:** *Promoting quality education, and Job Creation*

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## An Assessment on the Effect of Irrigation Interval on the Growth and Yield of Amaranthus (*Amaranthus Cruentus*)

**Abdullahi Mohammed**

*Department of Agricultural Education  
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### Abstract

Amaranthus is one of the most widely cultivated leafy vegetables cultivated worldwide. It is often regarded as a dual purpose crop, both for its highly nutritious seed and basically for its leaves. The research was conducted at Isa –Kaita college of Education, Dutsinma between June and July, 2019 to determine the right frequency of irrigation water application for optimum growth and yield of the crop. There were a total of three treatments; application of water once a week, twice a week and thrice a week. These were replicated three times, making a total of nine plots, arranged in a randomized complete block design (RCBD). Growth and yield parameters taken on weekly basis were Plant height, number of leaves per plant and leaf area, while fresh shoot weight was taken at the harvest time. Data obtained was subjected to statistical analysis using ANOVA at 5% level of significance as a tool. The results showed highest Mean values for the plants irrigated twice per week. This was followed by those with thrice irrigation frequency, and once irrigation ranked the least. This also followed the significant statistical difference among the treatments which was at reverse from the replications which showed non statistical difference. Recommendation was offered on the right frequency of water application on the crop for optimum performance and returns.

**Keywords:** *Effect of Irrigation, Interval and Growth*

