



# **NATIONAL ECONOMIC TRANSFORMATION & SUSTAINABLE DEVELOPMENT CONFERENCE**

## **THEME**

Nigeria Economy, Governance, Security & Emerging Development Challenges: Multi-Sectoral Assessment

**DATE:** 29th - 30th September, 2020

**TIME:** 10:00 am

## **RESEARCH TRAINING WORKSHOP**

- Developing Research Problem
- Literature and Theoretical Discourse
- Qualitative and Quantitative Research Methods
- Publication Index: Web of Science & Scopus
- Research Collaboration, Grants and Funding

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University of Calabar, Nigeria

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# **NATIONAL ECONOMIC TRANSFORMATION & SUSTAINABLE DEVELOPMENT CONFERENCE**

## **CONFERENCE PROGRAMME**

### **DAY ONE – Tuesday 29th September, 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 – Wednesday 30th September, 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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**Bassey Anam**  
Director - IIPRDS & UN-African IP-SDGs  
University of Calabar-Nigeria

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



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**Professor Ravindra Kumar**  
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Ombudsman, Swarni Vivekanand,  
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# Conference Abstracts

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## A Review on Some Physical Diagnostic Medical Imaging Scanning Procedures

<sup>1</sup>Yakubu Ibrahim Java, <sup>2</sup>Andrew Fambia & <sup>3</sup>Hafiz Aliyu

<sup>1&2</sup>Department of Physics, UIIECEST Bama, Borno State.

<sup>3</sup>RMK CARSTudunwada, Kano

### Abstract

This work is a review on some physical diagnostic medical imaging scanning procedures, since medical physicist who are charged with responsibility of producing quality diagnostic imaging consistent with the available technology and with optimized safety techniques are lacking. There have been serious staffing problems for both diagnoses and treatment in hospitals particularly in the developing countries like Nigeria. This study is important in order to identify how physics is applied in physical diagnostic medical imaging in hospitals. The finding from this work provides evident that electromagnetic waves and sound waves are applied by radiographers during diagnoses in order to detect fault in the human body, such as fractured bones, tissues, tendon and other internal organs. These are archived either by X-rays, Computer Tomography (CT) Scans, magnetic resonance imaging (MRI) or Ultra sound machine. The main conclusions drawn from this study are that X-ray/Computer Tomography (CT) Scans machines are used to detect images of bones and structures in the human body with the use of radiation. Ultra sound/magnetic resonance imaging (MRI) machines are used to examine the internal structures of a human body such as tendons, muscles, joint, blood vessels and internal organs with high frequency signals without radiation. It is recommended that ultra sound/MRI is the best method in physical diagnoses since they do not use radiation unlike Computer Tomography (CT) scans and X-rays. It is a well known fact that too much radiation damages the human cells which may eventually lead to death.

**Keywords:** *Medical imaging, Magnetic resonance, Radiation and frequency*

## The Roles of Public Libraries in Information Service Provision towards Achieving Sustainable Development Goals in Kaduna State, Nigeria

<sup>1</sup>Musa Aminu Umar, <sup>2</sup>Uman Hassan, <sup>3</sup>Mustapha Mannir, <sup>4</sup>Aliyu Haidar Abubakar & <sup>5</sup>Mohammad Nasiru Umar

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<sup>5</sup>Arewa House Historical Research Library, Arewa House, Kaduna

### Abstract

The United Nations Sustainable Development Goals (SDGs) is explicitly and directly linked to access to information and knowledge. This paper examines the roles of public libraries towards achieving sustainable development goals in Kaduna state. Three objectives were set out to be accomplished by the study. A survey research design was adopted using a questionnaire as a data collection instrument. A total of 2903 registered users of public libraries in the Kaduna State constituted the study population, while the study sample was collected using a stratified sampling technique. A sample of 2038 was drawn from the user population of 2903, where 30% out of the sample was drawn from the six (6) selected libraries, amounting to 611 for questionnaire administration. A total of 433 (71%) questionnaires were duly completed and returned. The findings arising from the study revealed that current awareness service, library instruction services, selective dissemination of information as well as indexing and abstracting were the services provided by the libraries covered by the study. The study also indicated that public libraries are active in achieving the Sustainable Development Goals (SDGs) in Kaduna State. For example, looking at the findings, Sustainable Development Goal 4: i.e. the provision of a safe and inclusive space for lifelong learning was identified as the leading role played by the public libraries covered by the study with 174 (40.2%) responses. SDGs 3: i.e. the provision of health information and literacy to the community on pregnancy, malaria, cholera and SDGs 8: i.e. the provision of training on the use of ICT as well as assistance on online job application processes, were also identified in the study as fundamental roles played by the libraries with the same response rate of 146 (33.7%). While looking at the challenges faced by the public libraries, the study reported lack of funds, lack of current materials, language barrier, lack of trained personnel and lack of Internet access were complained by the respondents as a hindrance to effective use of information resources. Given the above challenges, the study, therefore, recommended that issues relating to funding, staffing, information resources, innovative services, infrastructure all need to be addressed by taking proper measures. When these issues are resolved, it will go a long way towards achieving the (SDGs) in Nigeria and Africa at large.

**Keywords:** *Public Libraries, Sustainable Development Goals, Information Service, Library services, Information Service Providers, Kaduna State, Nigeria*

## Impact of Training on Academic Staff Development in the State Higher Educational Institutions of Borno State

**Dr. Aji Abdulmumini**

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*Umar Ibrahim Ibn El-kanemi College of Education Science and Technology,*

*P.M.B. 16 Bama. Borno State*

### Abstract

Academic staff are the backbone of any form of development. Training academic staff for knowledge and skills update is a necessity for state and national development. The study explores the Impact of training on academic staff development in the State higher educational institutions of Borno State. The study raised three questions to determine: The impact of training on academic staff development. Hypotheses was formulated and tested in line with the objectives of the study. Related literatures were reviewed based on the stated objective. Descriptive survey method was employed for the study. The population of the study were all academic staffs of the State higher educational institutions (1410). The sample of the study comprised all academic staff from the four selected institutions (938) using closed questionnaires. The collected data was presented by the use of simple frequency and percentages, and later analysed using Chi-square statistical technique. The finding reveals there is a significant relationship between training and academic staff development. The study concluded that office/housing accommodation influence academic staff development. It is recommended that the state should provide adequate funds for academic staff in the state higher education for training, workshops, conference, research and publications for knowledge and skill updates to boost academic staff productivity.

**Keywords:** *Impact, Training, Academic staff development*

## Components of Non-Revenue Water; Its Management as a Tool for Sustainable Water Resources; A Case Study of Doka District, Kaduna North LGA

<sup>1</sup>Ajoge, H. N., <sup>2</sup>Muhammad, M.N., <sup>3</sup>Ugwu, S. J., <sup>4</sup>Zayyanu, A.S. & <sup>5</sup>Akhadelor, M.O.

<sup>1,3</sup>*National Water Resources Institute, Kaduna*

<sup>2</sup>*Department of Chemistry, Nigerian Defence Academy, Kaduna,*

<sup>4</sup>*Department of Civil Engineering, Nigerian Defence Academy, Kaduna*

<sup>5</sup>*Federal College of Forestry Mechanization, Afaka, Kaduna*

### Abstract

Non-revenue water (NRW) is the difference between net water inputs in the distribution system and billed authorized consumption. Water resources are under stress due to growing population and climate change making a shift towards the implementation of non-revenue water reduction strategies in most countries worldwide (Kanakoudis and Muhammetoglu, 2014). It is expected that by 2030, 47 % of the world population will live in regions with severe water stress (González-gómez, García-rubio and Guardiola, 2015). The increase in water demand coupled with Non-Revenue Water (NRW) is causing a challenge in meeting water demands for all competing uses of water; hence the need to assess the management of non-revenue water in Doka district of Kaduna North LGA. In assessing the existing situation and the management strategies to minimize non-revenue water in Doka district questionnaires and Key Informant Interviews (KII) were administered using purposive sampling. Results show that plumbing materials to fix bursts and leakages which contributes highly to NRW is inadequate to the tune of about 70%. There should be a proactive programme of constantly reviewing the basis for estimation of bills for customers who are currently not metered to improve the accuracy of these estimates while efforts should be made to complete the metering of all customers;

**Keywords:** *Assessment, Management Strategies, Non-Revenue Water, Kaduna State Water Corporation (KADSWAC) and water Demand*



## Effect of Reading Comprehension on Reading Fluency among Pupils with Reading Difficulties in Primary Schools

**Binta Abdullahi Ammani**

*Department of Special Needs Education*

*Isa Kaita College of Education Dutsinma, Katsina State*

### Abstract

Reading is an integral part of Education and everyday life, the ultimate goal of reading is comprehension i.e. the ability to gather meaning from the printed materials. Fluency is one of the building blocks of reading because its development is directly related to comprehension. The ability to read fluently allowed readers to free up processing space so that they can comprehend effectively by making corrections to the text and acquire new vocabulary. This paper tends to identify pupils with difficulties in primary schools with recommendations and intervention procedures are giving, among the recommendations is to identify a reading problem for children they are to write down questions they don't understand and takes to teacher for extra help.

**Keywords:** *Oral reading fluency, Reading comprehension, Reading difficulties*

## Democracy and National Development in Nigeria: A Historical Approach

**Abdullahi Mohammed**

*Department of History*

*Isa Kaita College of Education Dutsinma Katsina State*

### Abstract

Democracy being a government based on the elective principles and popular representation at all levels of our national life, had passed through a number of evolutionary stages in Nigeria since the attainment of Independence in 1960. However, despite the importance of democracy as a tool for good governance and national development, the whole concept and practice of democracy have not ushered in any meaningful development in the Nigerian polity. This paper traces and discusses the evolutionary stages of the Nigerian democracy; highlighting its strengths and weaknesses and proffering solutions to the latter, one of which is allowing the people to elect their representatives in a truly democratic process. The paper concludes that there is no alternative to democracy, and it is only when the real democracy is practiced that Nigeria will be moved to greater heights to possibly compete with the advanced democracies in the world.

**Keywords:** *Democracy, National Development, Nigeria, Historical Approach*

## Relationship between Reasoning Ability and Academic Performance in Chemistry Among Pre NCE Students of Isa Kaita College of Education Dutsinma, Katsina State

**Bello Isa Karofi**

*Department of Adult and Non-Formal Education,  
Isa Kaita College of Education Dutsin-Ma, Katsina State*

### Abstract

This study investigated the relationship between reasoning ability and academic performance in chemistry among Pre-NCE students of Isa Kaita College of Education Dutsinma. Two research questions were raised and two null hypotheses were tested at 0.05 level of significance. The population of the study comprised of 2015/2016 Pre-NCE Chemistry students. A sample of 205 students was selected using proportionate random sampling technique, and was chosen using Krejcie and Morgan (1970) table for determining sample size from a given population. Two instruments were used for the purpose of the research, viz Group Assessment of Logical Reasoning Test (GALRT) and First Semester Pre-NCE results of chemistry. The validity of GALRT was determined by experts in Science Education and Educational Psychology and the reliability coefficients was determined using test re-test, and was found to be 0.79. The variables were compared and analyzed using Pearson Product Moment Correlation (PPMC). The results of the analysis revealed that, there was a significant relationship between students' reasoning ability and academic performance, there was no significant relationship between male and female students' reasoning ability and academic performance. It was recommended that science teachers should encourage students more especially female toward developing reasoning ability.

**Keywords:** *Relationship, Reasoning Ability, Academic Performance, Chemistry, Pre NCE Students, Isa Kaita College of Education*

## Evaluation of Evapotranspiration Models Using Climatic Data in Northern Guinea Savanna of Nigeria

<sup>1</sup>F. I. Adeyemi, <sup>2</sup>H.G. Aminu, <sup>3</sup>A. S. Adeyemi & <sup>4</sup>M. N. Yahaya

<sup>1&2</sup>Department of Agricultural and Bio-resources Engineering, ABU, Zaria, Nigeria

<sup>3</sup>Department of Agricultural Economics and Extension, NSU, Keffi, Nigeria

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### Abstract

The aim of this research work is to evaluate evapotranspiration models (Penman and Blaney- criddle) using climatic data in northern guinea savanna of Nigeria within latitude 11°11'N and longitude 7° 38'E. Monthly data of at least 8 years of record (2005 – 2012) were used in estimating the reference evapotranspiration rates of the region and comparing then them with measured data from the field using open pan. Furthermore, the work also proceeded in estimating the actual evapotranspiration rates with correlation to crop factors using maize and cowpea as sample crops. The Blaney- criddle and Penman's model were evaluated and the estimated result shows that the Penman provided greater values compared to the Blaney- criddle with the maximum value 9.6mm/day was recorded for Penman while 6.1mm/day was recorded for Blaney- criddle. A crop factor of 1.2 and 0.8 were used for maize and cowpea for both models. Moreso, when comparing the results from the models with Open pan evapotranspiration, it showed that the values recorded for the pan from the meteorological station were greater (50% - 70%) than that of the estimated values obtained from the two models used. However, 11.14 and 7.43mm/day were recorded for maize and cowpea from Penman's model, while 7.40 and 4.94mm/day were recorded for maize and cowpea from Blaney- criddle's model. Furthermore, the evaluation of results presented from the student T-test indicated that the Penman's model was recommended as the most appropriate and more reliable compared to that of the Blaney-criddle because it provided greater estimates of crop water requirement and the least mean error of  $\pm 0.15$  from the period under study. The study recommends that Penman's model should be used in predicting water evapotranspiration rates in the study area.

**Keywords:** *Evaporation, Transpiration, Models, Crop coefficient, Climate change*

## Performance Management Appraisal as Tools in Providing Effective Utilization of (ICT) in Enhancing Human and Technological Power to Any Organization

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### Abstract

The study discussed Performance management appraisal as one of the fundamental tools in providing everlasting solutions to any organization through the application of ICT that could provide effective transformations in both human and technological powers. ICT today has greatly advances many organizations in terms of effective production of goods and services in relations to skills accusation, motivation, rapid production and other necessary aspect in the organization. However, the study explores issues like research purpose aims and objective which shows how effective and efficient performance management utilized in and organization through the use of ICT. Similarly, the study also discussed crucial understanding by enplaning the general and the more specific term, such as organization in the 21<sup>st</sup> century and role of ICT IN THE 21<sup>st</sup> century. The study therefore, identified direct, need to understand and make consultations on other people work that was literature review, which stated that performances management, behavioral expectation and result expectation as the major avenue to improving managerial responsibility, it could be only achieved through the applicant of ICT. The study further mentioned and explains the paradigm of ICT Revolution in the 21<sup>st</sup> century, which revealed that information Communication Technology is one of the vital tools that could manufacture current manpower in and organization. Additionally, the research study methodology was purely conceptual, methods used for data collection was secondary information's such information were text books, journals, magazines, interments and other valid second hand information's. The study finally, established recommendations as a strategy for enhancing future organization through ICT Revolution.

**Keywords:** *Management, Appraisal, ICT, & Organization*

## Comparative Analysis of Awareness, Accessibility and Practice to HIV/AIDS Counselling among Students of Nuhu Bamalli Polytechnic and Federal College of Education Zaria, Kaduna State

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### Abstract

This study examines the comparative analysis of HIV/AIDS awareness and accessibility to counseling and testing among students of Nuhu Bamalli Polytechnic and Federal College of Education, Zaria. The study examines the level of students' awareness and sensitization to HIV/AIDS counseling and testing in the two institutions in Zaria. Another fundamental problem associated with students in Nigeria are that students who tested positive to HIV/AIDS sometimes refused to disclosed their status to the appropriate health organizations vis-à-vis medical personnel that could help to arrest the virus at the early stage of contact for fear of stigmatization. Importantly, students that go for HIV/AIDS test for the virus infection do not wait to know their status. The study argues that HIV prevention and counseling is a very important mode of behavioral intervention especially in the absence of an effective vaccine or a curative treatment. It also investigated why most students in tertiary institutions in Nigeria have bluntly refused to go for free HIV/AIDS counseling and testing to know their HIV status, despite aggressive campaign and sensitizations through radio, television stations, religious houses and hospitals both local and international domain to reduce the spread of the HIV/AIDS virus. The current study employed the Theory of Reasoned Action in the mid-1960s as the analytical framework to provide a conceptual foundation for its analysis. The method of data generation and analysis deployed for the study are both the quantitative and qualitative. This was derived from both secondary and the primary sources which include existing documents on the subject matter, text books, journal publications as well as related internet materials. In terms of the analyses that the work undertook, qualitative data was analysed descriptively while simple statistical tools were adopted in analysing the quantitative data (questionnaires). In the process, the study adopts a multi-stage cluster sampling procedure to determine the sample size of the study. Accordingly, the study used the Yamane's published table for the calculation of a sample size, provided for the sample sizes for a given combination of precisions, confidence levels and variability. The study chooses the sample sizes in proportion of their areas of studies. Federal College of Education Zaria has a population of 12,000 students while Nuhu Bamalli Polytechnic has a total population of 20,000 students. Thus, the study had to choose from the table, a population between 10 and 15 at 5% precision level where confidence level is 95% and p-5. Hence, a simple size of 395 was chosen at 5% precision level. The findings of the research revealed higher percentage of students attending FCE were aware of HIV/AIDS counseling and testing compared to those attending Nuhu Bamalli Polytechnic as reflected on the data establishing 85.8% while Nuhu Bamalli recorded 85%. The study concluded by recommending that more effort of government should be made on or studies be conducted with the provisions for HIV/AIDS testing readily available to ascertain the HIV/AIDS status of the students in other to know the prevalence.

**Keywords:** *Management, Appraisal, ICT, & Organization*

## The Prospects of Fine and Applied Arts Practicing among the Youths for Sustainable Development in Nigeria

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### Abstract

Despite the prospects in Fine and Applied Arts practice in Nigeria continues to decline, this is due to lack of awareness, patronage of art products, poor leadership among others. It is believed that Fine Arts practice is very important towards youth empowerment, self-reliance and socio-economic development. Our teeming numbers of youths need to have awareness, guide, support and encouragement for doing constant practice in the area so that they will acquire basic skills and earn their living, this will minimize high rate of unemployment among the youths and improve sustainable development in Nigeria. The professional artists are responsible for training of our teeming number of youths in the various fields of Fine and Applied Arts such as in painting, printmaking, interior decorations, fashion design etc. The paper highlights the Art history, concept of Fine and Applied Arts, relevance of practicing the area, youth empowerment, problems of Fine and Applied Arts etc. In conclusion, some suggestions and recommendations will be made towards the prospects of Fine and Applied Arts practicing among the youths for sustainable development in Nigeria.

**Keywords:** *Prospect, Fine Arts, Practice, Sustainable Development.*

## Development and Evaluation of a Manually Operated Single Row Multi-Purpose Weeder

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### Abstract

Weed control is one of the major problems in crops and vegetables production in Nigeria. Most of the peasant farmers use manual weeders in their cultivation, a process that is costly, labour intensive and time consuming. The process does not also give the farmer adequate returns to enable him breakeven. This study focus on designing, construction and evaluation of a hand-pushed weeder that would minimize the human effort, provide efficient work output and eliminate the challenges being faced by peasant farmers in agricultural production. Materials are selected to suit the construction of the weeder are durable and locally available, easily replaced if damaged and at affordable cost. They include mild steel (3mm, 5mm), 30mm circular (hollow) pipes, 10mm diameter steel rod, and 400mm diameter replaceable pneumatic and steel tyres to suit prevailing soil conditions. The developed weeder was evaluated in the experimental farm of IAR with impressive results. It works well in sandy loam soil of about 25.65% moisture content and requires less labour force compared to the manual hoe. It has about 84.7% weeding efficiency, 0.0129ha/hr effective field capacity, 0.019ha/hr theoretical field capacity and 68% field efficiency.

**Keywords:** *Manual weeding, Hand-pushed weeder, Field efficiency, Weeding efficiency*



## Role of Rural Farmers in the Development of Agriculture in Nigeria

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### Abstract

Agriculture contributes immensely to the African economy in various ways; namely, in the provision of food for the increasing population; supply of adequate raw materials to a growing industrial sector; a major source of employment; generation of foreign exchange earnings; and, provision of a market for the products of the industrial sector among others. This paper argues that the agrarian sector has a strong rural base; hence, concern for agriculture and rural development become synonymous, with a common root and that the bedrock of agriculture and agricultural development in Africa is rural development, without which all efforts at agricultural development will be futile. It observes that African agriculture remains largely traditional and concentrated in the hands of smallholders and pastoralists, and the neglect of agriculture has resulted to the mass exodus of rural dwellers and in turn has made the rural area qualitatively and quantitatively depopulated, and progressively less attractive for socio-economic investment. It discusses the problems and challenges posed by this and government responses to the rural infrastructural needs of the people in the rural areas. It therefore recommends that for the government(s) agricultural policies to achieve its target, there is need for an adequate level of strategically targeted investment in agriculture, upgrade rural infrastructure, boost productivity, and increase competitiveness of the farm output, in addition to fighting corruption. It is the view of the paper that in order to facilitate agricultural development, government should adopt an integrated rural development approach which is a multidimensional strategy for improving the quality of the life of the rural people. It concludes that rural development is imperative for improved of agricultural growth and development in Africa.

**Keywords:** *Agriculture, Agricultural Development, Rural Development and Integrated Rural Development*

## Impacts of Macro and Micro Economic Variables on the Financial Performance of Quoted Insurance Companies in Nigeria

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### Abstract

The insurance companies' ability to continue to cover risk in the economy hinges on their capacity to create profit or value for their shareholders. A well-developed and evolved insurance industry is a boom for economic development as it provides long-term funds for infrastructure development of every economy. The purpose of this study was to identify the key factors that affect profitability of insurance companies in Nigeria. Specifically, it investigates the internal or firm specific variables (underwriting risk, leverage ratio and liquidity ratio) and external or macro variable (growth rate of GDP). In order to achieve this objective, the fixed effect model was used instead of random effect model following the result of hausman test. Panel data covering 5 years period from 2015 to 2019 were analysed for 13 composite insurance companies registered with NAICOM as at 2018 (NAICOM, 2018). Results of the regression analysis revealed that liquidity, leverage and underwriting risk were significant determinants of firm financial performance while GDP growth was insignificant. Finally, the study suggested that managers of insurance companies as well as the policy makers in the country should take crucial measures by framing policies and strategies that aimed in improving the overall profitability of insurers.

**Keywords:** *Financial Performance, Liquidity, Leverage, underwriting risk and GDP*

## Regulatory Constraints in Multi-Modal Transportation in Nigeria: Interrogating the Administrative and Institutional Frameworks

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### Abstract

This study attempts a qualitative investigation of how people, goods, services and information are transported within the just-in-time concept safely, within applicable regulations. Consequently, the objective of this paper is to interrogate the administrative and institutional frameworks which provides for optional transportation services conducive for wider considerations in terms of costs and comfort. The study shall ascertain the efficiency cum effectiveness of these frameworks within the jurisdiction of Structural-Functionalist theory; while the relevant resources that will be analysed and presented descriptively, will be obtained via the secondary method. The paper observed that the existing multiplicity of regulatory bodies/agencies and their overlapping functions is a serious challenge, which invites confusion and chaos instead of sanity in some modes of transportation in Nigeria. Thus, the study noted that the uncoordinated method of enforcement of transport regulations in Nigeria, renders it ineffective is-à-vis regulatory mechanisms put in place to forestall challenges in multi-modal mobility. It observed that, to deal with the chaos in transport regulations, there exists the need to obtain additive insights to accelerate remediation/redress. The paper suggests a robust synergy amongst Institutional frameworks for regulating transport for effective and efficient performance. Furthermore, the percentage structure for transport administration, particularly of the road, being the dominant mode of transportation in the country should be reviewed. It was also suggested that the establishment of a National Transport Commission is sine-qua-non for the proper coordination activities in the country in tandem with modern practices. The concludes that government and the private sector operators must streamline the frameworks for transport regulation in Nigeria to upturn the operational constraints in regulating the sector.

**Keywords:** *Regulatory Agencies, Transport Regulation, Administrative and Institutional Frameworks, Modes of Transport, Multi-modal Transport*

## An Examination of the Alarming Rates of Infections and Deaths from Corona Virus Pandemic among Blacks in the United States of America in the First Quarter of 2020

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### Abstract

Mankind is at war with an invisible foe called Covid-19, a new type of deadly pandemic disease from the Corona-virus family. Since its outbreak in November, 2019 in Wuhan, China; it has devastated humanity and made mankind gullible, impotent and powerless; and it has momentarily debased science and technology, globally. According to the records of John Hopkins University (JHU), as at 4<sup>th</sup> August, 2020, it has infected over eighteen (18) million, and killed over half a million (695,848) persons globally. The spread of the virus metamorphosed from the phase of importation (index) to the phase of Community transmission through human-to-human. The USA is among the countries that are worst infected by the pandemic; as at 4<sup>th</sup> August, 2020, the JHU said over 4,742,277 Americans were infected, while over 156 thousand of them, mostly Blacks, were killed. In this vein, this paper seeks to examine the factors responsible for the alarming rates of Covid-19 infections and deaths among Blacks in the United States. The underlying vulnerabilities that necessitate such humungous infections and deaths among Black Americans will be highlighted, lessons from analysis of trends for the Global South will be harnessed; and the myths and conspiracy theories that is associated with the pandemic will be exposed. These are the germane phenomena that this paper seeks to examine. The Neo-functional theory is adopted as a theoretical framework for analysis, while the method is Ex-Post Facto. The paper observed that the infection of the virus is alarming among Black Americans in minority low income communities where basic social amenities are inadequate because of the social inequalities therein. It concludes that the pandemic is an existential threat to mankind, and until social inequalities are addressed in minority communities in the USA, the Blacks will continue to be vulnerable to Covid-19, and futuristic pandemics.

**Keywords:** *Corona-virus, Infections, Deaths, Pandemic, Black Americans.*

## Refining of Academic Libraries towards Digital Society for Sustainable Development

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### Abstract

This paper describes refining of academic libraries towards digital society for sustainable Development. It highlights the development of hybrid libraries as a magical solution to meet the information needs of library users in the digital age, showing great sensitivity in the use of new technologies. It also explores new trends in providing information that librarians can use to re-establish the university library to provide effective services. Lack of efficiency, technological inefficiency and inadequate energy supplies were highlighted as some of the challenges to effective service delivery for sustainable development. Libraries should strive to acquire ICT skills through personal training to be relevant and defend their profession, as training funds are not always appropriate. The study identified librarians and discussed academic libraries in the digital society, as well as providing services in a digital society.

**Keywords:** *Service delivery for sustainable development, Librarians, Academic libraries, Information needs, Digital society*

## Problems Associated with Cross-Border Patient Mobility and Utilization of Healthcare Facilities on the Nigeria-Cameroon Border, Bama Local Government Area, Borno State

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### Abstract

This research was carried out retrospectively on the Nigerian – Cameroon border. There are so many communities that live on this border. It was stated in the Border Community Development Agency Act (2003) that Bama Local Government area has 120 identified border communities. These populations therefore need to have access to healthcare facilities on either side of the boundary as they interact in different ways, which expose them to infections, contagious and other socially transmittable diseases. Cross-border healthcare access is therefore relevant to people living on the border. This study examines the extent of cross-border patient mobility and healthcare utilization in the three districts (Banki, Dare-el-jamal and Kumshe) on the Nigeria-Cameroon border. The researchers used mix methods research design. Survey was conducted supplemented by qualitative method which enables the researchers to obtain both quantitative and qualitative data. The researchers and two trained research assistants went to the two camps that host internally displaced persons (IDPs) from Bama local government area (Dalori camp I and II) and identified 625 cross-border patients that come from Banki, Dare-el-jamal and Kumshe districts. This served as the sample population for the research and 40% of the population was selected as sample respondents by random sampling technique. Descriptive statistical tools were used to interpret the data acquired i.e percentages and Chi-square at  $P \leq 0.05$  were used to test whether cross-border healthcare utilization in the study area was gender sensitive. Distance decay curves were also used to measure the impact of distance on the level of patronage of healthcare facilities across the Nigeria-Cameroon border. The study revealed that there were established health centres in the three districts but were poorly equipped and that more Nigerians patronize the healthcare facilities across the border where 65.5% of the respondents indicated that more Nigerians sought treatment in Cameroon.

**Keywords:** *Problems, Associated Cross-border, Patient mobility, Healthcare utilization, Distance and treatment*

## Role of Agricultural Mechanization in Rural Development: A Case Study of National Centre for Agricultural Mechanization (NCAM) in North-Central Nigeria

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### Abstract

The focus of this study is to examine the role of agricultural mechanization in improving agricultural production in Nigeria. It examines the benefits of adopting the developed technologies of the National Centre for Agricultural Mechanization in reducing drudgery and improving quality of life of farmers in the study area. Ten farming communities within four local government areas of Kwara State were selected for the study. These communities/settlements were selected based on their proximity to the Centre and were either aware or ignorant of the activities of the Centre with regards to the development of agriculture. A structured questionnaire was administered for selected farmers. The socio-economic characteristics of the respondents, educational level, land holding and productivity and income levels were examined and analysed. Results of the study indicated that 90% of the respondents were males. Only 80% of the respondents are in their productive years. 97% are the legal owners of their farm lands. 63% of the male respondents have no formal education while all the female respondents have a minimum of elementary education. The study also shows that about 2% of the respondents owned land of between 9 – 10 hectares while 35% have less than 1 hectare. Although most of the respondents refused to disclose their actual production output and accurate annual income, the study shows that most of the respondents have considerable increase in their output with the introduction of NCAM's activities, thus recording corresponding increase in their living standards.

**Keywords:** *Agricultural Mechanization, Rural Development, Agricultural Productivity, Technologies, Drudgery*

## Security Challenges in Nigeria: The Role of Traditional Institutions

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### Abstract

**E**thnic nationalities in Nigeria have a rich heritage which predates colonization. Prior to the advent of British colonialism in Nigeria, various ethnic nationalities have a well established political institution which met the social, economic and political needs and aspiration of their peoples. These institutions are today commonly referred to as traditional institution. The central concern of this paper is to examine the major roles of traditional institution in security administration in contemporary Nigeria. The paper brings to light the position of traditional institution in the pre-colonial, colonial as well as the post-colonial Nigeria. The study found it that despite the roles traditional rulers play in security administration they are faced with numerous challenges which include constitutional impediment, lack of proper roles as advisory etc. Base on this, the paper recommends that the constitution of Nigeria should be review so as to clearly include and identify the roles of traditional institution, particularly in matters parting security administration among others.

**Keywords:** *Traditional Institution, Security, Roles, Challenges*



## Effect of Deficit Irrigation and Mulch Materials on Crop Yield of Cucumber Crop (*Cucumis sativus* L.) in Samaru Zaria

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### Abstract

The study was conducted during the dry season in 2016 at the Irrigation Research farm of Institute for Agricultural Research, Samaru, Zaria, to determine the effect of deficit irrigation and mulch on yield of Cucumber. The experiment consisted of four levels of moisture depletion at 0%, 25%, 50%, and 75% (I100, I75, I50, and I25) of irrigation water application depths and three mulch types Rice straw mulch; Black polythene mulch, and No mulch (RSM, BPM, and NM) respectively. This was replicated three times and laid down in a split plot design. The irrigation water was allocated to the main plot, while mulch material was assign at the sub-plots. Water was applied to the basin using a PVC pipe of 7.5 cm diameter and 50 cm length to serve as an orifice. The soil moisture was measured and monitored throughout the trial, through an access tubes installed in each basin at three different depths of 0–15, 15–30, 30–45 cm coupled with theta probe moisture instrument. The results showed that application of 25% water deficit (I75), combined with rice straw mulch gives the highest yield of 14.60 t/ha. The yield obtained from the treatments ranges from 4.33 t/ha to 14.60 t/ha. The least yield was obtained from the treatment (I25NM), while the highest yield was obtained from the treatment (I75RSM). The yield response factor (Ky) for the total growing season obtained for RSM was 1.013; for BPM was 1.243 and for NM was 0.549, respectively. From the results obtained it shows that applying management methods such as the use of mulch cover for better use of water resources and in order to minimize water stress appears to be essential. The interaction effects of irrigation and mulch treatments were significant on yield, length, weight and number of fruits. The study showed that crop water use (CWU) of the Cucumber crop decreased with increase in irrigation deficit. The Kc values ranges from 0.34 – 0.48 for initial stage, 0.43 – 0.66 for development stage, 0.30 – 0.85 for mid-season stage, and 0.30 – 0.69 for late season stage. From the results obtained it shows that applying management methods such as the use of mulch cover for better use of water resources and in order to minimize water stress appears to be essential. Also the results showed that the interaction effects of irrigation and mulch treatments were significant on yield, length, weight and number of fruits.

**Keywords:** *Cucumber, Deficit Irrigation, Mulch, Yield.*

## Causes of Indiscipline Behaviours of Primary School Pupils in Maiduguri Metropolis of Borno State, Nigeria

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### Abstract

Indiscipline in education sector or any other is a detriment towards national development of any nation, hence educators and policy makers need to reassess the graveness this phenomenon pose, so as to provide a lasting remedy. This research study examined the causes of indiscipline behaviours of primary school pupils in Maiduguri metropolis Borno State. To achieve the purpose of the study four research objectives were formulated to guide the four research questions, which are on the types and causes of primary school Pupils indiscipline behaviours, the strategies teachers use as a style of classroom management and the strategies teachers should use for curbing indiscipline. The researchers adopted survey research design and use simple random sampling to select a sample of one hundred (100) teachers as participants. Questionnaire was employed as the research instrument to find out the types, causes, teachers style of classroom management and the strategies teachers should use for curbing indiscipline behaviours primary school pupils. The results were tabulated and analyzed using frequency counts and percentage. Based on the results of the findings however, the causes and types of indiscipline behaviours displayed by primary school pupils were revealed. The researchers also recommend some possible solutions to the problems of indiscipline behaviours of primary school pupils so as help reduce or possibly eradicate the problems of indiscipline behaviours of our primary school pupils in Maiduguri of Borno State and Nigeria as a whole.

**Keywords:** *Causes, Indiscipline, Pupils, Behaviour, School*

