

# BOOK OF ABSTRACTS

## 2<sup>ND</sup> INTERNATIONAL CONFERENCE ON MAINSTREAMING THE ENVIRONMENT INTO SUSTAINABLE DEVELOPMENT

*Organized by the Association for Israeli Cultural Studies in  
Collaboration with Population, Environment and Development  
Research Group, University Of Nigeria Nsukka*

**Dates:** 2 -3 February 2022

**Venue:** Faculty of the Social Sciences Lecture Hall, University of  
Nigeria, Nsukka

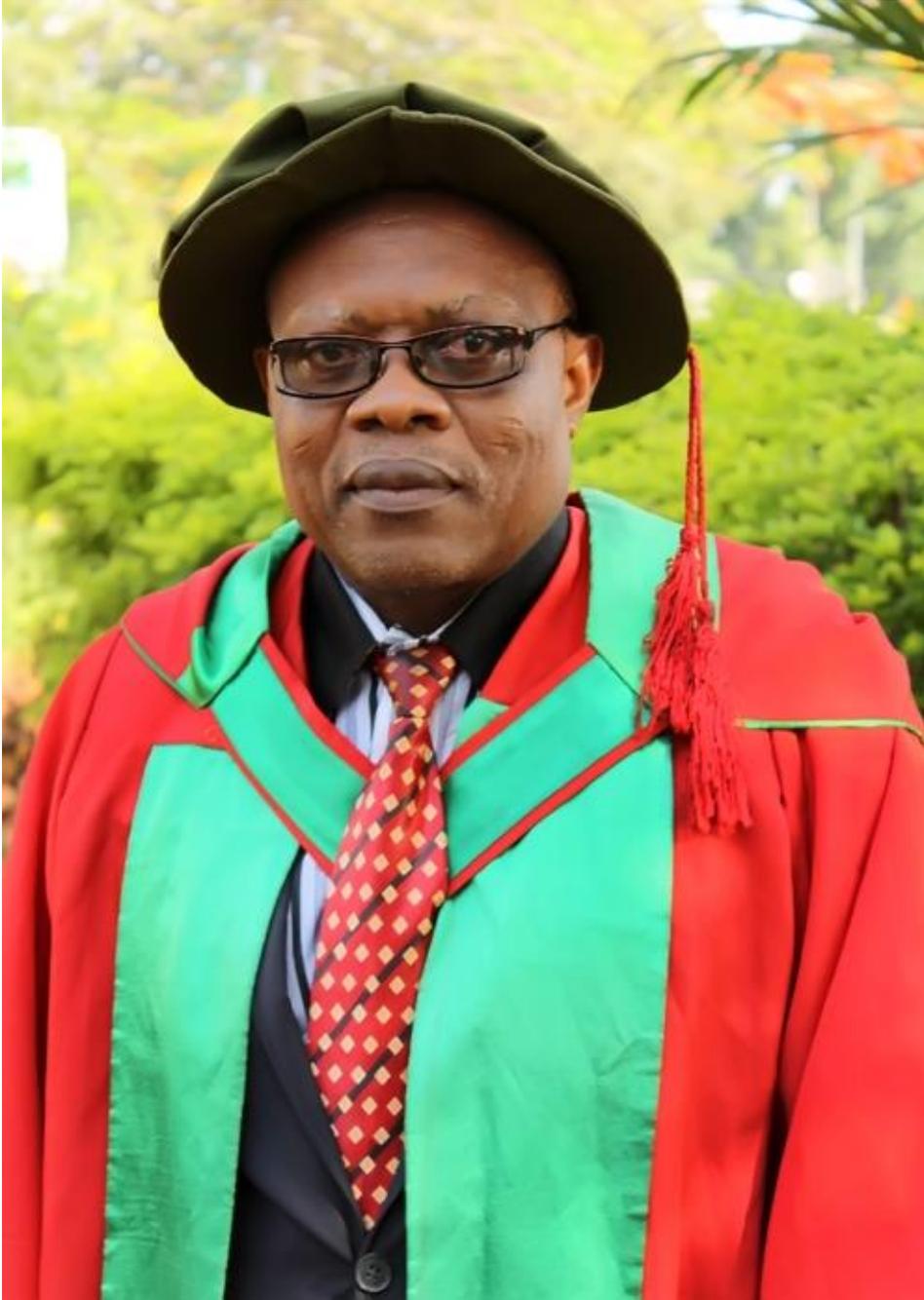
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## SPEAKERS



**Prof Ignatius A. Madu- Chairman of the Association for Israeli Cultural Studies(TAICS)**



Prof Benjamin Ozumba - Immediate past Vice Chancellor, University of Nigeria, Nsukka, **Guest Speaker**



Mgsr Prof Obiora Ike- executive Director,  
Globethics.net Geneva, **Guest Speaker**



Dr Joseph Shevel-President, Galilee International Management Institute, Israel- **Keynote Speaker**

**AN ADDRESS PRESENTED BY THE CHAIRMAN OF THE ASSOCIATION FOR ISRAELI CULTURAL STUDIES, PROF IGNATIUS A. MADU ON THE OCCASION OF THE 2ND INTERNATIONAL CONFERENCE ON ISRAEL'S SUSTAINABILITY EXPERIENCE ORGANIZED BY THE ASSOCIATION IN COLLABORATION WITH POPULATION, ENVIRONMENT AND DEVELOPMENT RESEARCH GROUP, UNIVERSITY OF NIGERIA NSUKKA HELD ON 2<sup>ND</sup> JANUARY 2022 AT FACULTY OF THE SOCIAL SCIENCES HALL UNIVERSITY OF NIGERIA NSUKKA**

The Chairman of the occasion,

Keynote Speaker

Special Guests

The Vice chancellor, University of Nigeria Nsukka

Principle Officers of the University here present

Distinguished Professors of this great University

Academic and administrative staff of the University

Esteemed conference participants

Great Lions and lionesses

Ladies and gentlemen

I am highly honoured and privileged to stand before this august audience to read this welcome address on behalf of the Association for Israeli Cultural Studies and Population, Environment and Development Research Group, University of Nigeria Nsukka. I thank God in a special way for his grace. I immensely thank the Chairman, Ozo Damion Ozoani for accepting to be here despite his numerous business engagements. His choice as a chairman was based on his outstanding contribution in promoting prosperity through economic growth and by providing social needs of the people including education and employment while also mindful of environmental protection .

I thank in a special way the Keynote Speaker, Dr Joseph Shevel, President, Galilee International Management Institute, Israel. He has been a strong supporter of the association

and facilitated my training in Galilee International Management Institute 2013/2014. The Organizers are also grateful to the Executive Director, Globethics, Geneva, Switzerland Msgr Prof Obiora Ike, for his support and encouragement. He could have been here as a guest speaker but for an official engagement at the UN in Geneva.

We are equally grateful to the Vice Chancellor for the marvelous support. The grant of courtesy call and his general disposition to academic and research is highly commendable.

In the same vein we are grateful the digital Dean of the Faculty of the Social Sciences for unquantifiable support including the approval of the use of Faculty Hall for this Conference. Also Heads of the Department of Economics, Geography, Psychology and Religion and Cultural Studies were very instrumental to the success of this conference. They provided venues and/or projectors for the technical sessions free of charge.

I thank the members of the L.O.C for working round the clock to ensure the success of this Conference. Finally I thank the participants and the general audience for coming and for their active participation.

The Conference is necessitated by the fact that the world is currently facing serious environmental crisis and disease pandemic including climate change, air and water pollution, land degradation, loss of biodiversity and COVID -19. Therefore, to meet the SGD environmental goals and in line with Agenda 2030, researchers and policy-and decision-makers need to consider the links between environmental policy responses and other SGD goals, such as mainstreaming the environment into sustainable investment and development.

Mainstreaming the environment into development activities has been an age long key element in Israel's environmental management. This stems from the need for solutions to problems like drinking water shortages or agricultural solutions in the Negev desert. It was therefore out of necessity to innovate that Israel has pioneered its way to the forefront of environmental sustainability. From the world's most environmentally recycled paper to cutting-edge water shortage solutions, sustainable healthcare, energy conservation and the green construction and infrastructure, Israel continues to make strides in sustainable innovation, living up to its status as the world's top innovator in the field of clean technologies by the **Global Cleantech 100 Index**.

A pertinent question here becomes to what extent has sustainability ideas and practices on mainstreaming environment into development diffused from Israel, “the Super Power of sustainability” to other countries of the world? The aim of the conference is therefore, to examine how countries of the world mainstream the environment into sustainable investment and development based on experience of Israel. In doing this and especially **by accentuating the cultural aspects of sustainability in the conference, the focus of the Association for Israeli Cultural Studies will be invariably underscored**. This we believe is crucial as it will create and foster quality opportunities for researchers and policy makers to interact, network and learn more about the complexity, diversity and sustainability of modern Israel and apply the experiences to the development of their societies.

The Association for Israeli Israeli Cultural Studies (TAICS) the principal organizer of this conference is an Israeli advocacy NGO duly registered in Nigeria with the Cooperate Affairs Commission (CAC). The mission is to promote an understanding of Israeli Development and

greater cooperation between Nigerians and the people of Israel through education, research, information dissemination and development assistance programmes. TAICS aims at forming a national and international hub for the creation and dissemination of knowledge about Israel and her contributions in diverse areas of human endeavour including .This we hope will not only bring about development to Nigeria but also will create a positive change in the perception of Nigerians and the global society on Israel.

In trying to achieve the mandate, TAICS has organized a number of activities. At the inauguration in 2006,the Deputy Head of Mission, Embassy of Israel, **Mr. Yair Frommer** delivered a public lecture on behalf of the Ambassador titled ‘ **Achieving Agriculture and Rural development in Nigeria: Learning from Israel Experience.**’ The event which also featured the launching of the Jerusalem Newspaper was chaired by His Excellency Dr Okwesilize Nwodo as earlier mentioned.

In November 8-9 2012, we organized a conference on **Democracy, Diversity and Development.** The conference drew lessons from Israel experience and Senator Ben Obi, the then president of the Nigeria Israeli Chamber of Commerce presented the keynote address.

On 27<sup>th</sup> November 2014, the Association in partnership with the Faculty of the Social Sciences University of Nigeria Nsukka organized a public lecture titled **Common Challenges of Israel and Nigeria** delivered by His Excellency, Mr. Uriel Palti, the then Israeli Ambassador to Nigeria. The Vice Chancellor then, Prof Benjamin Ozumba was very instrumental to the success of the public lecture.

In October 2019, the Association organized an International Conference on Israel and African Relations: Lessons, Opportunities and Challenges from 24-25th. The opening ceremony was chaired by **Chief John Nnia Nwodo**, the then President General of Ohaneze Ndigbo while the Keynote address was presented by **Hon. Barr. Nkiruka Onyejiocha**, Deputy Whip, House of Representatives and Member representing Isuikwato/Umunneochi Federal Constituency of Imo State.

Through these activities, we have established relationships and networks for the University and academics with the Embassy of Israel and some institutions in Israel.

TAICS is open to all individuals who are engaged in or share interest in academic and professional study of Israel. The Association accepts members from all disciplines.

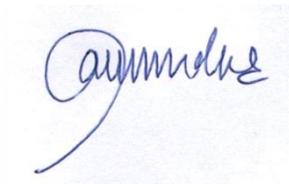
The partner organizer of this Conference is Population, Environment and Development Research Group. It is a made up of a group of vibrant researchers with Social Science background committed to the establishment of links, among population, environment and development.

At this juncture, I must have to state the fact that it is not easy to carry out research or to organize an academic conference of this nature in this country. This is because of the difficulty in getting funding and sponsorship .The implication is that we have not received any financial assistance for this conference. Apart from conferences, the Association requires funding for other activities including annual public lecture on areas of interest, establishment of Israeli Culture and Study Centre, research on Israeli Culture and Development and maintenance of a functional website. We however, do not wish to bore

you with the problems of the Association but to high light the activities that your require attention or your consideration.

I welcome you once more to this Conference and request for your active participation in the paper presentations both physical and virtual later today and tomorrow respectively. I wish you safe journey back home at the end of the event.

Thanks for listening

A handwritten signature in blue ink, appearing to read 'Ignatius A. Madu', is displayed on a light blue textured background.

Prof Ignatius A.Madu

# Nigeria

## Mainstreaming the Environment into Sustainable Development Israeli Experience

Dr. Joseph Shevel  
President, Galilee Institute, Israel

Feb. 2, 2022

Declaration by African heads of state (2002)

## The Abuja Declaration

Allocate 15% of national budgets to health care

## Total Expenditures on Health

Expenditure on healthcare as % of  
GDP

Nigeria - 3.89%

Israel – 7.5%

USA – 17.9%

## Nigeria

Private expenditure on health as a  
percentage of total health expenditure  
is 74.85% (2019)

Government – 25.15%

Nigeria Center for Disease Control (NCDC) struggled on a government budget - \$ 4million (2018)

US CDC's budget in the same year was \$11 billion

### Nigeria

Life Expectancy (2007) – 49

Life Expectancy (2018) – 54

### Ghana

2007 - 60

2018 63

### Israel

2007 79

2018 83

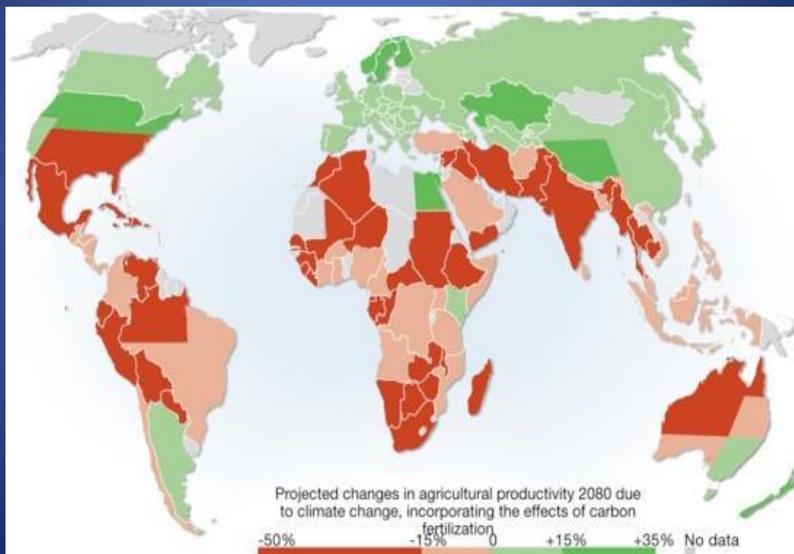
# A new Nigerian-Israeli Medical School

Veritas university

Joint Nigerian-Israeli faculty

One year – clinical studies at Israeli hospitals.

## Effects of **climate change** on rural food supply

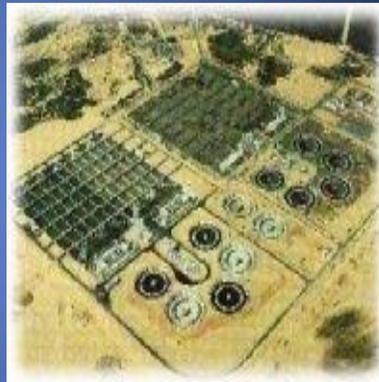


## Shrinking Lake Chad shared by Nigeria, Niger, Chad and Cameroon



## Reuse of Water

**90% of the  
water in  
Israel  
is reused.**



90 percent of the country's sewage is recycled, the highest percentage in the world.

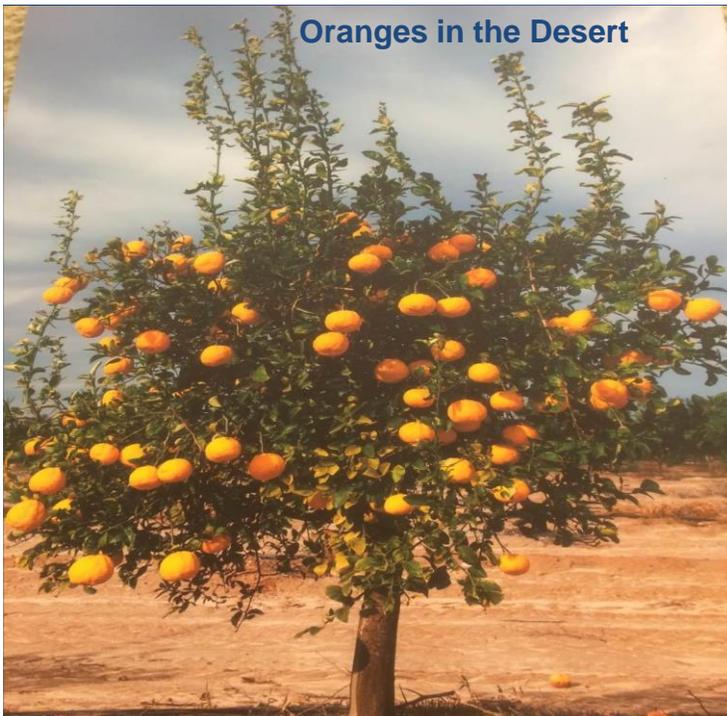


More than 60 percent of water used in agriculture comes from treated sewage.



Palm (Date) yields an average of **38 pounds** of dates a year.

Israeli date trees are now yielding **400 pounds/year** and are short enough to be harvested from the ground or a short ladder.



## Watermelon and Melon in the desert:



Israeli Desert (Negev)



## Flowers

Valentine's Day (2018),  
60 million Israeli flowers  
were sent to Europe for sale

Education is the most  
powerful weapon  
which you can use to  
change the World

Nelson Mandela



Israel 's \$500 billion economy is larger than all of its immediate neighbors combined.



Israel's best cow produces 70 liters a day. Average cow – 50 liters per day (no. 1 in the world)

Average cow in EU-countries was (2010) 20-22 liters a day  
in Asia: 6 -10 Liters



## Key factors for the success of the Israeli Dairy sector



Genetics  
Management  
Nutrition

## Microsoft Israel

1000 employees (mostly young researchers)

Microsoft is building a new research center  
(investing \$1B in Herzlia, near Tel Aviv)



**Most of the Windows NT and XP  
operating systems were developed  
by Microsoft-Israel.**

In order to minimize immigration  
to cities we have to develop  
efficient agriculture.

Farmers will stay at their farms  
only if they can survive.

Nigeria is the biggest importer of  
sugar, wheat, fish, rice

Only 40% of  
arable land is  
cultivated

Enough water

## What can we do?

Message: It is possible

Establishing the joint  
Nigerian-Israeli medical  
school (or schools)

Double the Agri Production  
(feeding the increasing  
population)

Reuse of Water

Professionals are welcome to  
Galilee training programmes

–  
Scholarships available  
(March 2022 programmes).

Young professionals are  
welcome to the Galilee on line  
2-years programme on digital  
health and digital agriculture  
with employment at Israeli  
firms (for the best students).

## Thank you and Shalom



**Protect our common home: Presented by Msgr Prof Obiora** and reported by **Josie Hough**, Communications & Project Assistant, Globethics.net Geneva

This week, Globethics.net was proud to be present at the 2nd International Conference on Israel Development and Sustainability Experience 2022 hosted by the University of Nigeria, Nsukka (UNN) in collaboration with the Association for Israeli Cultural Studies. The event, held between 2 to 4 February, is centred on the theme of Mainstreaming the Environment into Sustainable Development and learning from Israel's experience as "a superpower of sustainability".

It was with great pleasure that Globethics.net Executive Director Obiora Ike joined the conference as a guest speaker yesterday. After congratulating those present for their work on a growing Israeli-Nigerian relationship and paying respects to the UNN as a best-in-class institute, Obiora addressed the theme at hand:

*"The topic is not only current but is the biggest challenge for humanity - we must ensure that our "common home" is guarded and protected."*

When we talk about the environment, we don't just mean our ecosystem in terms of physical geography, continued Obiora. Our environment also includes social and political spaces, the world of technology, the spiritual world, the world of culture and traditions. We cannot simply take a scientific approach to sustainable development.

Think about it in terms of the UNN, he reasoned. This big institution has education as its vocation, but we cannot think about education without thinking about what the term implies. Education has its roots in the passing on of knowledge that adds value to its society and environment.

Quoting Socrates that "virtue is knowledge", Obiora continued: without this value-adding knowledge, people act ignorantly and wrongly as they do not know the consequences of their actions. They cut down trees, pollute the air and water, kill animals, and so on, without awareness of their impact on the environment.

Knowledge, education, is essential: for this reason, the UN launched its Sustainable Development Goals in 2015, the fourth of which specifically aims to ensure inclusive and equitable quality education for all.

As the leading ethics institute, Globethics.net works not only to embed ethics in education, but also in health, business, and politics. Obiora shared with conference participants the definition of the ETHICS acronym that the organisation has as its core mission: Empowerment, Transformation, Holistic approach, Integrity, Competence, Sustainability. By empowering people with knowledge of ethics, Globethics.net is facilitating integrity and competencies that lead to sustainability and societal transformation.

Concluding his presentation, Obiora once again congratulated the UNN for their knowledge and desire to work with people around the globe, specifically with Israel in the case of this conference, to deliver the value that our “common home”, Planet Earth, so desperately needs. He went on to remind participants of the wealth of resources that Globethics.net has to offer that can empower and support the UNN in addressing the issues at hand.

The Globethics.net Library holds over 3 million books, journals and documents that can add value to research and action towards sustainability. Globethics.net Academy’s courses and our research workgroups equally provide numerous opportunities for further studies for academic staff and students alike. Conference attendees, the UNN and the wider community are all encouraged to join the Globethics.net network and make use of our resources so that together we can protect our “common home” and achieve the UN’s SDGs.

## List of papers presented

/No	Name	Title	Address	Page
1	Timothy, T. Ishi and Ignatius A. Madu	Determinants of Households' willingness to pay for Improved Residential Solid Waste Management in Makurdi Metropolis, Central Nigeria	Department of Geography, University of Nigeria Nsukka	
2	Paul A. Onuh	Israel-Iran Conflict and Maritime Security in the Persian Gulf	Department of Political Science, University of Nigeria Nsukka	
3	Asadu Ngozi, and Ihuoma Chizoba	Practice of Exclusive Breast Feeding by Nursing Mothers in Igbo-Etiti Local Government Area of Enugu	Department of Sociology and Anthropology University of Nigeria, Nsukka.	
4	Amaechi, M; Obidiozor, C.J. and Unachukwu, S.S	Environmental and Public Health Management: A Review	Department of Environmental Management, Nnamdi Azikiwe University, Awka	
5	Kifilideen L. Osanyinpeju <sup>1*</sup> , Adewole A. Aderinlewo, Olawale U. Dairo, Olayide R. Adetunji and Emmanuel S.A.Ajisehiri	Application of Vibration Technique for the Control of Physical Properties of Yam Sprouts ( <i>Dioscorea</i> spp.) during Storage in Funaab, Nigeria Environment	Agricultural and Bio-Resources Engineering Department, College of Engineering, Federal University of Agriculture Abeokuta, Ogun State, Nigeria	
6	Kifilideen L. Osanyinpeju, Adewole A. Aderinlewo, Olawale U. Dairo Olayide R.	Development of Mechanical Yam Vibrator with Adjustable Frequency and Amplitude at Federal University of Agriculture, Abeokuta, Ogun Nigeri	Agricultural and Bio-Resources Engineering Department, College of Engineering,	

	Adetunji, Emmanuel S.A. Ajisegiri		Federal University of Agriculture Abeokuta, Ogun State, Nigeria	
7	Anthony Chinaemerem Ajah and Josephine Ngozi Akah	Being chosen and being destructive”: Identity, Fundamentalism and Sustainable Development in the Middle East	Humanities Unit, School of General Studies, University of Nigeria, Nsukka	
8	Obioji Josephine Nneka , Okafor Godwin O, Anyadike Nkechinyere O. PhD, Nwachukwu Tochukwu S, Ogbochie Andrew O	The nature and dynamics of politics and resource control: Exploring the nexus of instability in the 21st century Nigeria	Department of Public Administration and Local government, University of Nigeria Nsukka.	
9	Ogochukwu Christiana Anyanwu Obianuju Igweonu U. Christopher Emmanuel Nwankwo Nwokeocha Victor C	Do the structural characteristics of industries influence their decision to utilize strategic alliance?	Department of Geography, University of Nigeria	
10	Prof Jonathan Ali Ogwuche	Environmental and Social Safeguards: The Sustainable Tool for Environmental Mainstreaming in Development Assistance	Department of Geography Benue State University Makurdi	
11	Chukwuma Onyekachi G; Uchenna Teresa Okonkwo	Appropriating Proverbs 31:10-31 in the light of Matriliney and Wives’ Roles for Stable Families in Ohafia Community, Abia State, Nigeria	Department of Religion and Cultural Studies	
12	Umar Aminu Hussain’	Corruption, Political Instability and Economic Growth: Evidence from Panel	Department of Economics, Bayero	

	AbubakarWambai, Aminu Badamasi Sani Mohammed and Sule Yau Hayewa	of African Countries	University, Faculty of Social Sciences, Kano, P.M.B. 3011, Kano State, Nigeria	
13	Balogun, Joseph Olabode and Ibrahim, Wali Itopa	Assessment of the Impacts of Waste Mgt on the Environment in Lokoja, Nigeria	Department of Urban and Regional Planning, Ahmadu Bello University Zaria	
14	Amoke, Emmanuel Ikechukwu	The Igbo Nation of Nigeria as Descendants of Isreal: Socio-Cultural and Religious Implications	Dept. Social Sciences (Public Administration Unit), Coal City University, Enugu	
15	Clara C. Obi-Ochiabutor, Chukwunweike A.Ogbuabor, Ebele Okiche, Callistus Iyidiobi	Israel's Legal Framework for Environmental Sustainability as a Model to Nigeria	Department of Private Law, Faculty of Law, University of Nigeria	
16	Egbenta, Idu Robert	Assessment of Student's Willingness to Pay towards achieving Campus Environmental Sustainability at University of Nigeria, Enugu Campus	Department of Estate Management, University of Nigeria, Enugu Campus <a href="mailto:idu.egbenta@un.n.edu.ng">idu.egbenta@un.n.edu.ng</a>	
17	Sa'adu Musa Liman	Efficiency analysis of rice ( <i>oryza sativa l.</i> ) production in Ningi Local Government Area of Bauchi State, Nigeria	Agric Education Department, School of Vocational and Technical Education,	

			Adamu Tafawa Balewa College of Education Kangere, Bauchi state <a href="mailto:musasaaduliman@gmail.com">musasaaduliman@gmail.com</a>	
18	Musa Abdullahi and Abugu James Okechukwu	Exploring the Effects of Processing on Marketing of Agricultural Produce in Nigeria	Department of Marketing, FBA, Enugu Campus. University of Nigeria Nsukka <a href="mailto:james.abugu@unn.edu.ng">james.abugu@unn.edu.ng</a>	
19	Abugu James Okechukwu	Students' preference for online learning in post COVID-19 era in Nigeria	Department of Marketing, FBA, Enugu Campus. University of Nigeria Nsukka <a href="mailto:james.abugu@unn.edu.ng">james.abugu@unn.edu.ng</a>	
20	Ugbor I. Kalu and Ugonma Joy Ugbor-Kalu	Urban Tourism and Sustainable Development in Nigeria	Department of Political Science University of Nigeria Nsukka. <a href="mailto:ugonma.ugbor@unn.edu.ng">ugonma.ugbor@unn.edu.ng</a>	
21	Ngoka, Ruth Obioma, Ogechukwu Celestine Okafor and Omiunu, Funmilayo I.	The impact of governance on sustainable energy development: an assessment of Israel and Nigeria	Department of Political Science, Federal University Wukari, Taraba State, Nigeria <a href="mailto:ocelestineogechukwu@gmail.com">ocelestineogechukwu@gmail.com</a> ; <a href="mailto:ruth.ngoka@unn.edu.ng">ruth.ngoka@unn.edu.ng</a> ; <a href="mailto:funmi.omiunu@unn.edu.ng">funmi.omiunu@unn.edu.ng</a>	

			<a href="mailto:">gmail.com</a>	
22	Chinonye Lucy Nwamekwe and Chijioke Oliver Nwodoh	A Hostel Inmates' Perceptions on Causes of Poor Environmental Sanitation of a Nigerian University Campus Hostels	Department of Nursing Sciences University of Nigeria, Enugu Campus. <a href="mailto:chijioke.nwodoh@unn.edu.ng">chijioke.nwodoh@unn.edu.ng</a>	
23	Joseph Paul Essien	Culture and Religion: Dynamics for Sustainable Development in Nigeria	Department of Philosophy University of Calabar <a href="mailto:essien285@gmail.com">essien285@gmail.com</a>	
24	Joseph Paul Essien and Bassey-Duke, David Orok	Culture as a Tool - Box for Sustainable Development in Nigeria	Department of Philosophy University of Calabar <a href="mailto:essien285@gmail.com">essien285@gmail.com</a> ; <a href="mailto:popeduke01@gmail.com">popeduke01@gmail.com</a>	
25	Cletus Famous Nwankwo and Uchenna Paulinus Okafor	Ethnic faultline in the farmer-pastoralist conflict (FPC): when does ethnicity matter to the FPCs? A case study of Adani-Nimbo area in South-Eastern Nigeria	Department of Geography, University of Nigeria, Nsukka. <a href="mailto:cletus.nwankwo@unn.edu.ng">cletus.nwankwo@unn.edu.ng</a> ; <a href="mailto:uchenna.okafor@unn.edu.ng">uchenna.okafor@unn.edu.ng</a>	
26	Ogbonna Okemini. and Christopher,N. Ibenwa	Religious violence in Nigeria: An obstacle to effective public service delivery	<a href="mailto:ogbonna.okemini@unn.edu.ng">ogbonna.okemini@unn.edu.ng</a>	
27	Abugu	Analysis of geospatial pattern of	Department of	

	Nkechinyere Anthonia, Yamma Bashir Sani, Innocent Ehiaguina Bello and Isaac Alaji Agbanwu	armed banditry in Gusau, Zamfara State, Nigeria	Geography, Faculty of Environmental Science Nasarawa State University Keffi <a href="mailto:researcherscreed@gmail.com">researcherscreed@gmail.com</a>	
28	Abugu Nkechinyere Anthonia, Suleiman Arafat Yero, Idris Nasiru Medugu and Irene Amahagbor Macaulay	Investigation of Factors that Constrained the Integration of Green Building Concept in Estate Housing Construction in FCC Abuja, Nigeria	Department of Geography, Faculty of Environmental Science Nasarawa State University Keffi <a href="mailto:researcherscreed@gmail.com">researcherscreed@gmail.com</a>	
29	Chiemezie S. Atama, & Igwebuike Collins Okolo	Firewood usage and indoor air pollution in rural communities in Enugu-North Senatorial zone: Implications for women's health and environmental sustainability.	Department of Sociology and Anthropology, University of Nigeria, Nsukka, Nigeria. chiemezie.atama @unn.edu.ng	
30	Obi, Kelechukwu Charles and Ignatius Ukwuaba	Wholesale Land Resource Transactions, Rural Banditry and Sustainable Development in Nigeria: Zamfara State in Perspective	Department of Political Science, University of Nigeria, Nsukka <a href="mailto:kelechukwu.obi@unn.edu.ng">kelechukwu.obi@unn.edu.ng</a>	
31	Allison, Chidimma Jessica (Ph.D)	Enhancing Environmental Sustainability: The Significance of Animism in African Traditional Religion	Department of Religion and Cultural Studies, University of Nigeria Nsukka chidimma.allison	

			@unn.edu.ng	
32	Emmanuel U. Onyeabor and Helen U. Agu,	Re-Tooling Nigeria's Legislation on Environment for Effective Environmental Governance	Department of Environmental Law, University of Nigeria, Enugu Campus. <a href="mailto:eonyeabor@gmail.com">eonyeabor@gmail.com</a>	
33	Chinedu Josephine Onyishi	Residents' participation in municipal solid waste management: Pro-environmental behaviour towards sustainable environmental management in Enugu, Nigeria.	Department of Geography, University of Nigeria, Nsukka. <a href="mailto:Chinedu.onyishi@unn.edu.ng">Chinedu.onyishi@unn.edu.ng</a>	
34	Amaechi, M., Obidiozor, C.J., and Unachukwu, S.S	Environmental and Public Health Management: A Review	Department of Environmental Management, Nnamdi Azikiwe University, Awka. <a href="mailto:am.amaechi@unizik.edu.ng">am.amaechi@unizik.edu.ng</a>	
35	Umar Aminu Hussain Abubakar Wambai Aminu Badamasi Sani Mohammed and Sule Yau Hayewa	Corruption, Political Instability and Economic Growth: Evidence from Panel of African Countries	Department of Economics, Bayero University, Faculty of Social Sciences, Kano, P.M.B. 3011, Kano State, Nigeria <a href="mailto:uahussaini.eco@buk.edu.ng">uahussaini.eco@buk.edu.ng</a>	
36	Chikwado Collins Ezugworie; Ogbonna,	One God, two Places to Visit: Assessment of Pilgrimage as a form of Israel's Religious Soft Power and Lessons for Nigeria	Department of Political Science University of	

	Confidence Nwachinemere; Ostar Christopher and Ogu Esomchi		Nigeria, Nsukka <a href="mailto:chikwado.ezugworie@unn.edu.ng">chikwado.ezugworie@unn.edu.ng</a>	
37	K.O. Abdul and Mukhtar R.O	Assessing three sustainable diets on the growth performance of Weaner Pigs.	Department of Agricultural Education, Michael Otedola College of Primary Education, Noforija, Epe, Lagos, Nigeria. <a href="mailto:oritoke6@yahoo.com">oritoke6@yahoo.com</a> <a href="mailto:omrukayatmukhtarafolabi@gmail.com">omrukayatmukhtarafolabi@gmail.com</a>	
38	Anthony U. Ezebuio, PhD ; Dr Obiora Anichebe and Cajetan Ihesiaba	Rationalizing Neil Manson's Precautionary Principle and African Concept of Reality For sustainable Environmental Friendliness	Department of Philosophy University of Nigeria Nsukka <a href="mailto:anthony.ezebuio@unn.edu.ng">anthony.ezebuio@unn.edu.ng</a> , <a href="mailto:obiora.anichebe@unn.edu.ng">obiora.anichebe@unn.edu.ng</a> , <a href="mailto:cajetan.ihesiaba@unn.edu.ng">cajetan.ihesiaba@unn.edu.ng</a>	
39	Oguejiofor V. Omeje and Dr Cindy Ezugwu	Drama as a Model of Evaluation: Re-examination of the Film "Ninety Minutes at Entebbe".	Humanities Unit, School of General Studies University of Nigeria Nsukka. <a href="mailto:victor.omeje@unn.edu.ng">victor.omeje@unn.edu.ng</a>	
40	, George Ohabuenyi, Ph.D and Onah Sebastian	An Ethical Approach to Land Use Practice in Traditional Igboland: Towards a Balanced Contemporary Framework for Environmental	Department of Philosophy, University of Nigeria, Nsukka.	

	Okechukwu Ph.D	Protection	<a href="mailto:george.abah@unn.edu.ng">george.abah@unn.edu.ng</a>	
41	Eberechukwu J.Eze, and Nneka E. Chiatula and Ann U.Eze	Analysis of the effectiveness of health systems resilience in dispensing ART during the covid-19 lockdown in Nsukka Urban	Department of Geography, University of Nigeria, Nsukka <a href="mailto:eberechukwu.eze@unn.edu.ng">eberechukwu.eze@unn.edu.ng</a>	
42	Bonoh Friday, PhD, Adams Joyce and Bege Inda Adon	Role of Locust Beans Tree in Socio-Economic Growth and Sustainable Development in Southern Part of Kaduna State, Nigeria	Department of Geography, Kaduna State College of Education, Gidan Waya <a href="mailto:bonohbonohf@gmail.com">bonohbonohf@gmail.com</a>	
43	Innocent Ikechukwu Enweh	The Stability of the Earth and Human Flourishing in Igbo Myth of Origin and Noahic Covenant	Department of Philosophy University of Nigeria, Nsukka <a href="mailto:innocent.enweh@unn.edu.ng">innocent.enweh@unn.edu.ng</a>	
44	Godslove Nnadi Sunday	Non-Farm activities and the Sustainability Status of Food Security in Rural Communities of Enugu State	Department of Geography, University of Nigeria Nsukka <a href="mailto:godslove.nnadi@unn.edu.ng">godslove.nnadi@unn.edu.ng</a>	
45	Idoko Cordelia Ozoemena	Enactment of Anti-Open Grazing Law and Herders-Farmers Conflict in Enugu State, Nigeria	Social Sciences Unit, School of General Studies University of Nigeria, Nsukka. <a href="mailto:cordelia.idoko@unn.edu.ng">cordelia.idoko@unn.edu.ng</a>	

46	Ossai Onyinyechi Gift	Engineering Liveability through Urban Renewal Projects in Enugu Urban, Nigeria	Department of Geography, University of Nigeria, Nsukka.  <a href="mailto:Onyinyechi.ossai@unn.edu.ng">Onyinyechi.ossai@unn.edu.ng</a>	
47	Nwosu, Okwudili Chukwuma, Bar Nwande Mathias	The Challenges Faced by the Nigerian Police and the Menace of Fulani Herdsmen	Okwudili.nwosu @unn.edu.ng	
48	Ajuruchi V. C. Duru C. M., Ukaoma A. A., Nwoko M. C., Daniel. Nwosu, E.I	In-Vitro Induction and Proliferation of Callus In Persea Americana (Avocado) using Composite Media BSA1 and BSA2	Department Of Biology, Federal University of Technology, Owerri, Imo State Nigeria. <a href="mailto:ajuruchimaria@gmail.com">ajuruchimaria@gmail.com</a>	

49	Fr Martin Asiogbu	Migration: Pan- Africa Framework as solution for migrants.	Department of Philosophy, University of Nigeria Nsukka <a href="mailto:martin.asiogbu@unn.edu.ng">martin.asiogbu@unn.edu.ng</a>	
50	Chinasa E. Urama, Ikechukwu A., Mobosi, Ezebuilo R. Ukwueze, Divine N. Obodoechi, Afamefuna A. EZE, Ifeoma Christy Mba and Nsikak-Abasi A. Etim and Oliver E. Ogbonna	Climate change, productivity and Sustainable Development Goals in Nigeria	Department of Economics, University of Nigeria Nsukka. Enugu State, South-East Nigeria <a href="mailto:chinasa.urama@unn.edu.ng">chinasa.urama@unn.edu.ng</a>	
51	Nneka F. Nwafor, Chinyere E. Onalu and Ude Kingsley David	Waste management and Social work: analysis of the preference for improved poultry disposal among poultry enterprises in Lagos State, Nigeria	Department of Social Work, University of Nigeria Nsukka. <a href="mailto:nneka.nwafor@unn.edu.ng">nneka.nwafor@unn.edu.ng</a>	
52	Nnoli, Chukwuemeka and Obeta, M.C	Analysis of Rainfall Characteristics in Onitsha Urban: Policy and implication	Department of geography, University of Nigeria Nsukka nnoli. Chukwuemeka@gmail.com <a href="mailto:michael.obeta@unn.edu.ng">michael.obeta@unn.edu.ng</a>	
53	Kingsley Ikechukwu	An Ecological Re-reading of Lk 12:24-28 and its implications for Christians	Department of Religion and Cultural Studies,	

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53	Samuel O. Ebimgbo, Bashiru O. Idowu, Nkechi G. Onah, Obiageli K. Omali and Uzoma O. Okoye	Culture cum political-based adaptation strategies to migration challenges by left-behind older family members of international migrants in south-east Nigeria	Department of Social Work, University of Nigeria, Nsukka <a href="mailto:samuel.ebimgbo@unn.edu.ng">samuel.ebimgbo@unn.edu.ng</a>	
54	Chinedu L. Mba Nwosu Ijeoma G. and Cornelius, C. Mba	Assessment of contribution of small scale agro-based industries to sustainable rural economic development of Igbo-Eze South LGA of Enugu State, Nigeria	Department of geography, University of Nigeria Nsukka <a href="mailto:chinedu.mbah@unn.edu.ng">chinedu.mbah@unn.edu.ng</a> <a href="mailto:Ijeoama.ikejiofor@unn.edu.ng">Ijeoama.ikejiofor@unn.edu.ng</a>	
55	Okafor, Uchenna Paulinus Ezeokwuoha, Nkechi Augusta and Asuoha Godson Chinonyerem	Influence of Landuse Landcover (LULC) changes on soil erosion in Aguata Local Government Area of Anambra State, Nigeria	Department of geography, University of Nigeria Nsukka <a href="mailto:Chinonyerem.asuoha@unn.edu.ng">Chinonyerem.asuoha@unn.edu.ng</a>	
56	Ifeoma Christy Mba, Emmanuel Ikechukwu Mba, ChinasaE.Uram A ; Christopher Ndubuisi Ibenwa, Winnie	Can religious practices and educational attainment make a difference in the choice of COVID-19 Vaccination in Nigeria?	Department of Economics, University of Nigeria, Nsukka. Enugu State, South-East Nigeria,	

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57	Alphonsus Nwachukwu Ali	Rural public road transport accessibility in Enugu State, Nigeria	Department of Geography University of Nigeria, Nsukka	
58	Mathew O Isimah	Assessment of trace element toxicity in surface water and its potential health implications in Ika North East Local Area, Delta State, Nigeria	Department of Geography, University of Nigeria Nsukka  mathew <a href="mailto:mathew.isimah@unn.edu.ng">.isimah@unn.edu.ng</a>	
59	Chigozie Ndianefo; Christy Obi-keguna; Kelechi E. Okpara	The Intersection of Nature, Greed and ignorance in building Sustainable Informal Tourism based Economy in Ezimo Area of Enugu State	Department of Sociology and Anthropology, University of Nigeria, Nsukka <a href="mailto:ndianefochigozie7@gmail.com">ndianefochigozie7@gmail.com</a>	

## Abstracts of papers presented

### **Determinants' of Households' willingness to pay for Improved Residential Solid Waste Management in Makurdi Metropolis, Central Nigeria.**

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#### **Abstract**

Management of solid waste is a major challenge in urban households' for most parts of the world, especially in developing countries. The study aimed to determine and estimate the willingness to pay (WTP) of the selected households for better solid waste management in Makurdi residential neighbourhoods'. The study identified the determinants of household WTP for solid waste management service in the residential neighbourhoods of Makurdi municipality employing the contingent valuation method (CVM), the most widely applicable preference methods to establish empirical grounds for pricing the services of a new household solid waste management (HSWM) regime in Makurdi Municipality, Benue State, Nigeria. The data were collected through a closed-ended questionnaire survey with 398 households. A multistage sampling technique was adopted for the study while the data generated were analyzed using descriptive and multiple logit regression models (MLRM). The result showed that household income (HINCOME), household occupancy status (HOCSTAT) and willingness to pay amount (WTPA) has the highest odds ratio of 12.809, 3.852 and 18.238 respectively and are the most significant factors in determining the WTP status of respondents in the study area with a  $P < 0.05$ . The mean household WTP amount was calculated to be 750 naira (1.6 dollars). The results of this study can be used for the urban household solid waste planning to implement sustainable household solid waste development process in Makurdi. To achieve the desired result in residential neighbourhood solid waste management in the municipality, the study recommend that policy makers should set socially acceptable fee for household solid waste collection in order to avoid the free rider problem while government should subsidize for private waste managers in the new household solid waste paradigm.

**Key words: Willingness to Pay, Contingent Valuation, Households, Residential Neighbourhood, Makurdi.**

## Israel-Iran Conflict and Maritime Security in the Persian Gulf

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### Abstract

The Persian Gulf is the world's most important oil transit route and one of the most strategic shipping routes in the world. Around 21 million barrels (one fifth of the world's daily petroleum production) estimated at \$1.2 billion are transported through the Persian Gulf every day. With a total volume of trade valued at \$1.2 trillion annually, at least 33,000 shipping vessels transit through the Persian Gulf annually. In recent times, geopolitical power posturing between Israel, Iran and their allies in the region has made the region more volatile as maritime security of the Persian Gulf is increasingly undermined by rising incidence of attacks on shipping vessels. Between 2019 and 2020, the gulf has witnessed series of attacks on commercial vessels, military vessels, and military drones, leading to losses of assets valued in millions of dollars and deaths of seafarers. There have been about 20 attacks on vessels including explosions caused by limpet mines and other explosive devices. While scholars have attempted in literature to address some of the threats to maritime security in the Persian Gulf, not much has been done to examine the linkage between Israel-Iran shadow conflict and maritime security in the Persian Gulf. This study adopts the Regional Hegemony theory. It also relies on documentary method of data collection and qualitative descriptive method of data analysis. We found that the shadow conflict between Israel, Iran, their allies and proxies has undermined maritime security in the Persian Gulf. We recommend an immediate demilitarization of the Gulf which should be monitored by a United Nations special team in order to safeguard trade, shipping and innocent passage of military vessels.

**Keywords:** Israel; Iran; Shadow Conflict; Maritime Security; Persian Gulf; Regional Hegemony

## **Practice of Exclusive Breast Feeding by Nursing Mothers in Igbo-Etiti Local Government Area of Enugu**

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### **ABSTRACT**

In recent times, the rate of child mortality in Nigeria is alarming. Infants are exposed to several diseases both mentally and physically, their growth and development are affected and these have been attributed to lack of exclusive breastfeeding among nursing mothers. Breast milk as food for infants is very beneficial for the all-round growth of a child. The study evaluated the practice of exclusive breastfeeding by nursing mothers in Igbo-Etiti local government area of Enugu state. A cross-sectional survey method was adopted. Questionnaires served as instrument for data collection. This was self administered at the hospital where mothers come for immunization. The study findings revealed that only a few respondents practice exclusive breastfeeding and this is due to lack of spousal support in the practice of Exclusive Breast Feeding (EBF). Other factors militating against the practice of EBF by nursing mothers were EBF starves the baby, lack of time to practice EBF due to involvement of nursing mothers in paid employments, and the notion that EBF makes children unhealthy. Based on the study findings, suggestions were made on how best to promote the practice of exclusive breastfeeding by nursing mothers and notable of these recommendations include enlightening mothers on the benefits of EBF. Also, the government, through its ministry of health should design effective and prompt intervention initiatives that could promote the provision of quality support for nursing mothers as such efforts will go a long way in creating sustainable exclusive breastfeeding culture and a happier and healthy family.

**Keywords: Breast feeding, nursing mother, breast milk, processed milk, infant**

## **Environmental and Public Health Management: A Review**

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### **ABSTRACT**

Sequel to the rise in public health challenges resulting from environmental degradation, this paper critically reviewed literatures on how the quality of the environment affects public health in both the developed and the developing world. The literatures reviewed also included those bordering on the natural causes of environmental degradation like earthquake, tsunami, flood amongst others and man-made causes such as inadequate waste management, poverty, ignorance, lack of basic social amenities etc. It was discovered that the salient causes of environmental degradation are anthropogenic in nature. It was also revealed that environmental degradation can have significant impacts on human health ranging from allergies, cancers, and even death. These effects could be direct or indirect and they vary between developing and developed countries with respect to levels of exposures to environmental pollutants and access to public healthcare facilities. The paper concluded that since the quality of the environment determines the quality of life with man at the center of it, man has a duty of care to the environment; and thus must ensure a sustainable use of the environment which will enable him to live comfortably at the moment and also bequeath a safe and habitable environment to the future generations.

Keywords: Environment; Environmental Degradation; Public Health; Pollution; Sustainable Development

## **Application of Vibration Technique for the Control of Physical Properties of Yam Sprouts (*Dioscorea spp.*) during Storage in Funaab, Nigeria Environment**

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### **Abstract**

Early sprouting of yam tuber is a typical problem during storage resulting into weight losses, deterioration, shrinkage and reduction in quality. This work therefore applied vibration technique for the control of physical properties of yam sprouts (*Dioscorea spp.*) during storage in FUNAAB, Nigeria Environment. The physical properties (length, number, and weight of yam sprout, number of leaves, weight of roots) of the yam sprouts were determined for one hundred and forty white yam tubers. One hundred and eight tubers were subjected to vibration and remaining thirty-two tubers were taken as control. The factors of the experimental design examined were three levels of frequencies (low (1 – 5 Hz), medium (60 – 100) Hz and high (150 – 200 Hz)), amplitudes of low (5 mm), medium (10 mm) and high (20 mm) and times of low (5 minutes), medium (10 minutes) and high (15 minutes) with weight of yam tuber of two levels of small (0.1 – 2.9 kg) and big (3.0 – 5.0 kg). The tubers were stored for ten weeks after vibration and the physical properties of the yam sprouts were monitored and the records were taken every week during the storage period. It was discovered that; as the main effect of the frequency, amplitude and time of vibration were increasing; the physical properties of yam tubers sprouts scrutinized were decreasing significantly at  $p < 0.05$  for both weight of yams 0.1 – 2.9 kg and 3.0 – 5.0 kg. The results revealed that mechanical vibration helps in slowing down sprouting in yam tubers.

**Keywords:** Mechanical vibration, Vibration technique, Yam sprout, Yam storage, Dormancy, Physical properties.

## Development of Mechanical Yam Vibrator with Adjustable Frequency and Amplitude at Federal University of Agriculture, Abeokuta, Ogun Nigeria

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### Abstract

Overtime weight loss and sprouting loss and sprouting of yam tubers during storage had been creating issues among farmers and storage Engineers. Interaction of energy with matter has tendency of bringing change in the matter. To establish the effect of mechanical vibration on the physical properties of yam tubers and sprouts; this study therefore developed mechanical yam vibration with adjustable frequency and amplitude at Federal University of Agriculture, Abeokuta, Ogun Nigeria. A mechanical yam vibrator having adjustable frequencies and amplitudes was developed with vibrating chamber of capacity size of 670 mm × 570 mm × 180 mm which can contain four tubers of yam at a time. Preliminary test was conducted on the developed mechanical yam vibrator to determine the variation of the displacement of the developed mechanical vibrator using a vibrometer. The preliminary test conducted indicates that the maximum displacement of the developed mechanical yam vibrator using a cam size of 5 mm, 10 and 20 mm are 4.66 mm, 9.09 mm and 17.30 mm respectively at different levels of frequencies (low frequency (1 – 5 Hz), medium frequency (60 – 100 Hz) and high frequency (150 – 200 Hz). This proved that the developed mechanical yam vibration provide variation in displacement and frequency which would help in generating different levels of displacement and frequency for the yam tubers to be vibrated.

**Keywords:** Mechanical vibration, Frequency, Amplitude, Yam tubers, cam and follower, spring, electric motor.

## **“Being chosen and being destructive”: Identity, Fundamentalism and Sustainable Development in the Middle East**

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### **Abstract**

The 1947 Resolution 181 of the United Nations divided the British mandate of Palestine into Arab and Jewish states. That was the re-birth of violence in the Middle East, between Israel and Palestine. The Jewish universalist claim of being “the chosen people of God” implies a core fundamentalist position. Palestine also takes a similar position in defense of a social identity. This informs the unyielding, destructive insistence by both parties, regarding their existential condition of living along the Gaza. The result is that they and some of their allies prefer defense of old identities to building and maintaining civil diplomatic relations with each other. It is important to ask afresh: how can a rigid concept of identities and religious fundamentalism, explain the rationale, nature, and pattern of the lingering destructive conflicts in the Middle East? And how can secularization and appreciation of the fluidity of social identities, serve as existential ideological solutions to conflict resolution and sustainable development in the area? The aim of this paper, therefore, is to examine the impact of rigid identity and religious fundamentalism in the lingering conflict between Israel and Palestine, as well as the prospects of secularization in the Middle East. Qualitative method of study was used. Data were collected from secondary sources such as books, journals, newspapers, audio, and video recordings, etc. Data were analyzed using descriptive, hermeneutic, and dialectic-philosophical analyses. We argue that an inevitable solution to the conflict in the Middle East is a sustained campaign for secularization and fluidity of social identities in the region. This will require defusing the myth of being specially chosen among other groups and therefore deserving of pre-eminent consideration. It will prove to be a condition for meaningful dialogue about sustainable development in the region.

**Keywords:** Identity, fundamentalism, middle east, sustainable development, secularization

## **The nature and dynamics of politics and resource control: Exploring the nexus of instability in the 21st century Nigeria**

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### **Abstract**

The quest for resource control and appropriation has led to the emergence of Nigeria, and has continued to structure the nature and dynamics of power acquisition, use, and consolidation since 1960 independence. From anecdotal evidences, Nigeria is continually and increasingly experiencing debilitating instability that threatens its existence since 1960 particularly in the 21st century. This paper explores the nature and dynamics of power acquisition and use, resource control and distribution, and instability in Nigeria since 1960 with a view to investigate their causal links. The paper adopts a historical/analytical method of enquiry and generates data largely from books, journal articles, magazines/newspapers and the Internet. Data generated was analysed with the aid of content analysis. Results of analysis reveal that the centralisation of power and control of resources, and the ethnicization of their distribution and consumption, are the primary of progenitor of unabating instability in Nigeria since 1960. Synthetically, they orchestrated regional cleavages, the emergence of separatist movements, ethno-religious militia groups, legal contestations and alterations of systems and institutions of governance, nepotism, insurgencies and conflicts, and the failure of state system in Nigeria, etc. The paper makes practical recommendations for rethinking and restructuring in Nigeria for purposes of mutual co-existence, management of resources, and stability.

Key Words: politics, resources, regional cleavages, stability, Nigeria

## **Do the structural characteristics of industries influence their decision to utilize strategic alliance?**

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### **Abstract**

Strategic alliance is a cooperative agreement among industries such as large and small scale industries, institutions, and organizations, based on business contracts. This agreement is to reach a medium or long term benefits that they could hardly obtain working alone. This includes activities such as exchanging, sharing or co-development of products. The structural characteristics of an industry are the intrinsic characteristics/features of such an industry which often play a crucial role in their decision making process. This can be measure by the size, age, inputs, capacity utilization, asset base, ownership etc. This study assessed the structural characteristics of industries and their influence in the decision to utilize strategic alliance by industries. The study adopted a survey research design and a questionnaire survey of 115 industries while charts, percentages and tables were used to show results. Based on the structural characteristics of the surveyed industries, two types of industries were found in the study. These are small scale enterprises with not less than five and forty nine (5 and 49) employees and medium scale enterprises with an employee base of between fifty and one hundred and ninety nine (50 and 199). The result showed that 78.1% of the SMEs surveyed in the area were small scale enterprises while 21.9% were medium scale enterprises. In the area of strategic alliance decisions by industries, the study found that all sizes of industries both small scale enterprises and medium scale enterprises engaged in strategic alliance. Consequently, the study has shown that small scale enterprises are the fulcrum of industrial activities in the study. This also indicated that the study area has the potentials to stimulate entrepreneurship development were innovation and human ingenuity can be harnessed. It is therefore recommend that industrial policies of government should be targeted at harnessing these potentials.

## **Environmental and Social Safeguards: The Sustainable Tool for Environmental Mainstreaming in Development Assistance**

**By**

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God created and designed our beautiful earth to last forever. However, overtime, across space and with increasing population and advancement in technology, environmental problems took over, and culminated into increasing poverty, especially in developing countries. As part of the global movement to promote a more sustainable and socially just world, international development agencies (institutions and banks) are jointly committed to assisting developing countries through a number of interventions. They recognize the need for a proactive approach to ensure that environmental and social considerations are mainstreamed into their interventions, through the adoption of safeguards systems, currently called Environmental and Social Framework (ESF). Typically, the World Bank's ESF sets out a set of ten (10) Environmental and Social Standards (ESS1-10) designed to focus on the identification and management of environmental and social risks and impacts of projects for development assistance from the Bank. This is aimed at reducing poverty and increasing prosperity in a sustainable manner, for the benefit of the people and their environment. This framework is being recommended to be mainstreamed in all investment projects to mitigate negative and enhance positive environmental and social impacts of those projects. This is the sure way of ensuring and achieving sustainable development that guarantees environmental sustainability and social responsibility.

**Key words: *Sustainable Development, Environmental and Social Framework, Environmental and Social Safeguards, Environmental and Social Standards, and Environmental and Social Impacts***

## **Appropriating Proverbs 31:10-31 in the light of Matriliny and Wives' Roles for Stable Families in Ohafia Community, Abia State, Nigeria**

By

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### **Abstract**

Matriliny is a kinship system in which descent is reckoned through the mother's side. This cultural practice is found among the Ohafia village group of Southeast Nigeria. Extant literatures indicate that matrilineal system of kinship heralds dysfunctional families in Ohafia community. Ohafia matrilineal kinship system encourages men to abandon the responsibility of taking care of their children because their children culturally belong to their wives' brothers and sisters. They commit their resources to training their sisters' children. Consequently, the burden of children upbringing often becomes the sole responsibility of women. This usually results in family instability and unrest. This study investigates the various traits which husbands develop in response to this cultural practice and how this practice challenges the roles of wives in maintaining stable families. Hence, this paper primarily aims at examining the roles of a wife in maintaining a stable family in Ohafia community in the light of Proverbs 31:10-31. This text is an alphabetic acrostic poem written in honour of a capable wife. It consists of explicit statements which cut across the roles of a wife in a home. This study employs rhetorical analysis to study and carry out a contextual application of the text to the social reality under discourse. Phenomenological method is used to analyse data which is derived from personal communication (oral interview), journal articles and online resources. Findings from this study indicate that the message of Proverbs 31:10-31 is very essential in educating Ohafia wives on their roles in ensuring functional families.

**Key words:** Matriliny, Ohafia, Wife, Stable family, Proverbs 31: 10-31

## **Corruption, Political Instability and Economic Growth: Evidence from Panel of African Countries**

**By**

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This paper carries out an empirical investigation of the link between corruption, political instability and economic growth in Africa from 1996 to 2020. It is evident from the literature that corruption leads to several fragilities and generates conflicts and potential destructions thereby hampering growth and sustainable development especially if the conflicts persist over time. The paper employs system gmm estimator and a panel of 54 countries in examining the relationship. The results have revealed evidence of a strong relationship among the variables across the countries studied. The results are indicative of the need for policy makers to explore more meaningful ways of combating corruption in Africa; as doing so would help propel growth in these nations.

**Key Words:** Corruption, Political Instability, Economic Growth, System GMM

## **Assessment of the Impacts of Waste Management on the Environment in Lokoja, Nigeria**

By

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### **Abstract**

Globally, Man's activities generate wastes, and this waste has to be managed as they affect the environment. The management of wastes has become an area of major concern in the Nigeria and Lokoja inclusive. This necessitates the need for embarking on the study. The paper therefore, assessed the impact of domestic waste management on the environment in Lokoja, Kogi state, Nigeria. This study was carried out through observation and the administration of structured questionnaire. A set of 200 questionnaires were randomly administered to cover parts of Kabawa, Felele, Ganaja, Old market/Kenwon and phase 1&2 area. Forty (40) questionnaires per location. These locations are more densely populated and are likely to be areas with dense waste. The data collected were analyzed using descriptive statistics and ANOVA used to test the hypothesis. The descriptive analysis shows that majority used open burning for their waste (58.6). The result of the ANOVA show that ratio for Df (9, 50) is 2.04 from f-distribution table, indicate that 4.33 is greater than 2.04. Calculated value is greater than table values, which indicate that, there is a significant relation between educational level of respondents and waste management method in Lokoja urban. The impact of waste management in the study area includes pollution of; air, land and water and the health hazards of the populace. It is therefore concluded that the highest challenges of waste management in the study area is the lack of personnel and capacity to monitor and regulate the activities of sanitary activities (63%) and the least 11.0% is in conflicts and disagreement on who is responsible for waste management. Parts of the recommendations include; the need to employ more professional sanitation managers by Kogi state government and the relevant private agencies.

**KEYWORDS:** Assessment, Environment, Impact, Waste Management, Nigeria.

## Potentials of Effective Urban Planning as a Tool for Disaster Risk Reduction in Nigeria Cities

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### Abstract

In the last couple of years, disaster occurrence, both natural and human-induced are increasing worldwide. The magnitude of these disasters and the severity of their impacts have become sources of concern to development analysts and disaster risk managers. The paper examines the potentials of effective urban planning as a tool for disaster risk reduction in Nigeria cities. This study highlights that unlike what obtains in many other parts of the world such as Europe, North America and South East Asia that are particularly ravaged by natural disasters such as landslides, earthquakes and hurricanes amongst others, the disasters commonly experienced in Nigeria as in many other sub-Saharan African countries, save for perennial flooding, are mostly human-induced disasters. In spite of the low frequency of natural disasters in the country the frequency and severity of human-induced disasters in recent times has become worrisome. This study therefore, emphasize that many of these kind of disasters such as building collapse, fire outbreaks, pollution and epidemics occur in the country as a result of the inappropriate pattern and poor land-use planning and uncoordinated physical development activities, particularly in the urban areas. It is therefore conclude that Urban planning through its various measures, some of which have been highlighted in this study, where effectively instituted, has the potential to severely minimize if not entirely remove the development-related risks that triggers disaster events, particularly human-induced disasters. The paper therefore, recommend that, relevance and utility of effective urban land-use planning and physical development tools such as land-use zoning, prevention of unwholesome and incompatible land-uses amongst others as veritable tools or measures for the prevention and minimization of human-induced disasters in the Nigeria.

**Keywords:** Disaster, Effectiveness, Potentials, Risk reduction, Urban planning.

## **The Igbo nation of Nigeria as descendants of Israel: socio-cultural and religious implications.**

By

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### **Abstract**

The Igbo nation of Nigeria, who occupy the South eastern part of the country, is a unique set of people whose language distinguishes them from all other languages, and spoken only in Igbo land. The Igbo people are known for their resourcefulness, ingenuity and enterprising spirit. There has been much speculations about the origin of the Igbo people as it is unknown how exactly the group came to form. Two communities in Anambra State—Nri and Aguleri—claim that the Igbo originated from their different communities through migration in the ancient times .Some historians hold that following the Assyrian invasion of Israel in the 18<sup>th</sup> century BC, ten tribes of the Israelite Northern kingdom were forced into exile and these tribes migrated westwards to Africa. This large population of the dispersed Jews became “lost” tribes from which the Igbo originated. Cultural identities and common religious practices are other factors which Israel and Igbo have in common. Aguleri people hold that Eri, the progenitor of Ndigbo migrated from Israel as the fifth son of Gad, the seventh son of Jacob. Nri people claim that the origin of Nri is Egypt and the father of Nri was Gad and Gad was the son of Jacob. This paper examined these claims including the socio-cultural and religious traits in order to establish the true origin of the Igbo nation and /or their relationship with Israel. Citing the Holy Bible in Genesis chapter 46 verse 16, Eri appeared there as the fifth son of Gad, the seventh son of Jacob, substantiating Aguleri’s claim of Igbo ancestral origin. The Social Network theory was adopted as the theoretical framework for this work. Holding the Biblical account very supreme, and examining the socio-cultural and religious similarities between the Igbo and Israel very critically, we submit here that the Igbo people are true descendants of Israel. **Key Words:** Igbo nation, Israel, descendants, socio-cultural, religion, migration, implication

# Israel's Legal Framework for Environmental Sustainability as a Model to Nigeria

by

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## ABSTRACT

The environment and issues relating to sustainability is the contemporary question of this age. As an oil producing nation, the exploration and exploitation in Nigeria impact negatively on the environment. The Nigerian environment is in danger, having been degraded by human activities especially in the oil sector of the economy. Economic activities are not carried out in an environmentally sustainable manner and with adequate attention and concern for the environment. The quest for economic development and the by-products of economic growth cause cumulative stress on the environment thereby resulting in environmental degradation. Survival on the earth now depends more on the ability to restore the balance between the biosphere and the ecosystem. If necessary measures are not taken to reduce environmental degradation and other unwholesome practices which threaten the health of the environment, calamity will be inevitable. The increasing rate of environmental degradation taking place in the world over and particularly in Nigeria has generated more concern for the sustainability of the environment. This paper therefore seeks to use Israel's legal framework as a model on how Nigeria can effectively preserve and maintain the purity of the environment and thereby reduce environmental degradation to enhance the base of economic productivity. It also discusses the lacunas and porosity of our environmental laws while showing that sustainable environmental governance framework ensures simultaneous progress towards environmental and economic goals. The law in its core function towards maintaining a stable and sustaining environment and economic productivity cannot be overemphasized particularly in view of Israel's strategic vision 2030 .In this context the paper makes some recommendations.

**KEY WORDS:** Environmental Sustainability, Environmental Laws, Israel's strategic vision 2030, Environmental degradation, Environmental governance, Nigeria.

## **Assessment of Student's Willingness to Pay towards achieving Campus Environmental Sustainability at University of Nigeria, Enugu Campus**

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### **Abstract**

Institutions of learning are the major drivers of changes in the society, be it primary, secondary and tertiary education. These changes are expected to go beyond campus communities but to the real world environment. Achieving campus sustainable environment is not possible without involvement of the students as one of the major stakeholders' of university communities. The contention is whether the students are willing to participate in achieving sustainability is doubtful, especially in University of Nigeria Enugu campus. The aim of the study is to ascertain student's willingness to pay to achieve campus environmental sustainability. Based on the survey of 394 students of the University of Nigeria Enugu Campus, the result of the study showed that the student indicates a great of awareness and concern about campus environmental sustainability. They are willing to pay ranging from ₦ 500 to ₦ 8,000 annually to achieve sustainable campus environment. There are interested and willing to participate towards achieving sustainability in the area of landscaping and waste minimization practices. Though there are few sustainability initiatives in transportation, energy and water conservation on the campus. The study suggested the incorporation of sustainable environment to campus operation, training students in promoting environmental sustainability in the University of Nigeria.

**Key Words:** Assessment, Student, Willingness To Pay, Environment, Sustainability, University of Nigeria

## Efficiency analysis of rice (*oryza sativa l.*) production in Ningi Local Government Area of Bauchi State, Nigeria

By

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### Abstract

The study was conducted to analyze the efficiency of rice production in Ningi Local Government Area of Bauchi State, Nigeria. It studied the socio-economic characteristics of rice farmers, determined the profitability, technical, allocative and economic efficiencies of rice production, and traced the sources of information and the constraints associated with rice production in the study area. Multi-stage random sampling technique was used to generate data from 188 respondents. The data were analyzed using descriptive statistics, gross margin and stochastic frontier model. The results revealed that majority (70.74%) of the respondents were male, 69.68% were within the age range of 31-50 years and 68.62% were married, 76.60% had farm size of between 0.1-15 ha, 84.58% were not member of cooperative society and 96.96% do not had access to farm credit. The production of rice was profitable with gross margin of ₦68, 509.40/ha; net farm income of ₦59, 152.01/ha and return per Naira invested of 0.29. The stochastic frontier production function revealed that farm size, fertilizer, agrochemicals as well as labour were significant. The mean technical, allocative, and economic efficiencies were 0.82, 0.94, and 0.77, respectively. The production frontier cost function indicated cost of farmland, agrochemicals, fertilizer as well as labour were significant. Furthermore, friends and relatives (81.92%) and neighbors' (69.68%) were the major sources of information to rice farmers. The major constraints in rice production were land fragmentation, inadequate capital, high cost of farm input and high cost of labour. It was concluded that rice farming was remunerative and farmers were inefficient in the production. The study recommended there is need for government support to revitalize and prioritize funding to extension services, provision of incentives, expansion of farmers' awareness on information and addressing the issue of land fragmentation through land used act of 1978 to ensure efficient productivity among rice farmers.

Keywords: Analyzed, Efficiency and Rice Production

# Exploring the Effects of Processing on Marketing of Agricultural Produce in Nigeria

By

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## Abstract

The breakthrough in agricultural marketing of unprocessed to processed agricultural products has increased the marketing efficiency of distribution of the processed product. This development coupled with the advancement of technology gives birth to many opportunities in the marketing of processed agricultural produce. This paper seeks to describe the concept of processing on the marketing of agricultural produce its characteristics and challenges to appreciate the opportunities that bound in processed of agricultural produce as well as strategies to employ to operate in many markets. It is a conceptual paper that is exploratory. The study reviews the challenges and opportunities of marketing agricultural processed produce. The study concludes that processing of agricultural produce will enhance its marketing and serve as a catalyst for economic development. Further recommended that, the agricultural processing should be upheld by the stakeholders especially those involved in crops and livestock for better marketing opportunities and longevity.

**Keywords:** agriculture, produce, processing, challenges, marketing strategies, marketing

## Students' preference for online learning in post COVID-19 era in Nigeria

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### **Abstract**

The online mode of study has been in existence world wide, especially in developed countries of the World. However, with the emergence of covid-19 pandemic there was unprecedented increase on the operation of online lecturing by a number of universities across the globe generally and Nigeria in particular. As if the post-covid-19 pandemic will result to decrease on the number of University students engaged in online learning, the reverse is the case. This study thus explore whether cost-effectiveness, accessibility, customized learning experience and less time investment that are inherent in online learning has resulted to the continued increment of the number of University students engaged in online study in Nigeria even in the post-covid-19 era. The students of Open University of Nigeria, (NOUN) Enugu study centre and those of the centre for Distance and e-learning (CDeL) programme of the University of Nigeria Nsukka constituted the respondents for the study. After the analysis of the data collected for the study and the test of the hypotheses it was established that cost-effectiveness, accessibility, customized learning experience and less time investment were the major factors for students preference for online learning. It was therefore concluded that online learning is less expensive, can be sourced from any part of the world, gives room for customized learning and effective time management. Based on this, it was recommended that Universities in Nigeria should improve as they migrate to online learning especially by way of ensuring that necessary technologies that ensure its efficiency and effective are adequate.

*Keywords: Online learning, preference, cost-effective, accessibility, customized learning experience, time management, post-covid-19.*

# Urban Tourism and Sustainable Development in Nigeria

By

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## Abstract

The pinpoint of this study is to probe the deficiency of government in advancing urban tourism as a strategy for sustainable revenue generation and employment as well as infrastructural development in Nigeria. We relied on the documentary source for relevant information for the study and analyses the data using descriptive statistics. The study further relies on the structural-functional theory as our theoretical framework of analysis. The result of the study shows that deterring infrastructural development can make urban centers dysfunctional and such originates from corrupt leadership style, high level of insecurity, weak institutional base, actors in policy preferences, and others. The study therefore posits that to encourage and boost urban tourism for sustainable development there is need to encourage the strong institutions with adequate legal framework that will enforce policies and programs relating to urban development.

Keyword: urban tourism, sustainable development, revenue generation, infrastructural development, governance.

## The impact of governance on sustainable energy development: an assessment of Israel and Nigeria.

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### Abstract

Sustainable energy development requires a balanced composition between energy security, economic development and environmental protection. This study seeks to address comparatively how government policies of Israel and Nigeria accentuate sustainable energy development which is an important sustainable development goal. Poor governance can never be a catalyst for energy security and energy plays a vital role in economic growth and development, poverty eradication and security of any nation. The study relied on documentary method for data collection while qualitative content analysis and case study research design are deployed in our methodology. The study adopted the propositions of David Easton's systems theory to analyze how subsystems in Israel and Nigeria are framed towards actualizing sustainable biomass and solar energy development. Findings reveal that Israel has made rational use of biomass and solar energy resources to sustain development through effective governance structures and process. The Nigerian government has also adopted policy mechanisms towards addressing sustainable energy development but unfortunately, increasing failure of policy direction as a result of lack of political will, weak governance structures and capacity has undermined the achievement of sustainable energy development. The paper therefore, recommends strengthening of governance structures, strong political will power, and clarity of purpose and effective deployment of technologies as a panacea for sustainable energy development in Nigeria.

**Keywords:** *Governance, sustainable energy, development, biomass, solar energy.*

## **A Hostel Inmates' Perceptions on Causes of Poor Environmental Sanitation of a Nigerian University Campus Hostels**

By

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### **Abstract**

Environmental sanitation is fundamental to schools' health and development, and having healthy hostels/school environments sets schools on track for conducive and active learning. Major public health problems are controlled with the proper sanitisation of student hostels. However, the environments of many hostels in some Nigerian universities are poorly sanitised. Finding out the root causes of the poor hostel environmental sanitation from the inhabitants of the hostels is a step towards truly addressing the problems of unhygienic hostel environments. For the above background, this study aimed to assess the perceptions of a Nigerian university hostel inmates on the causes of poor university campus' hostel environmental sanitation. Specifically, this descriptive survey determined the opinions of the randomly selected 243 inmates on student-related, school authority-related, hostel cleaners-related, and waste management authority-related causes of poor environmental sanitation of the hostels using the researchers' developed questionnaire. The result showed that improper waste disposal, including indiscriminate dumping of faeces within and around the hostels, is a major student-related cause of poor hostel environmental sanitation, as the respondents (> 80%) opined. Greater than 80% of the respondents equally opined that assigning more inmates than the capacity of the hostels can carry, a limited number of students' hostels on the campus, inadequate hostel waste management workforce, and inadequate supplies/supervision of hostel waste management workers are the leading school-authority-related causes of the problem. Poor execution of the hostel cleaning tasks is what 86.4% of the respondents viewed as the central hostel cleaners-related cause of the poor hostel environmental sanitation. According to the respondents' viewpoints, the significant waste management-related causes of the problem include poor management of waste-draining gutters, lack of prompt repair of spoilt waste collection facilities, and lack of routine hostel environmental checks. Conclusively, the students, the school authorities, the hostel cleaners, and the waste management authorities all contribute to the poor hostel environmental sanitation within the university campuses. Therefore, the above four identified stakeholders of university hostels should explore the option of collective dialogue to proffer and implement workable solutions to the perennial problem of poor hostel environmental sanitation in Nigerian universities.

**Keywords:** University hostel inmates, perceptions on causes, poor environmental sanitation, Nigerian university campus hostels

## **Culture and Religion: Dynamics for Sustainable Development in Nigeria**

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Development is the driving force for structural renovation and the introduction of new features of progress, advancement and industrialization in a given environment such as Nigeria. Development ushers in a propelling wheel of new activities towards enhancing improved living conditions for the growing population such as Nigeria. With development there is a continuous renovation and a structural advancement for the betterment of the living condition of the people. Development comes with new things; new houses, new roads, schools, hospital, industries, new and improved means of transportation and communication. Religion which represents that invisible and spiritual aspect of man in his relationship with the absolute is a very strong force that structuralizes the pattern of mind set, attitude and meaningful value consideration. Nigeria is pluralistic societies of religion, culture, ethnicity and political and social afflictions. These plurality and diversity of cultures and religion has over the years impacted very negatively on the course of development in Nigeria leaving very insignificant traces of success. As many scholars observe if this plurality of culture, religion and political affiliations are not properly managed, the imperatives of sustainable development will continue to elude our country, Nigeria. Adopting the methods of comparative and critical analyses this paper argues that culture and religion rather than continue to constitute barriers to the progress and development of the people should be assess as dynamics of socio – economic transformation and be employed for integrated sustainable development in Nigeria.

**Keywords:** *sustainable development, culture, dynamics, industrialization, religious conflict*

## **Culture as a Tool - Box for Sustainable Development in Nigeria**

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Culture represents the totality of both the expressive and none expressive modes of the people in a given environment. It is the tool box that contains the permissible activities and the prohibitions of a people; it contains the social parameters for interpersonal relationships and enforces actions toward the maintenance of a common interest of the people. As a tool box, its custodies a behavioural pattern that identifies a person as a member of the immediate environment as it creates index for acceptance, integration and lay down rules of engagement in the case of inter cultural relationship. Sustainable development is understood as a process of change in which the exploitation of resources, the direction of investments, the orientation of technological developments and institutional changes are made consistent with prevailing existential necessities. This is made possible through cultural dynamics such as tourism, handicraft, food production; creative industries, agriculture, food and medicine to promote economic growth. This paper applying the method of comparative analysis argues that culture as a driver of societal transformation should constitute a very important element of the strategies of sustainable development. This paper concludes that culture in the modern sense transcends the concept of the theater of festivities and rituals but should be understood as a very important element for inclusive economic, social and industrialization.

*Keywords: sustainable development, culture, toolbox, industrialization, control device*

## **Ethnic faultline in the farmer-pastoralist conflict (FPC): when does ethnicity matter to the FPCs? A case study of Adani-Nimbo area in South-Eastern Nigeria**

**By**

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### **Abstract**

The farmer-pastoralist conflict (FPC) has been discussed and given ethnic and religious appellations in some countries of West Africa, such as Ghana and Nigeria. In Nigeria, such a reading of the conflict is rampant in the media and dominant in national political discourse. However, these ethno-religious insinuations have not received serious scholarly treatment in Nigeria or been downplayed. In this paper, we examine the context in which ethnicity becomes vital to the FPCs based on fieldwork in the Nimbo-Adani area of Uzo-Uwani municipal area of Enugu State affected most by the conflict in South-Eastern Nigeria. This area is an essential hot spot of the FPCs that has not been explored in analyzing the FPCs in Nigeria. The study is based on field observations and semi-structured in-depth interviews. The paper draws on the FPCs literature regarding the influence of ethnic identities on the conflict. It shows that the difference in ethnicity between pastoralists and farming communities is not the primary root of the conflict. At the first outbreak of violence, the difference in ethnicity was not the cause of the conflict. Ethnic identity only gets enrolled after the first brutal fighting between the nomads and the farming community. Non-violent conflicts often occur because of cattle destruction of crops and pollution of water sources. Although the herders are accused of various atrocities, such as rape and kidnapping, the first outbreak of violence was caused by retaliation for killing a herder in one of the villages. This then heighten ethnic identity and amplify the construction of the herders' identity and social status as non-indigenous and non-belongs in the villages. Thus, the villages seek the eviction of the herders based on their social status as non-indigenes. The paper thus argues that ethnic faultline matter to the FPCs but only after other factors has initiated the conflict. Therefore, we should pay attention to the primary root of conflicts and how they get the basis for social exclusion activated.

**Keywords:** farmer-pastoralist conflict; ethnicity; land struggles; Nigeria; ethnic faultline; identity

## **Religious violence in Nigeria: An obstacle to effective public service delivery**

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### **Abstract**

In Nigeria, despite the lofty program embarked upon by different administrations to better the lives of Nigerian citizens, the extent to which these services are provided, in most cases, has remained stuck in swampy ground due to pervasiveness of religion. Departing from the underlying causes approach, this study undertakes an analytical inquiry into how religious violence has hindered smooth operation of public service delivery in Nigeria. Data for the study was sourced from both primary and secondary sources. In analyzing the data, logical method of analysis was adopted. Findings showed that religious violence has remained endemic in the country since the last two decades. The adherents of the two dominant religions in Nigeria – Christianity and Islam, have fought wars rather than they had sought for peace. This has deterred government's efforts in providing the required services that will benefit the Nigerian people. In view of these findings, the study recommends reforming the structure of the public sector and personnel management in Nigeria in a way that would help to check incidences of religion-based violence amongst the citizens. There should also be regular review of public service performance in order to improve efficient and effective service delivery to the general public. Similarly, all actors involved in providing essential services needed for the sustenance and survival of Nigerians should not only be encouraged to carry out their duties with benignity but also, must be provided with adequate security to function. Some of these actors include policy makers, frontline professionals, service recipients, and organizational providers.

**Keywords: Religious violence; public service delivery; public policy; Christianity; Islam**

## **Analysis of geospatial pattern of armed banditry in Gusau, Zamfara State, Nigeria.**

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### **Abstract**

The existing literature on banditry attributed it to many factors that vary in both time and space but geographical approach in banditry research is still inadequate especially in Gusau, Zamfara State, Nigeria. Thus, we mapped and analysed the spatial pattern of armed banditry in Gusau Zamfara State, Nigeria. The spatial data on occurrence of armed banditry from 2013-2019 was generated using vector data (X, Y) points of verified banditry spot collected from Nigeria Police Force, Nigeria watch data base, Newspapers and stakeholders' consultation. The spots of banditry in Gusau Local Government Area were analysed using Nearest Neighbour Analysis (Rn) and ANOVA. The result of Nearest Neighbour Analysis was 0.003 which means that banditry occurrence exhibited cluster pattern. Armed banditry has occurred in five wards (Mada, Magami, Ruwan Bore, Wonaka and Wanke) out of eleven wards. The variation in armed banditry occurrence among the eleven wards in Gusau is significant as calculated F (2.78) is greater than F ratio (1.91). There is a clustered pattern within certain location, thus, the need to improve security around specific locations has become highly inevitable.

**Keywords: Banditry, Geospatial pattern, Cluster, Mapping, Spatial data**

## Investigations of Factors that Constrained the Integration of Green Building Concept in Estate Housing Construction in FCT Abuja, Nigeria

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### **Abstract**

Green building has become a major interest of environmentalist and building professionals towards sustainable development. Consequently, scope and principles of Green Building Concept are well documented; however, compliance is still a contending issue in Nigeria. Thus, investigation of factors that constrained the integration of green building concept in estate housing construction in FCT Abuja, Nigeria was carried out. Objectives were to identify and assess factors that constrained the integration of green building concept in estate housing construction in the study area. One hundred and fifty (150) building professionals were randomly selected for data collection using questionnaire. Other stakeholders were contacted for interview. Data were analysed using percentage, rank and Factor Component Analysis. Challenges such as artisans' domination of professionals in the construction work, fear of higher investment costs, ignorance of stakeholders, increased consultancy fees and others were identified. The challenges were resolved into four main factors. The factors were scored and ranked as follows: Socio-Cultural (24.02% 3<sup>rd</sup>), Economic (23.06% 4<sup>th</sup>), knowledge/technical (25.31% 2<sup>nd</sup>) and political/policy factors (27.61 1<sup>st</sup>). Thus, issues related to policy and knowledge were the major constraints. Thus, there is need for policies that will guide green building and public enlightenment to improve knowledge and motivate stakeholders to build green in Nigeria.

**Keywords:** Green Building, Estate Housing, Sustainable Construction, Constrain Factors

## Analysis of geospatial pattern of armed banditry in Gusau, Zamfara State, Nigeria.

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### Abstract

The existing literature on banditry attributed it to many factors that vary in both time and space but geographical approach in banditry research is still inadequate especially in Gusau, Zamfara State, Nigeria. Thus, we mapped and analysed the spatial pattern of armed banditry in Gusau Zamfara State, Nigeria. The spatial data on occurrence of armed banditry from 2013-2019 was generated using vector data (X, Y) points of verified banditry spot collected from Nigeria Police Force, Nigeria watch data base, Newspapers and stakeholders' consultation. The spots of banditry in Gusau Local Government Area were analysed using Nearest Neighbour Analysis (Rn) and ANOVA. The result of Nearest Neighbour Analysis was 0.003 which means that banditry occurrence exhibited cluster pattern. Armed banditry has occurred in five wards (Mada, Magami, Ruwan Bore, Wonaka and Wanke) out of eleven wards. The variation in armed banditry occurrence among the eleven wards in Gusau is significant as calculated F (2.78) is greater than F ratio (1.91). There is a clustered pattern within certain location, thus, the need to improve security around specific locations has become highly inevitable.

**Keywords:** Banditry, Geospatial pattern, Cluster, Mapping, Spatial data

## **Firewood usage and indoor air pollution in rural communities in Enugu-North Senatorial zone: Implications for women's health and environmental sustainability.**

**By**

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The impact of cooking smoke on the health and well-being of women and children and the environment is substantial. This study investigated the use of firewood and awareness of its health and environmental impact in rural communities in Enugu North senatorial zone, Enugu state, Nigeria. Within the critical ethnographic approach, in-depth interview was employed to gather data from men and women in 30 randomly selected households in three communities (Amalla, Obukpa and Ovoko) in three LGAs (Udenu, Nukka and Igbo-Eze South) in Enugu- north senatorial zone. The data were thematically analyzed. All the randomly selected households rely entirely on firewood for cooking and heating. Only few women (10%) were aware of the health implications of cooking with firewood. Two of the women who were into cashew processing at Amalla, Udenu LGA narrated some of the health challenges they were facing due to exposure to firewood smoke. Both men and women were ignorant of the environmental impact of the use of firewood. To overcome the health and environmental consequences of traditional three stove fire for low-income households, we advocate for actions to empower women and girls in rural communities in Enugu-north senatorial zone, through awareness creation on the danger of cooking smoke to human health and the environment and provision of improved stove to reduce vulnerability to health and environmental issues.

## **Wholesale Land Resource Transactions, Rural Banditry and Sustainable Development in Nigeria: Zamfara State in Perspective**

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**And**

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### **Abstract**

Since last decade, Zamfara State, as in other northwestern states of Kaduna, Kano, Kebbi, Katsina, Jigawa, Sokoto, has been cross-stitched in a complex campaign of terror as advanced under the vanguard of hybrid armed bandits; with at least 10,000 armed bandits and cattle rustlers operate in eight major camps in the state. In spite of national and state-level military, legislative and soft response approaches, rural banditry characterized by wanton killings, cattle rustling, village raids, kidnapping for ransom etc, has upswinged in Zamfara State, impeding on the security environment and sustainable socio-economic developments in the state and Nigeria at large. The paper interrogated land resource transactions and rural banditry in the context of sustainable development in Zamfara State. Documentary method of data collection and qualitative descriptive method of data analysis were adopted in the paper. The paper was ingrained in Frustration-aggression theory to contend that the wholesale land transactions between the traditional/modern authorities and elite farmers accounted for inter-communal conflicts between the Hausa farming communities and Fulani pastoralists and escalation of rural armed banditry in Zamfara State. The urgent need to step-up extant policy efforts in land resource governance and pastoral economy by the levels of government was recommended in the paper as enduring panacea to farmers-herders conflicts and connected rural banditry and socio-economic development challenges in Zamfara State and northwest Nigeria.

**Keywords: Land resource; rural banditry, farmers and herders; sustainable development; Zamfara State**

## **Enhancing Environmental Sustainability: The Significance of Animism in African Traditional Religion**

**By**

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### **Abstracts**

Development is said to be sustainable only when it is wholistic; encompassing the three interdependent and mutually reinforcing pillars of economic development, social development and environmental protections. Unfortunately, there has been an increase rate of negative attitudes towards the environment in our society today; ranging from environmental degradation (depletion and extinction) to environmental pollution (contamination). This paper aims to highlight the potentials of some religious practices in enhancing environmental protection and sustainability. This study used qualitative methods in the collection and assessment of data. The findings reveal that though known world religions believes the environment ought to be protected since the earth belongs to God and humans as stewards, religious beliefs and practices which promotes animism, as can be seen in African Traditional Religious practices are more environmental friendly. However, one must not be animistic in order to protect the enviroment. The call for environmental friendly and sustainability remains a call for and to all.

**Key Words:** Environment, Environmental Friendly / Sustainability, Environmental abuse, Animism, African Traditional Religion

## Re-Tooling Nigeria's Legislation on Environment for Effective Environmental Governance

### By

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### Abstract

Environmental degradation has become an issue of global concern as new environmental crisis arises daily. This has given rise to many international treaties and agreements to halt the growing menace. Nigeria, like many other countries, has enacted much legislation to give effect to these multilateral environmental treaties to which they are signatories. Despite a plethora of environmental laws and agencies in Nigeria, achieving a benign environment seems to be far cry due to the many challenges and loopholes in these legislations. This paper critically reviews the environmental legislations in Nigeria x-raying the many loopholes that have hindered their effective enforcement. It proposes a thorough review of the extant legislations and the need to enact a one-shop-stop Environmental Law that will integrate various approaches to environmental legislation and apply international best practices that guarantee both public participation in decision making and access to environmental information. It is further recommends that the new Law should have stringent penalties, specific goals, broad based definition of environmental terms and creation of various management and enforcement organs with clearly defined powers and functions. These suggestions, it is hoped will create the much needed legislative terrain, that make for an effective and efficient enforcement of environmental laws and ensure optimum environmental governance in Nigeria.

**Key words:** Re-tooling; Environmental legislation; Environmental abuse and dislocation; Bottle-necks; one-shop-stop Environmental law

## **Residents' participation in municipal solid waste management: Pro-environmental behaviour towards sustainable environmental management in Enugu, Nigeria.**

By

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### **Abstract**

The management of Municipal Solid Waste (MSW) poses adverse environmental and human health impacts worldwide. Consequently, governments of both the developed and developing countries have continued to develop policies to guide effective and environmentally safe management. However, while policy initiatives in developed countries are focusing on facilitating speedy transitioning to zero-waste and zero-landfill following circular economy paradigm, many developing countries including Nigeria are still battling with provision of infrastructures for adequate collection and disposal of the ever-increasing waste stream occasioned by rapid urbanization and changing consumption patterns. Adopting a multi-stakeholder approach and data from interviews and field observation, this study critically examines how residents' participation in MSW management in Enugu state advances pro-environmental behaviour towards sustainable waste management and environmental protection. It reveals that while residents' participation have previously been left out of analyses of MSW management in Nigeria, community residents have contributed immensely to circular economy in Enugu, Nigeria through recovering of re-useable and recyclable fraction of the waste stream. The paper concludes that involving residents in MSW management offers scope for moving waste up the hierarchy and ensuring sustainable waste management towards environmental protection.

**Key Words:** Public participation, municipal solid waste management, pro-environmental behaviour, environmental protection, sustainable development.

## **Environmental and Public Health Management: A Review**

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### **Abstract**

Sequel to the rise in public health challenges resulting from environmental degradation, this paper critically reviewed literatures on how the quality of the environment affects public health in both the developed and the developing world. The literatures reviewed also included those bordering on the natural causes of environmental degradation like earthquake, tsunami, flood amongst others and man-made causes such as inadequate waste management, poverty, ignorance, lack of basic social amenities etc. It was discovered that the salient causes of environmental degradation are anthropogenic in nature. It was also revealed that environmental degradation can have significant impacts on human health ranging from allergies, cancers, and even death. These effects could be direct or indirect and they vary between developing and developed countries with respect to levels of exposures to environmental pollutants and access to public healthcare facilities. The paper concluded that since the quality of the environment determines the quality of life with man at the center of it, man has a duty of care to the environment; and thus must ensure a sustainable use of the environment which will enable him to live comfortably at the moment and also bequeath a safe and habitable environment to the future generations.

**Keywords:** Environment; Environmental Degradation; Public Health; Pollution; Sustainable Development

## **Corruption, Political Instability and Economic Growth: Evidence from Panel of African Countries**

**By**

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This paper carries out an empirical investigation of the link between corruption, political instability and economic growth in Africa from 1996 to 2020. It is evident from the literature that corruption leads to several fragilities and generates conflicts and potential destructions thereby hampering growth and sustainable development especially if the conflicts persist over time. The paper employs system gmm estimator and a panel of 54 countries in examining the relationship. The results have revealed evidence of a strong relationship among the variables across the countries studied. The results are indicative of the need for policy makers to explore more meaningful ways of combating corruption in Africa; as doing so would help propel growth in these nations.

**Key Words:** Corruption, Political Instability, Economic Growth, System GMM

## **One God, two Places to Visit: Assessment of Pilgrimage as a form of Israel's Religious Soft Power and Lessons for Nigeria**

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### **ABSTRACT**

Israel is widely known for its hard power resources, and it is beginning to gather scholarly attention as a soft power state, especially with its global image as the birthplace of Christianity, making Israel a pilgrim state for the teeming population of Christians around the world, who seek to reconnect to the spiritual experience of the birthplace of their Messiah. On the other hand, several studies have established that with the Pentecostal revival wave permeating every corner of the world and its pivotal role in reverse missionary, Nigeria has been identified as central to this worldwide movement, occasioning an annual influx of pilgrims visiting the leaders and their Pentecostal churches. Unfortunately, there is little or no comparative study of these frontline states in terms of their religious soft power component. Therefore, the central focus of this paper is to examine the place of pilgrimage as a form of Israel's religious soft power and draw out possible lessons for Nigeria. Methodologically, the paper adopted the political economy of pilgrimage framework while data was sourced through Key Informant Interview and corroborated by secondary sources. The paper argued that pilgrimage to holy sites in Israel constitutes veritable soft power resources that the state of Israel has used to sell and launder its image among nations. Similarly, with religious tourism accounting for a large chunk of visitors to Nigeria, the study recommends that Abuja should take advantage of this emergent form of religious soft power as an avenue to prop up Nigeria's image abroad.

**Keywords: Pilgrimage, Religion, Soft Power, Israel, Nigeria,**

**Assessing three sustainable diets on the growth performance of Weaner Pigs.**

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**Abstract**

The research was carried out at the piggery unit of the teaching and research farm of Michael Otedola College of Primary Education Lagos State, Nigeria. The objective of this study was to assess the effect of three dietary feed treatments: plant foliage and fruits, palm kernel cake (PKC) and Wheat offal in a 50:50 ratio on the performance and growth of weaned pigs. 6 weaned pigs were allotted to three dietary treatments for 90 days with each treatment replicated twice in a completely randomized design. The piglets were placed on the same kilogram of feed/diet throughout the 90-day duration of the trial. The weaned pigs were divided in to three groups based on their initial average body weight of 3.2 – 4.7kg and allocated a treatment per month for the next three months. Weekly feed consumption, weight changes and weight gains were recorded. Weight gain and feed conversion ratio was estimated to assess performance of the weaned pigs. The results from the study shows the highest weight gain and feed conversion ratio was in the third month, while plant foliage and fruits diet gave the best compared to other diets in final weight gain, and feed conversion ratio at 3- 4kg gain in weight per pig. However, the dietary inclusion of Wheat offal and PKC in the second month gave a significant push in the weight gain of the pigs.

**Keywords: Weaner pigs, Growth performance, plant foliage and fruits, Wheat offal and Palm kernel cake.**

## **Rationalizing Neil Manson's Precautionary Principle and African Concept of Reality For sustainable Environmental Friendliness**

By

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### **ABSTRACT**

This work takes an analytic approach to rationalizing the link in Neil Manson's precautionary principle and African idea that reality is basically interconnected. It is on record that harm to human life and the environment has been identified as a recurrent concomitance of many developmental projects in human society. Hence to safeguard human life and the environment from development-induced harm, the United Nations made a declaration that precaution is one of the principles of sustainable environment. This declaration, however, has given rise to endless debate, varied and divergent interpretations and versions of precautionary principles, owing to the challenge encountered by various groups, environmental policy-makers and government agencies in their implementation. It is in this direction that Neil Manson took up a mediatory or rather reconciliatory approach to discover some unifying factors or what he calls 'genetic elements' grounding the many valid versions of precautionary principles existing. These elements, summed up as activity, effect and remedy, spell out a tripartite structure namely, the damage condition which specifies the characteristic of an effect for which precautionary measures should be considered, the knowledge condition which specifies the status of knowledge regarding the causal connections between the activity and the effect, and the remedy-need which specifies the remedy that decision makers should take in response to their activities. It is in this sense that this formulation aligns with the African idea that reality is interconnected. The African conceives reality in terms of a universe of forces that are linked together and that are in constant interplay with one another. So for the African, the environment comprises of elements which are both "material and mystical, visible and invisible, physical and mental, corporal and spiritual and each of these elements is so linked with the other in such a way that they appear almost inseparable. Manson's prescription of a conceptual clarity and strong awareness of this fact suggests that it is a good ground for justifying the validity of his theory. Thus Manson concludes that he has advanced a knowledge of an appreciation of the precautionary principle as a moral principle that underscores the normative character of environmental risk whereby the consideration of right and wrong rather than cost and benefits should be the basis for reevaluating environmental risk.

Keyword: Rationalization, Precautionary Principle, Environmental Friendliness, Sustainable Development

## **Drama as a Model of Evaluation: Re-examination of the Film "Ninety Minutes at Entebbe"**

**By**

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### **Abstract**

When in 1976, Israeli nationals were held hostage in Uganda by Pro-Palestinian terrorists with the assistance of the Ugandan despotic head of state Idi Amin, all diplomatic approach to freeing the hostages failed. Military option was ruled out because of the collateral damage it would incur. Equally ruled out was political solution due to time and health of the hostages among other considerations. After due consultation and evaluation of the situation, dramatic model was approved but, with little military back up in case of any eventuality during the rescue operations. Its success was second to none. Problem is that drama is usually dismissed as mere academic exercise with little or no connection to reality or solution of practical problems. The objective of the paper is to re-examine the film "Ninety Minutes at Entebbe" formally known as "Operation Thunderbolt" with a view to advancing the latent functions of drama in security operations. Findings show that this is the first time in the history of Israeli government this model was applied and over one hundred of her citizens were rescued with less casualty. It concludes that using dramatic model to test run policies before execution is more proactive than the straight forward approach. The paper adopted historical-analytical design and Dramatic Theoretical framework.

**Key words:** drama, policy, rescue, approach, proactive

## **An Ethical Approach to Land Use Practice in Traditional Igboland: Towards a Balanced Contemporary Framework for Environmental Protection.**

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### **Abstract**

There are in Igboland some culture-based land use practices which have continued to help some communities sustain and protect green vegetation around them. As processes of globalization and modernization continue to stretch into rural communities resulting to the destruction of green vegetation, it is important and urgent to assist rural communities to enjoy modernization processes without losing sustainable traditional cultural principles that have protected their lands and environment. Unfortunately, some of these cultural principles that define the traditional land use practices in Igboland communities are stigma-ridden with the attendant challenges of how such principles could be properly articulated into rational, feasible, and sustainable ethical framework for environmental protection projects in the region and beyond. Using the qualitative design, this study aims to expose the inherent stigmatization that some of these cultural practices may communicate to the growing modern minds, and finally argue that if these principles or practices are to be rationally redeemed from their imposing stigma, and rather given an ethical framework, they can serve as seeds for possible contemporary framework for improved environmental protection strategies in those communities and elsewhere. The paper finally recommends that a thorough philosophical analysis of some traditional land use practices in some parts of Igboland can result in identification of rational principles that support the continued sustenance and protection of vast green vegetation in these areas and beyond.

**Key words:** Ethical Approach, Globalization and Modernization, Land use practice, Stigmatization, Traditional Igboland.

# **Analysis of the effectiveness of health systems resilience in dispensing ART during the covid-19 lockdown in Nsukka Urban**

By

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## **Abstract**

Covid-19 overwhelmed health facilities across the globe and lockdown was necessary to manage the pandemic. This period was challenging especially for people living with HIV (PLHIV) as regards accessing antiretroviral drugs and other routine checks. To ensure uninterrupted dispensing of antiretroviral (ART) drugs for HIV patients, some measures were adopted. For instance, health facilities across Nigeria extended the multi-month dispensing of ART. This study, therefore, identifies the strategies adopted and assesses the effectiveness of those strategies in ensuring uninterrupted access to ART for people living with HIV in Nsukka urban. Two sets of questionnaire will be used for the study. One is for the ARV clinics to determine the measures adopted for continued dispensing of ARV during the lockdown. The second questionnaire is for the PLHIV to assess the effectiveness of the adopted strategies. Initial results show that there are four ARV clinics in the study area. Multi-month dispensing and courier service delivery were the strategies adopted to overcome disruption in dispensing ART in the four ARV clinics in the study area. The result on the effectiveness of those strategies will show if there exist some loopholes in assessing ART during the lockdown and this will guide our recommendations and conclusion thereof.

**Keywords:** Covid-19, antiretroviral, HIV/AIDS.

# **Role of Locust Beans Tree in Socio-Economic Growth and Sustainable Development in Southern Part of Kaduna State, Nigeria**

**By**

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## **Abstract :**

This study analyzed the role of locust beans tree in socio-economic growth and sustainable development in southern part of Kaduna State, Nigeria. A purposive random sampling technique was used to select 300 respondents; 100 each of producers, traders and consumers who were administered with questionnaires to elicit data. Information from personal observations was used to augment data from the questionnaire. Data were collected and analyzed using simple descriptive statistics. The results revealed that the socio-economic benefit of locust beans tree include the provision of food and nutrition, income and employment, household energy, medical services, improved soil fertility, environmental protection for sustainable development. Seeds, fuel wood and charcoal were also revealed to be the principal sources of cash incomes for economic growth in southern part of Kaduna State. Based on these results, the study recommended intensive establishment of the species in plantations, and improved processing and pricing policies for the products to sustain the benefits.

**KEY WORDS:** Locust Beans tree, Growth, soil fertility, sustainable Development

## **The Stability of the Earth and Human Flourishing in Igbo Myth of Origin and Noahic Covenant**

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### **Abstract**

The growing depletion of ozone layer, pollution of waters, extinction of species and exploitation of natural resources have led to concern about the stability of the earth and the flourishing of humans on the planet earth. Attempts at finding solution to the problem have given rise to diverse philosophical positions such as the anthropocentric, bio-centric and eco-centric. These various positions, however, despite their strengths, have not succeeded in providing principles that guarantees both preservation of environment and sustainable development goals. This paper finds in Igbo World View and Noahic Covenant a principle that adequately provides for the security of man and his environment. Focusing on what it identifies as the theandric principle, it argues that preservation of environment entails a relationship of partnership in which the confluence of divine and human purposes reliably secures the stability of the earth and human flourishing. The paper, using the phenomenological method, describes and interprets the myth and the Genesis account of Noah, showing how collaboration between the divine (God/Chukwu) and the human (Noah/Eri and Awka) brought about transformation and conservation of the earth.

**Key words:** environment, pollution, development, myth of origin

# **Non-Farm Activities and the Sustainability Status of Food Security in Rural Communities of Enugu State**

**By**

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## ***Abstract***

There is an ongoing shift in the economic mainstream of rural areas from farm to non-farm activities. Non-farm activities are well recognized by its significant role in complementing agricultural income for rural dwellers. The government has demonstrated a commitment to confronting the issue of food security in Nigeria with different policies, the result indicates that the target is far from being realized, as the country is still listed among the hungry and food-insecure nations. However, what is lacking is what complements households food sustainability of rural communities and this provides the basis for this research. This study is aimed at assessing the sustainability status of food security of rural communities in Enugu state, Nigeria. The research used primary data which were obtained through direct field observations, questionnaire, oral interviews and information from key informants. This research also made use of descriptive analysis, mean, frequency and barometer of sustainability model. The findings show that education had positive relationship with food security. More so, the males were more generally engaged with coping strategies than females while the number of households increased the level of food security decreased because of the number of people that needed to be fed. The study also found that Average (50%) were food secure, 45.3% food insecure without hunger, 2.5% food secure with moderate hunger, and 2.2 % food insecure with severe hunger. Considering the sustainability of 0.496 in food security, the areas of the study in average has medium sustainability of 0.496. Thus, the study area achieved medium sustainability of food security. This study therefore suggests that the achievement of SDG goals of two and three on zero hunger and Good health and well-being respectively for Enugu state requires deliberate policies to improve on non-farm activities since it complements household's agricultural income.

**Key words:** Nonfarm activities, Food security, Barometer model, sustainability status

## **Enactment of Anti-Open Grazing Law and Herders-Farmers Conflict in Enugu State, Nigeria**

**By**

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### **Abstract**

The study Appraised anti-open grazing and farmers-herders crisis in Enugu State. Social conflict theory was adopted for the study. This theory was developed by Karl Marx between (1830 – 1880) The specific objectives of the study were to: determine the extent to which prohibition of animal grazing on farmlands will help in resolving farmers-herders crisis in Enugu State, ascertain the extent to which prohibition of movement of livestock on foot will help in reducing herders-farmers crises in Enugu State and establish the extent to which the prohibition of animal grazing with weapons or firearms will help in reducing herders-farmers crises in Enugu State. This study was conducted using survey research design. The study employed secondary and primary sources of data. The population of the study was 1106681. Taro Yamane formula was used to determine the sample size of 400. The collected data was analyzed through the use of mean score. The Z-test analysis technique was applied in testing the hypotheses. The findings revealed that prohibition of animal grazing on farmland, prohibition of movement of livestock on foot and prohibition of animal grazing with weapon or firearms will help in reducing crisis in Enugu State. The study concluded that the anti-grazing bill enacted by the Enugu state government aimed at putting a stop on the senseless killings, loss of lives and property in the state by the herdsman-farmers frequent clashes will restore peace in the state. The study recommended that the anti-grazing law should emanate from the federal authorities rather than the states. This will give it greater effectiveness. The state should only step down the laws to suit their peculiarities.

**Key Words:** Anti-Open Grazing, Farmers-Herders Crisis, Prohibition, Livestock.

## **Engineering Liveability through Urban Renewal Projects in Enugu Urban, Nigeria**

By

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### Abstract

The ever-increasing population in urban areas has resulted in physical deterioration, including blight and obsolescence of infrastructure and social amenities, which served as the impetus for the use of urban renewal. This paper investigates how urban renewal strategies can promote liveability in Enugu city, with a focus on the physical renewal that has occurred in the study area. To achieve these goals, the following objectives were established: identify the physical renewal in the urban area, review the urban renewal strategies used, and investigate the impact on liveability. To assess liveability, three indicators were used: physical attributes, neighborhood attributes, and health. The research used both statistical tools and descriptive statistics to analyze and present results. The study revealed that urban renewal projects have a positive impact on liveability because respondents reported an improvement in the liveability and sustainability of the urban area. The study also suggests village renewal and urban densification as a way to reduce the city's high rate of influx.

**Keywords:** Liveability; Sustainability; Urban renewal; Urban;

# **The Challenges Faced by the Nigerian Police and the Menace of Fulani Herdsmen**

**By**

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## **Abstract**

Nigerians are currently living under a far more insecure milieu than was ever envisaged, this is against the backdrop that the Greek Philosopher, Aristotle once stated that the state exists for the sake of life, and continues for the sake of the best life. Section 14 – 2 (b) of the 1999 Constitution of the Federal Republic of Nigeria states that the security and welfare of the people shall be the primary purpose of government. In spite of the above, there has been government failure to guarantee security of lives and properties to Nigerians. Great concern is the menace posed by Fulani herdsmen caused by the destruction of lives, land, property, and water resources. Nigeria's security system has become dysfunctional and the Nigerian police have not been able to come up with an efficient and enduring system that can overwhelm the resurgence of these ruthless herders terrifying innocent citizens in Nigeria. Hence, the study aims at identifying the underlying challenges faced by the Nigeria police in tackling the menace of Fulani herdsmen. The design for the study will be the documentary research design, thus, qualitative in nature, where relevant information will be collected from published and grey literature. The theoretical framework that will be applied will be the Routine Activity Theory. The method for data analysis will be the Descriptive Analytical Method. The findings will reveal the level of inadequacies of the Nigerian police towards nipping in the bud the menace of Fulani Herdsmen. The recommendations shall include total reorganization of the Nigerian Police in compliance to international standards of best practices. This overhauling will take care of: i. Logistics in the form of inadequate funding, personnel, weaponry, mobility and capacity building/ training. ii. Motivation in terms of welfare packages and poor or inadequate modern/advanced technology especially communication infrastructures. iii. Credible intelligence gathering/sharing, surveillance and provision of forensic investigation by the law enforcement agents.

## **In-Vitro Induction and Proliferation of Callus In *Persea Americana* (Avocado) using Composite Media BSA1 and BSA2**

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### **Abstract**

This study investigated the in-vitro Callus production of *Persea americana mill.* on a composite medium. The reason was to proffer alternative to the MS media in-vitro propagation events. The axillary meristems were cultured on Murashige and Skoog ( MS1, MS2) basal media as a positive control composite: soil- nitrogen-potassium-phosphorus [soil (MPK)] source composite media ( BSA1, BSA2). The composite medium were supplemented with orange (*Citrus sinensis L*) juice (BSB1, BSB2) the second medium supplemented with water melon (*Citrullus vulgaris Schrad*) juice (BSC1, BSC2), the third medium with pawpaw (*Asmina triloba*) former *Carica papaya.L.*) juice (BSD1, BSD2) and the soil supplemented with water ( BSE1, BSE2) which served as the negative control. The experiment was in two sets and incubated for a period of twenty one days in a dark cupboard the MS1 and MS2 basal medium showed emergence of callus after six days of incubation. The BSAQ, BSA2; BSC1, BSC2; BSD1, BSD2; BSE1, BSE2; did not support any callus growth. The growth trajectory for the callus production potential of the media MS1, MS2, BSA1, and BSA2; as shown by the fresh weight of the callus per incubation period, showed normal growth curve as recorded in cultural growth process. The application of composite media (BSA1, BSA2) shown in this study, can lead to the use of less expensive and readily available source of media in the protocol of tissue culture and micro propagation. The relevance of this study to science and agriculture cannot be overlooked and is open to further exploratory investigations especially of Agricultural Innovations and food security.

**Keywords:** Tissue culture, Micro propagation, In-vitro, *Asmine trioba*, *Citrus sinensis*, *Citullus vulgaris schrad*, callus.

## Climate change, productivity and Sustainable Development Goals in Nigeria

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### Abstract

Nigeria has been experiencing changing climatic conditions for the past few decades. These changes include variations in rainfall, drought and rises in temperature which seems to have impacted negatively on Agricultural productivity in Nigeria. This poses a serious challenge to the achievement of the second Sustainable development goals that aims to end hunger through achieving food security and promoting agricultural activities in Nigeria. This study examines the effect of climate variability such as rainfall and drought on agricultural productivity and its implication in achieving sustainable development goals in Nigeria. The study employed a Vector Autoregressive Model and Impulse response Functions (IRFs) techniques to estimate time series data ranging from 1980 to 2020. In the analysis, food productivity is modeled as a function of drought, rainfall, temperature changes, domestic credit (% of GDP), rural population and arable land used. It is expected that agricultural productivity will exhibit negative linear functions of the climate variability and positive function of the ratio of domestic credit to GDP, rural population and use of arable land. This may be an impediment to achieving SDG goal 2 of zero hunger in Nigeria if some drastic measures are not taken.

**Key words:** Climate change, productivity, Sustainable Development goal, Nigeria

## **Waste management and Social work: analysis of the preference for improved poultry disposal among poultry enterprises in Lagos State, Nigeria**

**By**

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### **Abstract**

The study analyzed preference for improved poultry waste management (PWM) options among medium and large scale poultry enterprises in Lagos state, with reference to problems of poor on-farm harness of excessive poultry waste, retrogression/unmet global environmental and economic waste management standards, exorbitant charges imposed by LAWMA and behavioural mitigations to sustainable PWM. It highlights the relevance of social work professional intervention in waste management policy advocacy. It used purposive and simple random sampling techniques in the selection of hundred respondents in a semi-structured interview. Relevant statistics were used to analyse the data. Sanitary landfill and anaerobic digestion were found to be mostly preferred by the medium and large scale poultry farmers respectively. The result also show the factors influencing these preferences viz; age, household size, education level, distance from dumpsite, and knowledge of policy information. The study recommends social work and government intervention to subsidize mini-anaerobic digesters, ensile and vermicompost services at affordable rates for better PWM and environmental sustainability.

**Keywords:** poultry, farmer, waste management, preference, social workers, Lagos, Nigeria.

## **An Ecological Re-reading of Lk 12:24-28 and its implications for Christians in Nigeria**

By

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### **Abstract**

Against the conventional reading of Lk 12:24 -28 as dealing with the need for contentment and trust in God for the provision of things of life, this article reads the text within ecological lines. It argues that the text's background is taken from nature and its beauty as arranged by God and as such has ecological implications. Part of this implication is a task on Christians to care for their environment in a world where ecological challenges are becoming overwhelming. Within the context of the practice of Christianity in Nigeria, one is hard-pressed to find Christians tackling ecological challenges like climate change and other activities of human that degrade the environment to complement that being done by the government. The reading of the text therefore challenges Christians in Nigeria to take active part in preserving their environment and save it from further degradation. This also challenges the church in Nigeria as a whole to partner with the government in the fight against environmental degradation.

**Key words:** Ecological hermeneutics, Lk 12:24-28, Care for the environment, environmental degradation, Nigerian Christians

## **Culture cum political-based adaptation strategies to migration challenges by left-behind older family members of international migrants in south-east Nigeria**

**By**

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### **Abstract**

The prime aim of United Nations Goals and African Union Agenda 2063 is to achieve good health, a high standard of living, and the wellbeing of all ages including older adults. However, international migration of young family members occasioned by poor economic conditions, increase in population, climate change, and conflict seems to wane these efforts concerning older adults especially the left-behind older family members. International migration of young family members to a great extent affects the general health and wellbeing of left-behind older family members; it causes emotional distress, illness, and is responsible for higher mortality rates. This study sought to ascertain the cultural and political adaptation strategies adopted by the left-behind older family members to cope with the challenges of migration of their young family members. In-depth interviews and focus group discussions were used to collect data from 58 older adults whose children migrated abroad. The data were analyzed thematically, and the findings of the study revealed that some of the prevailing cultural activities such as village/communal activities (meetings, marriages, funeral, etc.) and some of the political activities (meetings, campaigns, voting, etc.) serve as good adaptation strategies to the experience of challenges occasioned by the absence of their young family members. This study, therefore, suggests the need to encourage the left-behind older family members to participate in some of these activities to ensure maximum life satisfaction.

**Keywords:** Cultural activities, political activities, migration, adaptation strategies, left-behind older parents.

***Influence of Landuse Landcover (LULC) changes on soil erosion in Aguata Local Government Area of Anambra State, Nigeria***

**By**

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**Abstract**

Land use/land cover (LULC) change is a major driving force behind global environmental challenges in many developing countries. This study evaluated the influence of LULC changes on soil erosion in Aguata Local Government Area of Anambra State. The objectives were to ascertain the changes that have taken place in the study area over the thirty year period with respect to vegetation cover and its consequences on soil erosion in order to predict the future scenario of the area. Remote Sensing (RS) and Geographical Information System (GIS) were used to process and classify Landsat Thematic Mapper of 1990, Landsat Enhanced Thematic Mapper Plus of 2010 and Landsat8 images of 2020 all of which have spatial resolution of 30 metres each. Four identified categories of landuse in the area are built-up areas, high vegetation density areas, moderate vegetation density areas and low vegetation density areas. The results show that built-up areas increased from 22.70% in 1990 to 27.35% in 2020 indicating high depletion of biodiversity. The study also shows that areas of high vegetation density were the most adversely affected by LULC changes as a result of urban expansion, agricultural land expansion and infrastructural development pressure. The study concluded that with the present rate of encroachment into the vegetal cover of Aguata Local Government Area, there will be significant extinction of most species in the study area. The study recommends sustainable management of the plant species and the practice of sustainable agriculture in the study area.

**Keywords:** Land-use/land-cover change, Soil erosion, GIS, *vegetation, built-up area.*

## **Can religious practices and educational attainment make a difference in the choice of COVID-19 Vaccination in Nigeria?**

By

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### **Abstract**

The world's health and her economies have been hit by the COVID-19 pandemic and thus in an attempt to save lives, people are advised to take the COVID-19 vaccine. Generally, a lot of people believe in immunization but find it difficult receiving the covid-19 vaccine. This study thus attempts to understand if religious practices and educational attainment can actually make a difference in the choice of covid-19 vaccination in Nigeria. It is expected that religious practices should affect the choice of COVID-19 vaccination and also expected equally that the higher your educational attainment, the more likely their acceptance of the COVID-19 vaccination. Thus it is recommended that more awareness should be disseminated by various religious bodies.

**Keywords:** COVID-19, vaccination, religious practices, educational attainment

## Rural public road transport accessibility in Enugu State, Nigeria

By

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### Abstract:

Transport planning is an important part in the development of a region. Communities in rural areas face a range of challenges associated with accessibility and connectivity especially in the physical sphere. Accessibility to safe, reliable, affordable, and convenient public transport improves the livability of rural communities and quality of life for rural residents. Public Transport connects residents of rural communities to socio-economic activities of daily life. Interplay of several factors help to achieve well-functioning public transport systems. One of the major factors is the level of accessibility offered by the public transport systems. The modal shift of commuters towards public transport services depends majorly on its accessibility levels. To better understand and consequentially plan for enhancement of accessibility to public transport, we must be able to measure and evaluate it and map it. Thus the aim of this paper was to measure the accessibility levels of the rural population in the Enugu State to public road transport systems. The paper addressed the following two objectives: (a) to identify the different levels of rural residents' accessibility to public road transport systems in rural Enugu State and (b) to prepare an accessibility indexes for the proposed rural areas and map them. This paper adopted the Public Transport Accessibility Level (PTAL) methodology to evaluate the accessibility index in the study area. The method provides a detailed and accurate measure of the accessibility to the public transport opportunities. Public transport accessibility levels are a detailed and an accurate measure of accessibility of a point to the public transport network which considers walk access time and service availability. The analysis was based the households' use of public road transport services provided with rural taxis – bus, pickup, truck and car taxi vehicles to access their socio-economic goods and services. Based on the results of the analyses, suggestions were provided to enhance rural residents' accessibility to public transport systems in the study area.

**Keywords:** Transport, rural areas, Public Transport Accessibility Levels (PTALs), Enugu State

## The Intersection of Nature, Greed and ignorance in building Sustainable Informal Tourism based Economy in Ezimo Area of Enugu State

By

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**Abstract**

The nexus between environmental imposed limitations and sustainable development goals have been expanded in development and ecological research with the concern centred on how natural imposed challenges could be mitigated through sustainable global action. However, how nature intersects with greed and ignorance in developing countries to further limit such sustainable development actions like sustainable expansion of local economy from natural provisions has been neglected. In part, the neglect could be due to over emphasis on mitigation as global oriented action without commensurate illustration of community actions that could sustain the mitigations at community levels. Furthermore, recent emphases remain that empowering local community could be an effective way of building sustainable mitigation agenda that will invariably generate sustainable development. Using qualitative data, obtained through observation and interview in Ezimo, a community in Enugu state Nigeria, this paper illustrates the connection between greed and ignorance in misuse of natural endowment. It addresses the question of how greed and ignorance could inhibit efficient utilization of natural resources and probable ecological threats that could erupt from such misuse. By so doing, we discuss the dangers associated with neglect of tourist based informal economy on climate change mitigation and sustainable development literature, and how environmental resources like the waterfall could be mainstreamed into sustainable development actions. Implications for sustainable development and sustainable environmental actions were discussed while suggestions were made on efficient ways of harnessing nature outside greed and ignorance to further expand the informal economies.

**Keywords:** Informal economy, sustainable action, greed, eco-tourism, sustainable development, natural resources,

## **Re-imagining Strangeness and African Migrants. The Pan-African Narrative as the solution.**

By

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The paper argues the view that, of many contending narratives - statist narrative and cosmopolitan narrative, Pan-African narrative; it is the Pan African narrative that offers the African migrants the possible eco-friendly context as a human being. While the statist narrative insists on the right of the state to determine the people who are granted entry into any state and those equally excluded, and the cosmopolitan narrative lays Phasis on the fact that persons are human beings of the globe, both of these migration narratives take little note of the African migrants. The statist considers the African as a stranger, given the injustices of colonialist ideology and empire. The foundation of cosmopolitanism is constructed on Kant's racist anthropology. These two narratives inform the immigration policies of European states and the US, leading to the rejection of African migrants at most militarised borders of European states and the United States of America (hence the US). More than Europe, the US is a little more balanced in her rejection and acceptance of African migrants. Pan-African narrative not only recognises the African migrants as citizens of Africa and not as strangers in the 21st Century. Nonetheless, having bought over the manner of thinking of the two other narratives, some African countries refuse citizens of Africa crossing their borders. The consequences are seen in xenophobia and other killings of African migrants.

Key Words: Statist, Cosmopolitan and African narratives, African migrants, Strangers, Immigration, Global Citizenship.

## Assessment of Trace Elements Toxicity in Surface Water and Its Potential Health Implications in Ika North East Local Government Area, Delta State, Nigeria

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### Subtheme: Environmental and Public Health Management

#### Abstract

Water is a basic necessity for life, but the excessive presence of trace elements in surface water results in water pollution, threatening human health systems. This study assessed trace elements toxicity in surface water and its potential health implications in Ika North East Local Government Area, Delta State, Nigeria. Samples of water from Ofie, Mbiru, and Orogho rivers were tested in the laboratory, using the WHO (2011) standard for drinking water. Descriptive statistics were employed to analyze the laboratory results. The considered trace elements include; copper, manganese, iron, zinc and lead and their corresponding WHO standards are: 2.0mg/l, 0.05mg/l, 0.1mg/l, 0.1mg/l, and 0.1mg/l respectively. The results revealed high concentrations of “iron” in all the sampled points A-E (0.8559 mg/l., 2.2009 mg/l., 1.2227 mg/l., 0.1223 mg/l., and 0.4891 mg/l.) respectively as their values exceeded the maximum WHO standard (0.1mg/l) for drinking water. Concentrations of manganese (0.0972 mg/l.) at point D, and lead (0.5957mg/l and 0.2979mg/l) at points D and E, were equally dictated to be higher than the safe limit set by WHO. Consequent to these results, the study concluded that the sampled rivers are polluted, and drinking water from these sources without proper treatment is risky. The health implications of drinking water with high concentrations of trace metals include vomiting, diarrhea, liver and kidney damage, respiratory and brain disorder, cancer, death, etc. This study, therefore, recommends adequate monitoring of rivers to protect them from pollution and treatment of water from these river sources before drinking, provision of more bore-holes as an alternative source of drinking water to reduce human pressure on water bodies. The need for an awareness campaign on the implications of water pollution is essential.

**Keywords:** Surface water, contamination, trace elements, health Implications, and Standard.

## **Assessment of contributions of small scale agro-based industries to sustainable rural economic development of Igbo-Eze South of Enugu State, Nigeria.**

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### **Abstract**

This study examined the role of small scale agro-based industries to rural development in Igbo-Eze south LGA of Enugu state Nigeria. This study was prompted by the economic changes that have taken place in the study area since the introduction of palm oil processing machines. In an effort to understand rural development dynamics, the study focussed on the extent to which the introduction of palm oil processing machines has had effect on employment, household income, trade and commerce and the general living standards of the people. This was done by developing a model of impact assessment which classifies effects and determines measures and indicators for these effects. The result reveals that majority of the respondents (67.6%) were males, (41.4%) are between the ages of 31-40 years and 81.9% are married. 55.2% have secondary education, (44.5%) have farming as the primary occupation and (73.4%) produce palm oil below 1000 kg. (69.1%) planted several oil palms in their farms, 50.2% were involved in harvesting of oil palm fruits from the farms while 54.2% were involved in the sales of oil palm products. Palm oil processing activities already has multiplier and distributive effects in terms of the earned incomes being re-invested in other income generating activities that improve the general well-being of the people. (74.4%) were into trading and 57.2% signified that inadequate credit facility was a serious challenge in the processing of palm oil in the study area. The rural communities mainly economic benefits from the introduction of the palm oil processing industries. The study concludes by recommending for the introduction of more small-scale palm oil processing industries given that the investment requirements of such small-scale industries are manageable by local entrepreneurs and therefore more appropriate to establish than large scale factories which need greater public sector funding.

**Keywords:** *Assessment, Small-scale Agro-based Industries, Sustainable Rural Economic Development, Igbo-Eze South LGA, Enugu state, Nigeria.*