

# **Accepted Abstracts**

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**National health accounts: an Insight in to Indian Health systems, an assessment, quantification and an Evaluation, in the context of South East Asian Countries: A cross country comparison**

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**Abstract**

Health sector is very sensitive for the issues pertaining to the governance, as the essential services, gets worst affected, pushing the populations in the crisis situations, particularly in the low and middle income countries, where the human development index is moderate to low, if the governance and the political stability is not ensured. Public policies, public spending and fiscal transfers, plays a vital role in health care service provisions. Indian health care sector is largely owned and controlled by the state health, institutions, as the health is largely dealt the sub-national levels. National health accounts, keeps track of the public spending, particularly in the health sector, often needs to be sensitized, among the all the cadres, in the service provisions. *Aims and objectives:* The paper is intended, to sensitize, those, involved, in the health care provisions, pertaining to the technicalities of the National Health Accounts, scope and implications. *Methodology:* Cross sectional Study. *Results:* The social safe guards in the, countries, needs to be strengthened and are very feable, and slight variation can reflect in the form of catastrophes. Health investments and expenditures are very crucial in uplifting the health systems for service delivery in the service sector. National Health Accounts, in this front, can keep track of the financial indicators, for achieving the health related sustainable development goals. *Conclusions:* In principle, the health care systems of the countries with the poor and modest economies, are controlled by, the highly performing economies, with greater, political stability and good governanance. Global south to north transitions and transformations, have the greater impact on the Global health care markets, in the emerging economies. Economic dynamics, volatility and stability of the nations are the key determinants in achieving the good growth rates, with implications in the service sector, including, the health. Public spending and the National Health Accounts, are the viable documents, to track the health investments, at national and sub-national level, and need to be sensitized, among the policy makers, to make a evidence policy decisions, in the “national interests”, often “managing the Global Transition”

**Keywords:** (Global transitions, Health systems, National Health accounts, National Priorities, Population dynamics)

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## **Perspective on Politics and Development in Nigeria**

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### **Abstract**

We live in a world where many societies are extremely poor, while few are exceedingly rich. The reason for this difference is the use of politics as an instrument for development. In many countries of Africa, Asia and Latin America, millions of people are living in abject poverty and total underdevelopment. This is not the case in Europe and North America where life is meaningful with available of social amenities. The argument here is that, politics of nations determine their development whether political, social and economical. As a content analysis work, this paper made use of secondary data. The conclusion here is that for countries in the Third World to develop, there is need for modification in their political behavior and character of the state. This is because the nature and character of the state has a strong influence on the development of any nation. The work recommends among others that African leaders should see politics as an instrument for development as against the current practice of politics for personal and selfish interest.

**Keywords:** Politics, Perspectives, development, third world countries

## **Reward System and Employees Job Performance: Assessment of the New Police Welfare Package in Nigeria**

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### **Abstract**

For several decades in Nigeria, there exist disagreements between the labour union and government on the discriminatory pay to the public servants. The reward system in the Nigeria police force has made little or no impact in the lives of the officers which eventually makes their productivities to be doubtful. It is important to note that there is always a disconnection between the performance of the officers in the force and their pay package. This, no doubt, has led to corruption, inefficiencies and below standard performance of the Nigerian public servants. The issue of corruption and bribery is evident among the officers in the Nigeria police force. There is a general belief that if government increases their pay, the stigma of corruption and bribery will be reduced drastically in the force. Therefore this study focuses on reward system and employees' job performance in the Nigeria police force with specific reference to the new police welfare package introduced under the current civilian administration.

The study adopts descriptive research method. Data collection was carried out through primary and secondary sources. The main instrument of data collection was structured questionnaire. Data collected was presented and analyzed using descriptive statistics while the stated hypotheses were tested using correlation coefficient with the aid of Statistical Package for Social Sciences (SPSS). Secondary data was sourced from web pages, publications, journals articles, environmental organization reports and books. The findings reveal that the new police welfare has reduced to bribery and official corruption in the force. It further reveals that the new welfare package has only reduced bribe taking from motorists but has not reduced the bribery associated with false arrest at their various stations. This study therefore recommends among others that for police to be productive and efficient in the discharge of their responsibilities, there should be proper welfare package that is not limited to salaries. Government should set up a welfare department that will be charged with the responsibility of meeting the needs of police officers such as sewing uniform, buying of shoes and other operational costs. Lastly, government should set up monitoring teams that checkmate the activities of the police officers from time to time.

**Keywords:** Efficiency; Performance; Productivity; Reward System; Welfare Package.

## **An Empirical Test of Dual-Double Memories in Sub-Sahara African Foreign Exchange Markets**

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### **Abstract**

The study investigated the Dual-Double Memories in Sub-Sahara African Foreign Exchange Markets using daily data for the period of 1992 to 2015. In view of this, batteries of GARCH family models were estimated. ARIMA and AFRIMA models were estimated to determine if there exist short and long-range dependency in return in these countries. Using the variance ratio test, it was discovered that these countries' exchange rate return does not follow a random walk. It is observed that the series of return on naira dollar exchange rate, cedi dollar exchange rate, and rand dollar exchange is heteroskedastic, chaotic, auto-correlated, reversible and nonrandom. From the findings conducted, it was discovered that there was a presence of dragon king both in Nigeria, South Africa and in Ghana during the 2007/2008 financial crisis, since the returns in these countries were negatively influenced by the crisis. There is presence of long range dependency in return for the three countries. Nigeria and South African foreign exchange markets have short memory in return. However, this is not applicable in the case of the Ghanaian foreign exchange market. Test for short and long memory in volatility were conducted and it was discovered that these countries foreign exchange markets exhibit both short and long memory in volatility. The post estimation test shows that FIGARCH is the most strongest and adequate model for prediction in Nigeria, Ghana and South Africa.

**Keywords:** Auto-correlated, Exchange rate return, Foreign exchange markets, Heteroskedastic, Random walk, Volatility

## A Model of Hotel CSR through Customers' Participation

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### Abstract

The issue of corporate social responsibility has developed very rapidly in line with the development of community empowerment. One of its mandates is that the business world is not merely pursuing profits, but also being ethical to the local community and to the environmental impact of the company's operations. Among the corporate ethics activities that are now developing are community development by means of donations. According to a study conducted by Jung (1994) corporate social responsibility is generally influenced by three important factors, namely (1) the size and maturity of the company on the scale of funding; (2) tax regulations and systems applicable in a country; and (3) the form of ownership and management of the company.

In Indonesia, the concept of CSR is regulated in Act No. 25 of 2007 concerning Investment and Act No. 40 of 2007 concerning limited liability companies. But if we pay close attention, there are differences in the principles set out in these two laws. Just mention that Act in the explanation of Article 15 mentioned as "corporate social responsibility is the responsibility inherent in every investment company to continue to create harmonious, balanced and in accordance with the environment, values, norms and culture of the local community." Responsibility in terms of this means that the company is consciously or not bound and must implement CSR.

Based on a study conducted by PIRAC illustrating that the implementation of CSR in 266 large and medium companies found in 10 cities in Indonesia, Jahja (2006) research stated that, found that the company's motivation contributed generally because of the company's policy of 86%, because the leadership wanted 26%, because it was asked for 28% and because of encouragement to promote. This is reinforced by Zaini (2008) which states that the most tangible impact on CSR activities in companies is improving performance, reputation, and corporate image. This is because the public perception of CSR is a company activity to help the community in the physical, social, cultural and economic fields so that the community is more empowered and independent so that they are helped in improving their welfare (Sumaryo, 2009).

Hotels in Solo Raya have implemented CSR in the form of giving funds directly to the community. Activities carried out include school scholarships for children who live around the hotel, mass circumcision and so on. This activity is carried out in accordance with policies issued by the company and is incidental. Thus it is seen that CSR carried out by hotels is still charity (Subarkah, 2015).

This study was to examine the model CSR through customer's participation. This study examined using path analysis with SPSS 22.0. The research sample is purposive with a total of 331 questionnaires that taken from three hotels in Solo Raya. The results showed a significant and positive relationship between customer's perception and customers' participation. Besides that, results showed that implementation of CSR policy can influence significantly and positively on customers' perception. Lastly, customers' perception have a significant and positive impact on CSR development.

This research concludes that the most significant impact of this model is implementation of CSR policy. It means that when hotel implements CSR policy in their organization, hotel customers will align with it so CSR can be succeed.

**Keywords:** customers' perception, customers' participation, CSR

## **The Indicators of sustainable business Model in Petrochemical Industries**

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### **Abstract**

Given that technological innovations alone cannot solve the challenges of sustainability, there is a need for something more fundamental, lasting and dramatically different to reciprocate the relationship between production and consumption and in practice calls for a new business model as Part of a wider shift to social justice is needed or created . Nowadays, Businesses face two major challenges. The first challenge is the transformation of the business models into account in the light of developments in the world, and the second challenge is to adapt itself to the elements that shape sustainable development and the creation of a sustainable business. There is now a growing interest in using new business models. But little has been done to explore and research the development of business models that are consistent with sustainable development and sustainable business creation. In this framework, sustainable business is defined as a business that is economically sustainable, environmentally responsible and socially responsible.

Since the petrochemical industry is known as an industrial that potentially facing a continuous challenge with some sustainable business components, especially environmental ones, and on the other hand, the lack of research on components for other dimensions of Sustainability, this research seeks to develop sustainable business models in the industry by introducing 16 environmental components, 16 economic components and 14 social components from among 602 different components in various texts, examining sustainable business models in the petrochemical industry. The situation of this industry in the world, due to the fundamental changes in the price of oil in recent years, strongly requires changes in the business model of the major oil companies in the world, despite the perception of this position by some large and multinational corporations in the world and the beginning of the change process. The business model need to standardize some of the components of the environmental, economic and social aspects, and the requirement for companies to use them in their current business models, have been felt for greater business continuity and accelerated the change process of Business model.

**Keywords:** Business Models, Business Model Innovation, Sustainability, Sustainable Business Model, sustainable petrochemical Industry



**Perspective of Government Officials on Solar Energy in the Commercial Sector: Experiences from India**

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**Abstract**

Today, India can well be identified as an energy guzzler. The demand for power is increasing exponentially and the scope of growth of this sector is immense. India's energy consumption has almost doubled since the year 2000 and the potential for further rapid growth is massive. India has been dependent on fossil fuels such as coal, oil, and gas for its energy requirements. Fossil fuel reserves are diminishing rapidly across the world, intensifying the stress on existing reserves day-by-day due to increased demand. Owing to its location between the Tropic of Cancer and the Equator, India has huge solar potential. Ministry of New and Renewable Energy (MNRE) is the nodal ministry of the Government of India at the central level for all matters relating to new and renewable energy. Government, being the main regulatory body, is promoting the use of renewable energy in general and solar energy in particular in the country by their policies, programs and incentives to achieve energy security in a sustainable manner. The study is significant as it makes an attempt to understand the initiatives from the stakeholders' perspective in terms of their awareness, accelerators, barriers and satisfaction level regarding these policies, programs and incentives. The study also envisaged understanding the impediments in implementing these initiatives from the perspective of the government and generating a framework for better acceptance and implementation of such initiatives.

**Keywords:** Commercial establishments; Government officials; Solar Energy

## Impact of Logging on Non-Timber Forest Products in a Rainforest Ecosystem of Cross River State, Nigeria

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### Abstract

The research was undertaken to investigate the impact of logging on non-timber forest products (NTFP's) in Agoi-Ekpo Forest of Cross River State, Nigeria. Three 20m x 20m quadrats were laid randomly in the sampled plots of different logging intensities (intensively logged, fairly logged and unlogged) whereby the NTFPs were identified and collected. The data collected were used to compute the number of individual species, species diversity, richness, density and evenness. Descriptive statistics like percentages were used to explain the result while inferential statistics such as analysis of variance and Pearson's correlation statistics were used to test the hypotheses at 0.05 significant levels. Results showed that a total number of 2742 individual species of NTFPs with 85 species were recorded. *Sacrophrium brachystachyum* recorded the highest number of species with 519 species. Of the total number of individual species of NTFPs, intensively logged plot had 12.4%, fairly logged plot had 20.12% while unlogged plot had 67.5%. Furthermore, 36 families of NTFPs were recorded with Fabaceae recording the highest (15.3%). The species density was highest in the unlogged plot (1.25 species per squared meters) while the least was observed in the intensively logged plot (0.85 species per squared meters). the species diversity was highest in the unlogged plot was the highest (0.9987). Species richness was highest in the unlogged plot (234.73) and least in the intensively logged plot (43.89). The species evenness was highest in the intensively logged plot (0.17) and least in the unlogged plot (0.13). There was a significant variations in the species richness ( $F=4.130$ ;  $p=0.017$ ), density ( $F=4.897$ ;  $p=0.008$ ) and the number of individual species ( $F= 4.936$ ;  $p=0.008$ ) among the plots varied significantly at  $p<0.05$ . Furthermore, number of individual species significantly correlated with diversity ( $r=0.653$ ;  $p<0.05$ ) and richness ( $r=0.997$ ;  $p<0.05$ ). The study recommended among others that immediate restoration and rehabilitation of the degraded (intensively logged) areas of the forest should be done through rapid regeneration programmes like afforestation by government.

**Keywords:** Logging, Non-timber forest, Species diversity, Species evenness, Species richness

## Mobilizing the community-based organizations for sustainable national development

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### Abstract

The study identified the community based organizations (CBOs) and their structure in Ondo Senatorial District in Ondo State, Nigeria; and assessed the spatial and temporal distribution pattern of developmental projects embarked upon by the CBOs in the area. It also examined the level of community participation in the developmental activities; and assessed the functionality and method of maintenance of developmental projects in the area. It finally examined the challenges facing the CBOs in facilitating development in the area. These were with a view to determining the impact of CBOs' activities in the area for the attainment sustainable national development. Data used were obtained from both primary and secondary sources. Primary data involved mapping the locations (x, y) of projects by CBOs, administration of two sets of questionnaire and conduct of interviews to obtain responses of key officers of CBOs on community development, decision making, planning processes and implementation of policy, and of residents and major stakeholders on level of involvement in community development programmes. A multistage sampling procedure was adopted for the selection of sampling frame. First, the study area was delineated into rural and urban regions, and two most important settlements in each region was selected based on availability of functioning CBOs and settlement functions. Second, the selected settlements were categorized into four different population strata (less than 10,000, 10,000 – 19,999, 20,000 – 29,999, 30,000 and above). Third, key officers and major stakeholders of the CBOs in each were identified for conduct of interview and questionnaire administration on community development and implementation policy. Finally, houses in each selected settlement were listed and numbered for questionnaire administration on residents, through the household heads, on the level of involvement in community development programmes. In all, 1,535 residents (0.75% of the total population of selected settlements based on 2015 estimate of the National Population Commission) and 150 key officers and major stakeholders of CBOs were administered questionnaire to. The secondary data were attributes of the CBOs and the communities of their locations, and these were extracted from Statistical Bulletins and land use maps. Data were analyzed using percentage distribution and Spearman ranking correlation. The study identified that of all the CBOs in the study area, 52% were Community Development Associations (CDA), 36% were Resident Associations, 11% were Town Unions and Youth Association made up 1%. The CBOs were generally structured into an organogram containing the administration of President (55%), Vice President (62%) and other members of executive (Secretary, Treasurer, Financial Secretary and Public Relations Officer) with the responsibility towards the CBOs' objectives to the host communities. Whereas borehole/water projects constituted the largest (30%) contribution of the CBOs at Idanre Local Government Area (LGA), largest financial contribution occurred at Ifedore LGA. In addition, the CBOs made at least 95 million naira as financial donations and completed 60 water projects between 1989 and 2015. The levels of community participation in developmental activities varied as attendance of meetings of developmental discussion (62%) and financial contributions (14.9%) in the area, and these were fairly but significantly correlated with the socio-economic characteristics of the residents ( $r = -0.1 - 0.4$ ;  $p < 0.05$ ). 60% of the CBOs' projects were functioning at the time of the study, and 34.5% of the projects were maintained by the CDA whereas community leaders and government maintained 5% and 2.3% of the projects, respectively. The three bodies (CDA, community leaders and government) maintain 17% of the projects. The main challenges of CBOs in facilitating developmental projects in the area are poor finance (32.4%), poor management (28%), CBOs – community leaders' feedbacks and irregular meeting (12.1%). The study concluded that CBOs' activities promote infrastructural development and improved livelihoods in the area.

**Keywords:** Community-based organizations; Mobilizing; National Development; Sustainable.

**Microenterprise Development in Sub-Saharan Africa: Issues, Constraints, Challenges and Implications for Sustainable Economic Development.**

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**Abstract**

Microenterprises dominate the economic activities of most Sub-Saharan African (SSA) countries. In some countries, they account for about 70 per cent of all business undertakings. Consequently, SSA countries appreciate that the potentials of this category of undertakings is *sine qua non* to their development aspirations, especially from the perspective of the millennium development goals and sustainable development. Consequently, in the *Microenterprise Development in Sub-Saharan Africa: Issues, Constraints, Challenges and Implications for Sustainable Development*, Three objectives were set: to identify the factors inhibiting the growth and development of microenterprises among SSA countries; to evaluate the level of institutional support for microenterprises currently; and to explore the implications of an underdeveloped microenterprise category for most SSA countries vis-à-vis the aspirations of sustainable economic development. Primary data were generated through multistage sampling technique, involving two sampling stages. Two sets of questionnaires were distributed through trained field officers. The first stage was the pilot stage. It involved the distribution of unstructured questionnaire to 200 micro-entrepreneurs. This was a 'fill-in' questionnaire. The respondents were asked to fill-in their responses to the questions as it appealed to them and to the best of their ability, in their own words. For illiterate respondents, the field officers carefully filled their responses while interviewing them and to their knowledge. These responses were then used to develop the main questionnaire which is the second stage of the sampling. This was distributed to 2,000 micro-entrepreneurs. The various data generated were carefully classified and analyzed using the Multivariate Discriminant Analysis, (MDA), which is an advanced statistical technique. This produced some interesting results. Of the 10 factors discriminated, 6 were significant at the chosen level of significance. Among these were lack of institutional/governmental support, outright lack of affordable credit facilities alongside other financial incentives, and the use of obsolete technology, among others. One interesting discovery however is that in areas where there are development banks and/or special purpose banks, micro-entrepreneurs rarely applied for their services for fear of not meeting up with the loan repayment/retirement conditions. Several issues arise from these research findings. For instance, it is strange that countries of SSA are not doing enough especially in the direction of the millennium development goals with particular emphasis on poverty alleviation. There is near outright lack of assistance for the microenterprises which scholars contend employs the greater percentage of the population. Furthermore, there is a surprisingly low literacy rate among most micro-entrepreneurs to the extent that most of them do not even know of any kind of benefit or support which could be derived from the government or banks to enhance their size/scale of operation, and the consequent benefits thereof. These are serious obstacles to development, especially from the perspective of sustainable economic development. The principal recommendation is that governments of SSA countries should understand and explore the full potentials of microenterprises in their respective economies.

**Keywords:** Development, Discriminant Analysis, Microenterprises, Micro-entrepreneurs, Questionnaire.

## **Urbanization and Solid Waste Management in Lagos Mega City, Nigeria**

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### **Abstract**

In the past two decades, Nigeria has witnessed rapid and unprecedented urbanization. Urbanization has resulted in a huge increase in the volume of wastes being generated daily in developing countries like Nigeria. There is the problem of inadequate infrastructure and solid waste management which have constituted serious impediments to the development of some major cities in developing countries. Specifically, a combination of rapid population and economic growth and the associated affluence has led to increase in the use of consumer items which has accounted for high volume of waste in Lagos Mega City city. This study therefore examines the effect of urbanization on solid waste management in Lagos mega city. It adopts descriptive research method. Data collection was carried out through primary and secondary sources. The main instrument of data collection was structured questionnaire. Data collected was presented and analyzed using descriptive statistics while the stated hypotheses were tested using correlation coefficient with the aid of Statistical Package for Social Sciences (SPSS). Secondary data was sourced from waste management agencies, web pages, publications, journals articles, environmental organization reports and books. The findings reveal that mass exodus of people from rural to the urban area has accounted for the increase in solid waste generation and environmental pollution in the Lagos mega city. The study also observes that the current civilian administration has not done enough in the area of solid waste management unlike the past civilian administrations in the state. It recommends among others that there should be periodic environmental education and public participation option as these will lead to increasing awareness of environmental precaution. Also, an appropriate policy and implementation plans should be developed on solid waste management. These are important for continued sustainable economic development of the state.

**Keywords:** Management; Mega City; Solid Waste; Sustainable Economic Development; Urbanization

## **Rural Development and the Challenges of Corruption in Nigeria**

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### **Abstract**

The trend world over today is shifting the focus of development to the rural areas. This is most desirable and crucial in Nigeria where no less than eighty percent of the total population lives in the rural areas. The quality of life in the rural areas of Nigeria remains a major cause of concern with mass poverty and underdevelopment assuming a permanent feature of the Nigerian rural environment in spite of the country's rich endowment in human and natural resources. This is because as a result of Corruption, resources meant for rural development are siphoned into private pockets and development projects and programs are consequently denied the needed resources for execution. The paper examines the role and place of Corruption in frustrating the concerted efforts of successive governments in Nigeria at modernizing or transforming the rural areas. The paper relied on secondary source of data collection and adopted Modernization Theory as its analytical framework. The paper found that Corruption has held-back any meaningful rural development in the country. The paper, therefore, recommends that Corruption in Nigeria must be fought to a stand-still for genuine development to be achieved in the rural areas of the country. To this end, Nigerian leaders must appreciate and accept the fact that leadership is all about serving the people than asking what is there for you. This is key to a successful fight against Corruption because once leaders are corrupt they will find it difficult to fight Corruption and meaningful development will continue to elude the country in spite of yet being 'rich'.

**Keywords:** Rural development, Corruption, Population, Poverty, Underdevelopment, Leadership

## Regional and International Trade Interaction in Southeast Asia

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### Abstract

International trade can be seen to be regulated best by competition. As this does not necessarily exist across the globe, the study so undertaken aims at identifying various impediments to this competition, as well as their causes and effects in the Southeast Asian region. An analysis of the unilateral and cooperative actions of the governments as tools to regulate and remove distortions to competition is undertaken to ascertain the degree of influence and correlation of governmental policy to foreign as well as domestic trade.

On a similar note, an analysis of the adverse effects of restrictive trade practices arising from cartels having an extraterritorial effect on international trade forms the subject matter of the paper. The extraterritorial effects of trade regulations have been analysed from various viewpoints. Firstly, restricting trade to governmental actions which have a direct effect on imports and exports as well as on tariffs and exchange controls. Secondly, taking into consideration private entities acting independently or as members from cartels. This analysis also limits itself to single industries where there is trade between two countries or continents or trade of intellectual property.

Furthermore, this paper also aims at understanding the potential effect trade regulations have on the global economy in terms of economic sustainability and illustrates the need for the Southeast Asian Nations to increase their involvement in the management of international trade systems and rules. This article analyses the challenges faced by such nations to manage international trade and economic growth while being able to maintain stability in both economic and political spheres. It provides recommendations for actions that should be taken to effectively deal with the increase in international trade and extra territorial effect due to possible ramifications it could have on trade and economic stability in Southeast Asia. Additionally, the paper considers the legal implications of the interconnections of international trade towards strengthening bilateral cooperation and increasing the involvement of Southeast Asian Nations in International trade law systems. Due consideration has also been given to the power and authority of countries in their individual capacity and regional cooperative capacity towards ensuring the effectiveness of international trade

The aforementioned study brings out the importance of principles of international law as well as the use of “beneficial” restrictive trade practices and ascertaining points of interest for regulation of trade at a global level. The research work is predominantly doctrinal in nature. Various research methods, such as Historical method, Analytical method and Evaluative method are employed.

**Keywords:** economic sustainability, extra territoriality, governance, international trade, Southeast Asia

## **Sustainability Enigma: How Rule of Law can promote Environmental Viability**

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### **Abstract**

Lasting Peace and Sustainable Development cannot be achieved without giving due respect to the Rule of Law. Rule of Law entails that no one is above law; all those involved in the exercise of governmental authority are also bound by the law. The philosophy of rule of law is a defining relationship between society and the state. It not only upholds constitutional principles but also promotes values including human dignity, equality, transparency, and other social, cultural and environmental values. The Sustainable Development Goals (SDGs) are univocal objectives which seek to promote equal opportunity, environment protection, health, peace, and justice to name a few; and to establish a world order free from evils of hunger, poverty, violence among many others. The framers and pioneers of Sustainable Development Goals (SDGs) having recognized the pertinence of rule of law have formulated these goals under the centrality of rule of law in the Agenda 2030. By their presence, the principles of rule of law are conspicuous in the goals, they are no more perceived as an inclusive concept rather have been included exclusively under the Goal 16. Thus, the rule of law is the cornerstone, the chief architect on which the implementation of SDGs rests.

It is known that the real infrastructure of human society is the natural environment. However, mankind, throughout the course of history, has deployed the natural bounties to satiate their never-ending and sometimes unreasonable whims. The scourge of such indiscriminate deployment is evident from the climate change such as deteriorating health of the ozone layer, melting of glaciers, untimely floods; biodiversity loss, water scarcity, water, and air pollution, soil degradation, among others. Environmental deterioration is a global predicament which demands desperate answers. The evidence of the plight of the environment does not bode well for the eventual fate of the earth. The need of the hour, therefore, is to build effective regimes, coupled with viable execution mechanism and accessible legal procedure.

Since environment protection is closely intertwined with economic, social and environmental objectives, a sustainable environment can only be realized within the framework of fair, efficient and transparent governance based on rule of law.

Thus, through this paper, an attempt has been made to demonstrate the co-relation between strengthened rule of law and sustainable environment. The paper will further discuss on principles and institutional frameworks for the advancement of justice, governance, and law for environmental sustainability. It will deal with predicates on which the rule of law should rest so as to attain a sustained environment. It will also analyse steps taken and proposed to be taken in the direction of environmental sustainability. The paper will conclude by suggesting that the focus should shift towards strengthening rule of law for environmental protection and how it can become an engine for sustainable development and a tool for achieving peace and justice.

**Keywords:** Climate Change, Environmental Sustainability, Rule of Law, SDGs, Transparent Governance.



**Measuring the Strength of Sustainability in India's New Model Bilateral Investment Treaty 2015:  
A Legal Discourse**

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**Abstract**

This research addresses the question; does the Indian Model Bilateral Investment Treaty (BIT) 2015 encourage parties to promote Sustainable Development (SD)? In other words, does the Model BIT 2015 integrate SD objectives into the investment rules to actively promote sustainable investments? Given the word constraints of the present work, the analysis has been made from the examination and review of selective substantive provisions, namely – the Preamble, Definition of Investment, Expropriation, Corporate Social Responsibility (CSR) and General Exceptions. This work is a step forward in understanding better how well the substantive dimension of India's Model BIT integrates SD objectives.

The work consists of five sections; each section is dedicated towards the analysis of one of the aforementioned provisions. The analysis of every single provision begins with a brief insight on the relevance of the provision towards the integration of SD objectives. Secondly, the analysis makes a comparative study of the provision under scrutiny in India's Final Model 2015 with India's Model BIT 2003 and India's Draft Model BIT 2015. The focus here is on the change in the language of the treaty text to reveal the intention of the drafters. The analysis also studies the comments made by the Law Commission in their Report No. 260 to see to what extent, their suggestions were incorporated in order to shed light on the intention of the legislators and thus, achieve clarity on the purpose of the provision under evaluation. The third and final stage of the analysis assesses the treaty text in the light of the contentious issues surrounding each of the provisions, which may be a prospective challenge in the integration of SD objectives. This involves attempts to estimate the efficacy of the treaty language at the backdrop of the trends set by tribunals and viewpoints of various scholars. This will help in understanding the potential of the provision in furthering SD objectives.

**Keywords:** BIT, Corporate Social Responsibility, Investment Law, Sustainability, Sustainable Development

## **What should education be like? Fostering awareness and practice of intrinsic nature of self**

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### **Abstract**

According to Ito (1997), we have now a responsibility to create a new civilization. Future of mankind does not exist in the extension of conventional development, such as, Scientific Revolution, Industrial Revolution, and Information Revolution. The on-going revolution is called Environmental Revolution because the environmental problem involves all aspects of the human activities. It is a revolution that take place inside human beings. What should the future of education be like? Previous studies have indicated a necessity of integral education so as to overcome education principles in modern times (e.g., Akiyama, 2016; Akiyama et al., 2010; 2012; Akiyama and Li, 2013; San Carlos et al., 2016). However, empirical studies to evaluate educational effect of integral education are still limited. It is still unclear whether the integral education have positive effects. The objective of this study is to empirically investigate educational effect of integral education. To this end, we conducted an interview survey to those individuals who participated in meetings of Kyoto Forum Foundation where a large range of learners from children to adults gather together.

We established a framework of integral education based on the integral theory proposed by Wilber (2000) as well as Akiyama et al. (2012) and Akiyama and Li (2013). The core of the integral framework is a 4-quadrant framework which advocates any reality can be seen from four different aspects, namely interior and exterior aspects of individual and collective. Based on the proposed framework, we analyzed Kyoto Forum Foundation which is a place open to anyone to learn how humans should live their lives. They deepen diverse disciplines from Shintoism, Buddhism, Confucianism, Neo-Confucianism, Theology to a variety of sciences as well as to develop Public Philosophy. They reflect their past lives so as to find intrinsic nature of self and open themselves to public. We conducted an interview survey to 1,146 participants who joined Kyoto Forum Foundation in the fiscal year of 2018 to investigate their changes before and after participation.

Results show that integral learning at Kyoto Forum Foundation is a momentum of awakening of intrinsic self, which results in enhancing participants' capacity in all quadrants. All the participants became aware of the fact that they were tied up to their own ego, to knowledge, to organizations they belong to: they were ruled by many stereotypical ideas. There were even some participants who had awakened their intrinsic self. Integrity of an individual was retrieved in the process to seek for complete harmony of three parts in human mind which are cognitive, emotional, and conative parts. The significances of the awareness of intrinsic self are three-fold. Firstly, when the three parts came into a complete harmony, their beautiful soul started displaying beautiful deeds. This is what we say "Makoto" in Japanese. Secondly, they became to discover the works of Makoto not only in themselves but in others, and started making resonant effect. This is the state people's true selves enhance each other, which is fundamentally different from pyramid-shaped community. Thirdly, they became free from suffering and hesitation after they started doing their Makoto every single moment. They realized the way they live their life with nothing constraining them is the real happiness. When this state lasts over generations, the happiness becomes ubiquitous. Moving beyond Epistemology, the integral learning is significant especially in terms of fostering awareness and ability to practice of intrinsic nature of self. We highlight the learning can be incorporated into any level of education.

**Keywords:** ego, integrity, intrinsic self, Makoto, negative capability

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## **Can Stakeholder Mapping and Attributes Be Exploited to The Advantage of Sustainability?**

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### **Abstract**

The world is witnessing appreciable advancements in different spheres of life. However, an alarm is being raised in the way society consumes finite natural resources and how such unbridled behavior has affected the world around us. Therefore, business is being held to a higher level of accountability to ensure that we do not run out of those resources. Competition is at its peak as globalization gains more visibility despite the rise of nationalism. This is presenting both opportunities and challenges for business, but the consensus is that the world needs to rethink its production, consumption, and disposal processes. Today, concepts such as Sustainability, Corporate Social Responsibility (CSR), Business Ethics etc. have been resonating in the business community. At the center of this new paradigm is the growing need to incorporate stakeholders in business policies and practices. Lately, sustainability is being echoed in most organizations through policy changes on people, planet, and profit (3Ps). As the Shareholder Primacy Norm (SPN) is being relegated to the background, sustainability is becoming a major factor on the overall relationship between business and society. Therefore, its relevance can hardly be exaggerated.

This paper focuses on stakeholder mapping and attributes, and how they can be harnessed to gain stakeholder commitment to sustainability matters. Experience demonstrates how some stakeholder groups have maximized power and urgency attributes to positively influence the supply chain management behavior of some multinational organizations and acknowledges the lack of homogeneity in different sectors of the economy. Essentially, the paper explores the transferability of such approach in all sectors to promote and maintain sustainability. Additionally, it recognizes the increasing influence of stakeholders globally and tries to examine its relevance to the concept of sustainability as it shifts from ideology to an inevitable business longevity strategy. It decomposes the different perspectives in which stakeholder groups can be used to achieve sustainability by paying attention to the 3Ps. Some setbacks experienced by companies (especially the extractive industry) in their sustainability drive have been identified. The paper concludes by highlighting extant practices and gaps in business' approach to sustainability from both developing and less-developed nations dimension. Furthermore, it establishes a relationship between the institutional environment and embrace of sustainability. Finally, it makes recommendations that are driven by stakeholder attributes to the required awareness in the production, consumption, and disposal of good.

**Keywords:** 3Ps, Business Ethics, CSR, Stakeholder, Sustainability.

**Investigating Strategies for the transformation of Ondo to a Modern Sustainable City**

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**Abstract**

Ondo is a medium town settlement in Ondo state Nigeria with an estimated population of 305,000 in 2018. Despite its being a nodal town with three universities, a recently established teaching hospital, fifteen banking outlets, several institutions and a population of mostly young people, the town still lacks the qualities of a city status even in the African standard. There are the problems of grossly inadequate and decaying infrastructure, the level of unemployment is very high especially among university graduates, daily living has been difficult for its residents especially in activities such as transportation, trading, investment, education, health leisure and several other daily and periodic ventures. As a result despite its physical expansion from rural-urban migration, the social and economic dimensions of the town has been very slow to development. The objective of this paper is to explore the modality for the rapid development of the town into a sustainable city, to investigate how Ondo town can be transformed into a socially and ecologically sustainable, resilient, equitable, functional, safe, orderly, peaceful, serene, friendly and aesthetic city. The paper employed both questionnaire and oral interview to investigate the urban development constraints of the town. One thousand open-ended questionnaires were administered. The paper identifies noncompliance with town planning laws, flagrant violation of environmental and traffic law, urban crime; lack of infrastructure, insecurity, outdated urban planning master plan and low level of manufacturing as some of the problems of urban non development as shown below

Non- compliance with town planning laws.	223	22.3%
Violation of environmental laws	206	20.6%
Lack of infrastructure	208	20.8%
Outdated urban master plan	111	11.1%
Poverty	99	9.9%
Low level of manufacturing	75	7.5%
Urban crime	14	1.4%
Others	64	6.4%

The residents believe that these are the constraints to the development of the town.

The study established that community participation, in conjunction with government agencies is the key strategy for the sustainable development of the town. While the government provides policy framework and some human and material resources, most of the material and financial resources should come from the community through properly defined mechanism including donation and volunteering. Some of the vital community units identified for participation include community leaders, professional, institutional, organizational, virtual and, traditional communities, philanthropist and people in diaspora. The planning and execution of all projects should be the responsibility of the various relevant communities using local technology and materials where possible. The paper discussed the roles of each community unit and the strategy to be adopted by them in achieving the goals. For example the paper defined the role of the virtual community in crime detection and control, real time communication and environmental hygiene. It recommends that efforts toward the transformation to a sustainable city should be directed at the application of eco-friendly technologies, conservation, renewable energy, volunteering, industrialization, advocacy, enlightenment, enforcement, and urban rejuvenation among others.

**Keywords:** aesthetics, community, enforcement, sustainable, development.

## **Sustainability: A Critical Challenge for the Extractive Industry**

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### **Abstract**

Sustainability has been resonating within the business community and academia. Indeed, it has progressed from being an ideology to a technique that adds to the triple bottom line of companies. Given that the new contract is driven by global competition, several companies are striving to take advantage of the current narrative in their drive toward innovation. Most importantly, the expansion of corporate social responsibility (CSR) frontier is driving the discourse on sustainability, thus, leaving a business with limited options. Therefore, sustainability is no longer optional especially for industries, whose activities directly affect people and planet. Arguably, the more directly a company's activities affect people, the more likely it comes into direct contact with society. The implication is that they run the risk of being confronted by members of society especially rights groups, activists, and lately young people. This paper aims to demonstrate the author's curiosity to investigate the extractive industry's approach to sustainability in its operations. It also examines the extant practices of the extractive industry, which have direct links to sustainability. The paper reviews the existing literature relating to sustainability and production in the selected industry. Essentially, it discusses the level of acceptance of sustainability in the extractive industry, particularly in the less-developed world. This has exposed gaps, which will require policy overhaul and reorientation. Findings demonstrate a correlation between institutional environment and sustainability consciousness. Recommendations focus on social, economic, political, and technological perspectives. These factors have been found to influence the level of adoption of sustainability by companies. This paper serves as a precursor to a proposed qualitative research project, which will adopt a comparative approach to review the sustainability practices of two companies, based in New Zealand and Nigeria. The author's main goal is to publish a working document from the proposed research.

**Keywords:** CSR, Extractive Industry, Exploration & Production, Sustainability.

**Sustainable Rice Production Under System Of Rice Intensification For Assuring Food Security-  
An Economic Analysis**

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**Abstract**

In India, Rice is an important ingredient of household food basket. Rice being a staple food of about 65 per cent of people in India occupies the largest area and also second largest production in the world next to China. There is a growing demand for Rice due to increasing population in the world. India needs to produce 120 million tons by 2030 to feed its estimated one and a half billion plus population. Increasing rice yield becomes stagnant, while water and land resources becomes scarce. Water makes a significant contribution to food security, as it directly affects agricultural productivity. Because of the combined increasing demand for food with increasing scarcity of water, rice producers face three major challenges viz., to save water; to increase productivity; and to produce more rice with less water. Rice provides 31 per cent of total calorie intake in India. System of Rice Intensification is considered to be a Resilient Farm Technologies in Achieving Sustainable Development By keeping this view in mind, the present study quantified the benefits of SRI over the conventional method of rice cultivation in Thiruvarur district of Tamil Nadu. Cost of cultivation was higher for the conventional method (Rs. 80252.5) than SRI method (Rs. 78624.7). The net returns was much higher in SRI method (Rs. 24487.5/ha) than the conventional method (Rs. 5071.58 /ha), which registered 79.28 per cent higher net returns over the conventional method. Logit model result showed that probability of adoption of SRI method significantly increases with the decrease in the human labour days. 36. 84 per cent of HP (15 HP) hours of water could be saved in SRI method.

SRI farmers were more technically efficient (99.97 per cent) when compared to the conventional farmers (94.84 per cent). The Cobb-douglas production function for SRI method identified seeds, nitrogen and human labour days as positively significant variables on output. The variables nitrogen (-0.19), human labour days (-0.52) and machine labour (-0.41) were negatively influenced the yield under the conventional method. The decomposition analysis showed that the per ha production of SRI method was 16.17 per cent higher than that of conventional method. The SRI technology component alone contributed 53.37 per cent to the total change in output. Levelling of field, nursery management, weed problem are the major constraints identified in the study.

**Keywords:** Constraints, Cost of Cultivation, Decomposition Analysis, HP hours of water savings, Logit Model, SRI, Technical Efficiency,

**The resurgence of populism and its implications for democracy: A study  
of the United States presidential elections in 2016**

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**Abstract**

The recent success of populist actors and policies across the globe is undeniable evidence that populism is gaining greater ground on the global scene. The overarching purpose of this research is to interrogate the apparent resurgence of populism vis-à-vis its implications for democracy; particularly in the context of the United States of America, using the 2016 Presidential election as the case in point. The objectives of this research equally include the establishment of an understanding of the factors that led to the recent resurgence of populism and a discourse on the implications of populism on democracy in the USA. Democracy, especially liberal democracy is based on the basis of popular sovereignty, public and individual freedom of expression and political participation. Populism, on the other hand, is an expression of the general will of the people; it embodies the aggressive defense of the interests of the common man against that of the privileged elite. Democracy has no barrier against populism thereby making it vulnerable to populist propaganda. The question therefore is, should populism be considered a threat to democracy? The year 2016 is considered a golden year for populist actors and the victory of President Donald Trump among other contemporary events has significantly increased the overall interest in populism. This is because his victory as a newcomer in politics and whose campaign was overtly directed against the prevailing political establishment in a long established Western democracy was quite remarkable. It marked a turning point among Western democracies, making the US the first to be ruled by a right-wing populist leader. While most studies on populism have focused on the factors that have fuelled its resurgence, this research delves into evaluating whether or not the rise of populism is a cause for concern to democracies. This will expand the extant boundaries of knowledge on the nature, complexities and implications of populism. In carrying out this study, secondary data was gathered from existing literature while textual analysis was employed for analysing collected data. The findings from this study reveal that the implications of populism on democracy could be either positive or negative, depending on a number of factors discussed herein. Within the USA, its implications can be seen to tilt towards the positive rather than negative. It is recommended that further studies on the impact of populism on democracy be carried out in order to examine the role of various populist actors across the globe vis-à-vis democracy, thereby also enriching and expanding extant literature on the populist upsurge.

**Keywords:** Democracy, elections, populism, United States



## Post Economic Recession and Agricultural Production in Nigeria: Case Study of Small Scale Poultry Egg Farming

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### Abstract

This study seeks to confirm the authenticity of Nigeria's exit from recession (2016-2017) considering small scale poultry egg farming in Ekiti State, Nigeria. Poultry egg farming has definitely gone through the phase of economic recession, which is expected to have had negative impact on their profit. Poultry farmers in Nigeria have decried that recession has foisted great challenges upon production and marketing of its products that tilt towards strangulating the poultry industry. Due to the economic recession in Nigeria, the following problems were discovered to have arisen for poultry egg farmers, Poultry farmers grappled with skyrocketing cost of inputs, adulteration of raw materials, incessant egg glut, poor pricing of eggs, outbreak of poultry diseases, inconsistent government policies and high cost of feed. According to the Nigerian Bureau of Statistics (NBS), in the second quarter of 2017, the nation's GDP increased by 0.55% (year-on-year) in real terms, indicating the emergence of the economy from recession after five consecutive quarters of contraction. Since Nigeria declared her eviction from recession GDP figures from NBS has present a ray of light at the end of what has been a very dark tunnel for the average Nigerian. Nigeria has been talking about diversifying the economy away from oil as a result of the price of oil plunging in the international market, investors have been making a return to Nigeria, due to the new flexible exchange rate policy of the Central Bank of Nigeria, the floor of the Nigeria Stock Exchange (NSE) is buzzing again, Nigeria crude oil production level have been stable for a while now, as a result of the relative peace experienced in the Niger delta region and also the foreign exchange reserves are now in excess of thirty billion US dollar (US\$30B). In view of all this post recessional indicators as revealed by the Federal Government of Nigeria (FGN), poultry egg farms still grappled with various economic challenges. Then the question keep rolling in the minds of most poultry egg farmers, **is Nigeria really out of economic recession as revealed by these indicators?** Therefore this study seek to describe the socio-economic characteristics of the small scale poultry egg farmers, analyse the profitability of poultry egg farming during and after economic recession, determine the viability of poultry egg farming during and after economic recession, estimate the relationship between profit per crate of egg and variables affecting profit of the small scale poultry egg farmers after recession and determine the coping strategy of the small scale poultry egg farmers, if they are still affected by the recession. Multi-stage sampling procedure was adopted to select eighty poultry egg farmers. Primary data for the study were collected through the use of structured questionnaire. Data were analyzed using Descriptive statistics, Gross margin analysis, Benefit Cost Ratio (BCR), Regression analysis and Likert scale. Results showed that majority (63.7%) of the respondent were male with mean age of 44 years. Farmers with formal education were (98.8%). The results also showed that majority of the respondents (63.7%) were males while 36.2% were females. This implies that more males were involved in poultry egg farming. The married respondents were 58.8%. The marital status of the poultry egg farmers has implication on the household size and subsequently on the availability of family labour to assist on the poultry farm. The result further showed that the mean household size of the respondents were 6 with 41.2% having more than 5 members in their households. The mean profit margin during recession and after recession were ₦418,067 and ₦1,533,846.00 respectively. The analysis therefore reveals that poultry egg production was profitable after recession when compared with production during recession. Also, the Benefit Cost Ratio was 6.67 during recession and 41.96 after recession. The regression analysis indicated that years of experience in poultry egg farming, number of birds raised, price of egg and crates of egg produced positively affect profit per crate of egg after recession. The coping strategies adopted by the farmers to maintain their profit after recession includes sales of poultry dung and manures, increasing price of egg and spent layers. The study therefore recommends that the government should provide adequate market for eggs produced and also invest more in poultry production by subsidizing price of feeds.

**Keywords:** Coping strategy, Economic recession, Nigerian Bureau of Statistics, Poultry egg farming, Small scale farmers.

## **Restoring River Ecology through Involvement of Women**

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### **Abstract**

Ganga is believed to be one of the most sacred river in India with its ecological and economic significance. Due to greedy exploitation of river resource and increased population pressure make Ganga to loose it's pristineness. Majority of population lives in rural areas and their livelihood directly or indirectly depend on river water resource. Same time major cities in plains of Ganga e.g. Kanpur, Allahabad, Varanasi, Patna and Kolkota being located on bank of Ganga. Municipal sewage of these cities including catchments water carrying chemical and microbial contamination directly or through its major tributary rivers like Yamuna, Gomti, Ghaghra, Ramganga and Saryu and other uncontrolled man-made waste disposal into river stream is one of the main reason of degradation of ecology of Ganges. Chemical farming practice along riverside is also harming river-life. Women can play lead role in behaviour change of masses to create a river-friendly society. And an aware community will act as 'Guard of Ganga'. This is to be given utmost importance to sensitize common people for positive behaviour change with respect to river and influence policy makers, administration to make and effectively implement the river friendly development initiatives. **Rivers are our lifeline and river resources are** important for economic development of the society and ecological balance in our natural environment.

**Keywords:** Conservation, Ganges River Biodiversity, Ecology restoration, Women Empowerment

## **Socio-economic Dimensions of Disaster Management in Rajasthan**

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### **Abstract**

Rajasthan has numerous vulnerabilities in terms of socio-economic and geo-climatic nature. It has vast geographical extension with varied agro-climatic and social variations which led to multiple disasters like flood, drought, Water crisis and cyclones. To demarcate and assess the intensity and vulnerability of inhabitants is a matter of great concern to the planners and scientist. The rapid pace of population growth which demands more resources in order to fulfill their impending demand that caused tremendous loss to the ecology in the locality. Number of environmental assessment reports and survey soundly demonstrate a deplorable conditions prevailing presently as far as to may be felt in future automatically attract the sharp attention to the government to formulate an area specific plan and policies so that further destruction to be arrested for the sake of the welfare of humanity. The scale of mass awareness and recognition of immediate demands rise by people to be managed adopting the eco friendly approach in resource management. The co-operation of national and international organizations to restore the quality and resource health to check the unconscious utilization of natural resources, so that conflict or clash of world economies to grab the resources may be avoided. To minimize the incurring loss from the natural disaster, the scientific and resource conservation approaches to be taken into account so that property and human loss may be arrested. Proper geo-spatial data interpretation to be held at scientific level to address the frequent occurrence and loss incurred from the natural disasters in the state. The application of GIS and remote sensing technology for the indiendification of disaster prone sites and to invent the possible solution within the framework existing over the area which causes immense adverse influence upon the ecological set of the entity under research consideration.

**Keywords:** Multiple, humanity, zonation, drought, fragile, deplorable

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**Mobilizing the community-based organizations for sustainable national Development  
in Ondo senatorial district, Ondo State, Nigeria**

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**Abstract**

The study identified the community based organizations (CBOs) and their structure in Ondo Senatorial District in Ondo State; with a view to assessing their distribution pattern of developmental projects embarked upon by the CBOs in the area and examining the level of community participation in the developmental activities. The locations of the CBOs' projects were captured with the aid of global positioning systems (GPS). Furthermore, 1535 copies of questionnaire for the household and 150 copies of key informant questionnaire were used to collect data on community development, decision making, planning processes and implementation of policy, and of residents and major stakeholders on level of involvement in community development programmes using a multistage sampling procedure which was based on the level of development and population. Descriptive statistics in form of percentages and inferential statistics in form of Spearman's rank correlation were employed for the data analysis. Findings showed that of the total CBOs identified in the study area, 52% were Community Development Associations (CDA), 36% were Resident Associations, 11% were Town Unions and Youth Association made up 1%. The CBOs were generally structured into an organogram containing the administration of President (55%), Vice President (62%) and other members of executive (Secretary, Treasurer, Financial Secretary and Public Relations Officer) with the responsibility towards the CBOs' objectives to the host communities. Whereas borehole/water projects constituted the largest (30%) contribution of the CBOs at Idanre Local Government Area (LGA), largest financial contribution occurred at Ifedore LGA. In addition, the CBOs made at least 95 million naira as financial donations and completed 60 water projects between 1989 and 2015. The levels of community participation in developmental activities varied as attendance of meetings of developmental discussion (62%) and financial contributions (14.9%) in the area, and these were fairly but significantly correlated with the socio-economic characteristics of the residents ( $r = -0.1 - 0.4$ ;  $p < 0.05$ ). 60% of the CBOs' projects were functioning at the time of the study, and 34.5% of the projects were maintained by the CDA whereas community leaders and government maintained 5% and 2.3% of the projects, respectively. The three bodies (CDA, community leaders and government) maintain 17% of the projects. The main challenges of CBOs in facilitating developmental projects in the area are poor finance (32.4%), poor management (28%), CBOs-community leaders' feedbacks and irregular meeting (12.1%). The study concluded that CBOs' activities promote infrastructural development and improved livelihoods in the area.

**Keywords:** Community-based organizations; Mobilizing; National Development; Sustainable.

## Indian Judiciary: A Torchbearer of Climate Restoration

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### Abstract

*“Climate Change is no longer a doomsday prophecy. It’s a reality.” - Astrid Nøklebye Heiberg*

Mankind, throughout the course of history, has deployed the natural bounties to satiate their never-ending and sometimes unreasonable whims. However, the scourge of such indiscriminate deployment has been realized only lately which is evident from the deteriorating health of the ozone layer, melting of glaciers, untimely floods and other climatic changes, all of which call for prompt litigation revolution. Today, climate change is no longer a domestic issue but a global predicament demanding desperate answers. In the absence of effective national laws, international treaties and conventions, we are drawn in to reconsider the existing system and to explore the newly recognized avenue of climate adjudication. The cases pertaining to the climate change in recent times have increased exponentially and have brought forth effective and wide reaching effects by compelling Governments to make coherent policies, raising awareness and changing corporate behaviour. Indian Judiciary, which had been a bystander to environmental depredation since long, has now assumed a proactive and revolutionist role by interpreting the existing laws in an environmental-friendly manner and further formulating new legal approaches. One such approach is the liberalization of concept of *locus standi*, and emergence of PIL as the traditional concept of *locus standi* hampered progressive environmental litigation. The inception of principles of absolute liability and setting up of ‘Green Benches’ by Indian Judiciary further establishes its image of a progressive one. The liberal interpretation of Constitutional provisions, offences under the Indian Penal Code, and other laws like Administrative Law, Company Law, Criminal Procedure Code and Taxation Laws are a testimony to the fact that the Indian Judiciary has widen the horizons of climate change litigation by not restricting itself to merely Environmental Law. Notably, India is the first to call for duty to protect environment in its Constitution and to establish ‘Right to clean and healthy environment’ as a Fundamental Right.

This paper thus questions the role of the judiciary in legitimizing climate change action and the steps to be taken to further the same. It postulates the important role played by climate adjudication in India which being the fastest developing nation is a key player in the climate change politics. It further discusses the possibility of working out a legal strategy based upon the common law principles like public nuisance, negligence, public trust etc. and looks closely at the European countries and countries like Australia which have inculcated common law theories into the main stream litigation for climate change. The extortionate damage done by the 21<sup>st</sup> century technological advancement and modernization has made it imperative for the world community to unite and devise sustaining policies and novel approaches to preserve the sanctity of our fountainhead for it is less for the Nature and more for our own survival to do the same.

**Keywords:** Climate Change, Fundamental Right, Indian Judiciary, Locus Standi, PIL.

## **A Study of Waste Water from Ogbomoso Slaughter House**

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### **Abstract**

The slaughter house wastewater has a complex composition and is very harmful to the environment i.e. the animal and human health. The process employed in the generation, treatment and disposal of waste water in a slaughter house in Ogbomoso, Nigeria was studied in order to evaluate the waste water management of the slaughter house.

The methodology employed for the study of involved field survey, physical observation, and oral interview. The result of the study showed that approximately 8,000-12,000 l/day of waste water is generated from about 50 cattle killed per day, also that the sewage flow per day/heads of animal killed is about 60-70% of volume of water used which equals to about 7,800l/day. all these parameters are used to design an anaerobic lagoon which will reduce the BOD, BOD<sub>5</sub>, COD for a detention time of 11 days. From the study, it discovered that the mode of generating and discharging waste water at the slaughter house was not efficient enough to produce an effluent that is not harmful to the animal and human health.

Some management techniques should be put in place to ensure the training of slaughter house's employees in blood conservation and recovery, water conservation, and the use of simple engineering tools such as small diameter hoses instead of bucket etc. Also, a supervisor for proper waste water monitoring should be employed.

**Keywords:** Effluent, Environment, Health, Slaughter House, Waste Water

## **How The Effect of Investment Policy at Information and Communication Technology for Digital Economy Implementation toward Macroeconomic Indicators and Sectoral Performance, in Indonesia?**

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### **Abstract**

The purpose of this study is to analyze the effect of investment policy of Information and Communication Technology (ICT) on digital economy toward macroeconomic indicators and sectoral performance, during the period of 2014-2017, in Indonesia. The data used in this study is secondary database from Input Output (I-O) table and SNSE from Statistical Central Bureau and also from Information and Communication Technology Ministry. Analytical method used is a Computable General Equilibrium/CGE model. In this study, the relation between the availability of ICT infrastructure and macro and micro economic has been demonstrated in the simulation.

The results of the simulation consist of macro economics indicators: (i) Trade-GDP Balance Ratio, Real GDP, Import-Export, Nominal Wages, Real Wages, Household Consumption, Inflation; (ii) Sectoral Performance: Amount of Output/Production, Employment, Community Consumption, Output and Output prices, Export and Import. Arranged based on optimum Pareto from aggregate performance of 27 affected sectors, both in terms of Productivity in producing output (GDP, Trade Balance, Income, Indirect Taxes) and in the Employment.

The results of the analysis show that the impact of public policy in investment in the ICT sector, as has a positive impact on all macroeconomic indicators and sectoral performance. For this reason, the recommendation related to public policy is that the government needs to encourage the issuance of a legal standing; both at the central and regional and sectoral levels, which can oversee public policies in each sector in the development and utilization of ICT. This study has been proved that the role of ICT on the national economy is increasingly needed as a sustainable driver of national and sectoral economy.

Based on the results of the analysis of the economic aspects above, it is necessary to implement the appropriate public policy transformation strategy. In addition, it needs to be accompanied by public policies to increase investment in the ICT sector in order to achieve digital inclusion in all other regions and industrial sectors. Implications of public policy that are needed are: creating a positive effect from the development of ICT on other industrial sectors and the need for synchronization between institutions (sectors) and the central and regional levels, in an effort to optimize the role of the ICT sector which contributes to macroeconomic indicators and sectoral performance.

In addition to the strategy needed to transform in all aspects of the economy, it is also necessary to harmonize public policies at the central and regional levels. Public policy that encompasses the driving factor of the digital economy. As a system, public policy needs to be evaluated, harmonized, synergies both horizontally (between government agencies and sectors) and vertically (central and regional levels), as well as between different hierarchical sectors. Public policy has a role to achieve justice for all elements of society of economic actors.

**Keywords:** public policy; productivity; ICT; digital economy; macroeconomics, sectoral performance.

## **Political Parties, Women's Political Representation and Gender Mainstreaming in Nigeria**

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### **Abstract**

Women's political representation in Nigeria has left much to be desired. The situation of women's representation in the elective and appointive positions in the country, over the years, has been persistently low and declining, falling far below the threshold of gender Affirmative Action. While a lot of studies have been conducted on the issue of women's political participation and representation within the wider political space in Nigeria, only a little has been done of the state of women's representation within the context of political parties. By means of a combination of desk and field researches, anchored on the critical mass theory, the study posits that the internal structures and workings of Nigeria's major political parties have relegated women to the margins by emasculating their stake in the important leadership structures of the parties. The study contends that the virtual exclusion of women in the parties' hierarchies where critical decisions concerning party nominations and candidature are made explains their abysmal representation in governing positions. The study recognizes the prime place of political parties as the fulcrum of political representation in a democracy and therefore makes a case for the reform of the country's electoral and party systems in such a manner that compels the parties to reserve dedicated quotas for women both in their internal leadership positions and party nominations in the interest of gender mainstreaming.

**Keywords:** Critical mass theory, Electioneering, Gender mainstreaming, Political parties, Women's representation.



**Green Justice and the Application of Polluter- Pays Principle: A Study of India's  
National Green Tribunal**

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**Abstract**

The serious concerns of the pro-active Supreme Court of India to protect and enhance the quality of environment, on the one hand; and the difficulties experienced by it, in late 1980's, in handling the complex techno-legal environmental cases, on the other hand, advocated for the setting up of specialised environmental courts having both the judicial as well as technical expertise. As a result, the National Green Tribunal Act of 2010 (hereinafter referred as Act) was passed in June 2010, and the National Green Tribunal (hereinafter referred as Green Tribunal) was, ultimately, established by the Government of India in October 2010 that started functioning from May, 2011 to dispense green justice by expeditiously adjudicating cases relating to protection of environment and conservation of natural resources. One of the statutory duties of the Green Tribunal, as prescribed under Section 20 of the Act, is to apply, *inter alia*, the Polluter-Pays Principle at the time of passing any order or award under the Act.

The Green Tribunal has been applying this principle in innumerable cases with the result that Polluter-Pays Principle has emerged as a powerful instrument to restore the damaged environment and compensate the pollution-victims. For instance, last year, in January, 2018 the Green Tribunal had imposed a fine of, as much as Rs 195 Crore, on real estate developers for restoration of environment on builder's violation of environmental laws. The Green Tribunal has been valiantly applying the Polluter-Pays Principle not only to big corporate giants, but also to Pollution Control Boards as well as the Government and has earned the reputation of staunch protector of wholesome environment giving a new dimension to the environmental jurisprudence in India. The application and development of Polluter-Pays Principle at the Green Tribunal, however, also raise certain important issues: viz whether the Green Tribunal is applying Polluter-Pays Principle as a penalising principle or a restorative principle; whether it has been able to evolve a sound criteria to determine the quantum of compensation; whether this principle has been instrumental to protect the environment in its true spirit or has indeed been reduced to the principle of "pollute and Pay" etc.

In this background, the paper starts with a brief discussion on the economic base of Polluter-Pays Principle that has later been evolved as a legal principle in Environmental Law. After giving a short historical development of Polluter-Pays Principle at the International level as a soft guiding law, the paper highlights its mandatory application by Green Tribunal in India. It, then proceeds to identify, classify and critically analyse the major judgments of the Green Tribunal involving the application of Polluter-Pays Principle like *Tanaji Balasaheb*, *Naim Sharif Hasware*, *Ajay Kumar Negi*, *Art of Living Foundation and Volkswagen* etc. While doing so, it attempts to critically examine the approaches and unique methods like 'Guess work', 'pre-emptive measures' adopted by the Tribunal for the application and development of Polluter-Pays Principle.

The strength of India's Green Tribunal has been recognised, nationally as well as internationally. However, for some time, it has also been grappling with certain forces working deadily against it. These powerful stakeholders include, *inter alia*, the Ministry of Environment, Forest and Climate Change. Hence, in the light of this power-struggle against the Tribunal, the paper also analyses the effect of it on its judgments to protect the environment and discovers the 'waves of green justice' for some time, when the leadership of Green Tribunal changed a little over year back. Given the fact that India is a fast developing economy and is likely to have many developmental projects, the paper argues for the broader and stricter application of the Polluter-Pays Principle by the Green Tribunal of India. At the same time, it also calls for the incorporation of legal definition of Polluter-Pays Principle in the Act to bring certainty and uniformity in its scope and limits especially the computation of environmental cost.

**Keywords:** Environmental Protection, Green Justice, Indian Green Tribunal, Polluter-Pays Principle, Quantum of Compensation

**Does Environmental Performance Help Firms' Value to Recover Faster  
from Environmental Controversies: International Evidence?**

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**Abstract**

Even though researchers have thoroughly investigated the link between the environmental performance (EP) of firms and their financial performance, it remains rare in the context of financial resilience against environmental controversies (EC). Therefore, this study aims to contribute to the literature by analyzing the impact of the EP of firms on their financial resilience against the financial shock caused by EC, and the moderating role of country-level environmental standards in this relationship. According to the resource-based view, EP is a source of green image and reputation among stakeholders, and a firm may reinforce that image and reputation to mitigate the impact of EC on the firm's market value. However, this relationship may not be observed if the firm's country is not environmentally-oriented. By performing survival analysis on an international dataset of 233 observations, the results show that EP prior to disclosure of EC significantly increases the likelihood of a firm's market price recovery from the shock. Indicating that EP is source of green image and reputation which attracts investors' attention. This enables firms to cope with EC shocks. This relationship is robust on inclusion of different control variables, regression models and different measures of resilience. The results also find that this relationship is significant only in environmentally-oriented countries. Which shows that EP of firms pays off when the country-level environmental standards are strong. Furthermore, two of the dimensions of EP i.e. "emission reduction" and "product innovation" have the same association with resilience. However, the "resource reduction" does not affect resilience significantly, which may have a trade-off effect between its financial benefits and costs.

**Keywords:** Crisis Management; Environmental Impact, Environmental Performance; Resilience; Survival Analysis

## **East Kolkata Wetlands : A way to sustainable tomorrow**

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### **Abstract**

Climate Change is affecting different parts of the world differently and adversely. Depletion of natural resources on one side and ever increasing global population on the other side are aggravating the issues further. In the recent decades, the International Organizations are making attempts to shift towards a more sustainable life. The Millennium Development Goals (MDGs) and Sustainable Goals (SDGs) of 2015 are examples of such efforts. This paper discusses the SDGs pertinent to Wetland Conservation and takes examples from East Kolkata Wetlands (EKW) (India), a Ramsar Site, where the sewage water from the city of Kolkata after been treated by the wetlands is used to practice sweet water fishing and cultivation of paddy and vegetables. The city of Kolkata has been using these wetlands as a natural sewage treatment plant for almost a century now. The significance of such practices of sewage fed fishing and farming in contemporary world is immense. It helps in re-use of precious yet scarce water resources, provides employment to marginalized locals, produces economical food and performs several significant ecosystem services, like groundwater recharge, pollution control. This paper talks about the various roles played by the women in appropriating the provisioning services of wetlands. However, political and economic pressures are threatening the existence of this wetland and the associated sustainable practices. The fear of those women who are about to lose their livelihood and homes has been noted in the paper. This paper finally, tries to assert the importance of this wetland ecosystem and highlights ways to protect it in order to continue the fulfillment of different SDGs and also suggests replication of this system for achieving sustainable development on a global scale.

**Keywords:** Local Innovation, Peri Urban Women, Sewage fed fishing and farming, Sustainable Development, Wetland Management.

**Investigating the ICT usage on Transparency in the Governance Processes  
at the Local Level in Southwestern Nigeria**

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**Abstract**

This article discusses the nexus between ICT and transparency in local governance in Southwestern Nigeria. There appears to be little or no attempt at investigating the role of ICT usage in transparency in local governance in Southwestern Nigeria. This article takes this as a point of departure. The article relies on primary data sourced through mixed approach method of administering of questionnaire on local council ICT officers, registered voters, local community and youth leaders and key informant interview of officers of ICT non-governmental organisations. For the Quantitative design, 418 respondents were administered with questionnaire while 18 key informants were purposively interviewed. Data were analysed using SPSS; correlation co-efficient analysis using tables, while the interview responses were presented using content analysis. Results showed a positive correlation of +0.421 between ICT and transparency in local governance. The study concludes that local governance will better be enhanced through relevant ICT tools in rural communities.

**Keywords:** E-governance, ICT, Local Governance, Southwestern Nigeria and Transparency

**The Challenges of Urban Renewal Activities on Sustainable Urban Development  
in Owerri, Nigeria using Remote sensing and GIS**

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**Abstract**

This research paper examines the challenges of the recent urban renewal activities on sustainable urban development of Owerri, Nigeria using remote sensing and Geographic information system (GIS). Development of slum, with urban growth and development are observed to be increasingly occurring in the study area. Scholars has continue to reiterate on the need to end poverty, promote good health, provide portable water and sustainable agriculture for the developing nations and people of sub Saharan Africa. Personal observation, oral interview and questionnaire sampling are the research instrument employed in the study. A total of 242 structured questionnaires out of the a total 250 distributed systematically were retrieved from the areas observed to be affected by urban renewal activities which are Douglas road, Whetheral road, Okigwe road, MCC road and Amakohia/Akwakuma road in the study area. LANDSAT satellite imagery for the study area was acquired to show the Land use Land cover and urbanization trend in Owerri from the year 1987 – 2014. My findings show that despite the high rate of urbanization taking place in the study area, those displaced as a result of the urban renewal activities were not provided with adequate housing facilities neither were they compensated. I also observed from my research that with increase population and urbanization vegetation is highly reduced just as the study area lacks green belt areas and inadequate green spaces that can moderate temperature, tame global warming, improve protection of the environment and quality of life of the inhabitants of the study area. The findings also reveal that vegetation and shade trees planted by previous government of the state were removed during the urban renewal exercise with no certainty of replacing them. For a sustainable urban development to take place slums and informal sectors removed or demolished during urban renewal activities must not be allowed to spring up in any other part of the city just as provision of green belt and spaces must be included in the urban renewal project. Arguably, urban renewal activities in Nigeria and other developing countries are done without making the necessary arrangements and provisions for the expected environmental consequences. Worst still, Professionals such as Sustainability scholars, geographers, environmentalist and urban planners etc are not involved in the urban renewal activities. The implication is that immediate problems of traffic gridlocks and congestion are solved but the people continue to suffer from the dividends of environmental sustainability such as good sanitation, health, food security and good quality of life. Further urban problems in suburbs are eventually created and unlike in the developed countries where adequate and effective planning are made to manage the consequences. Environmental Sustainability and urban development is a holistic issue. A functional urban sustainability research centre should be set up in the study area. Adequate green spaces should be provided in Owerri by the Government just as there should be a residential accommodation provided for those displaced during urban renewal activities to keep the study area livable and sustainable.

**Keywords:** GIS; Green belt; Sustainability; Urbanization; Urban renewal.

## **Fuel and Gas Subsidy Budget Reallocation on Infrastructure Development Budget towards Indonesian Economic Growth and Macroeconomic Indicators**

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### **Abstract**

The government of the Republic of Indonesia has one policy which always gets the main attention from the government itself, researchers, politicians, as well as societies. The policy is the providing of fuel and gas subsidies. This policy aims to reduce the price of fuel and gas, which in turn has an impact on increasing the purchasing power of the people. This increase in purchasing power is expected to stimulate economic sector activities and subsequently be able to increase the country's economic growth. In 2015, based on the Presidential Regulation of the Republic of Indonesia Number 191 of 2014, the government imposed a reduction in the budget for fuel and gas subsidies. The budget is then allocated to other sectors, one of which is the infrastructure development budget. This is done by the government because infrastructure development is seen as more productive, which in the end will also be able to increase the country's economic growth.

This paper aims to analyze the impact of the fiscal policy on the reallocation of the fuel and gas subsidy budget to the infrastructure budget to national economic growth along with macroeconomic variables such as: (i) the level of public consumption; (ii) the level of investment; (iii) level of government expenditure; (iv) the level of import; (v) the level of export; (vi) level of government revenue; (vii) level of employment; and (viii) the level of real Gross Domestic Product.

The data used in this paper are 2010 Input-Output data as well as infrastructure development data for year 2012 until year 2016. The method uses in this paper is quantitative descriptive and uses the WAYANG model of Computable General Equilibrium (CGE) method and comparative-static simulation in processing data.

The results of this paper show the influence of fiscal policy implementation can be seen as follows: (i) the level of public consumption does not change in the short term but increases in the long term; (ii) there is an increase in investment in the short and long term; (iii) a decrease in government spending in the short and long term; (iv) a decline in imports in the short and long term; (v) a decline in exports in the short and long term; (vi) there is a decrease in government revenues from taxes in the short and long term; (vii) there is a decline in short-term and long-term employment absorption; (viii) there is an increase in real GDP in the short term by 0.225% and in the long term by 0.281%.

The policy implications show that the implementation of fiscal policies in general can increase national economic growth, even though shows a decline in several macroeconomic variables. These finding can be an input for policy makers to prepare the other policies which can support more effective and able to increase some of these macroeconomic variables.

**Keywords:** Fiscal Policy, Economic Growth, Budget Subsidize, Fuel and Gas, Input Output Analysis, Computing General Equilibrium

## **Women business owners' adoption of information and communication technology in Nigeria**

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This study aims to investigate the uptake and usage patterns of information and communication technologies (ICTs) by women small business owners (SBOs).

### **Design/methodology/approach**

Semi-structured interviews were conducted with 25 women SBOs who were recruited through purposeful sampling methods. Interview data on communication technologies participants used were broken down into six main categories: internet search, internet advertising, online transactions, telephone, email and fax. Participants were also asked questions regarding proximity between them and different business contacts, and whether technology influenced how they communicated with these individuals.

### **Findings**

All participants had moved up from having a basic website to transacting goods and services online. ICTs were used to acquire tangible and intangible resources as well as for informal learning. Geographical distance between SBOs and individuals within their business and convenience of ICT failed to affect participants' preference for face-to-face communication with key business contacts.

### **Research limitations/implications**

This study has limitations that tend to be commonly found in exploratory studies, such as a small sample size. However, the findings lay the groundwork for future quantitative studies that examine the potential influence of other factors, such as gender and culture, on adoption of ICT by SBOs.

### **Originality/value**

This study responds to a call for research that develops a more nuanced understanding of how women SBOs use ICTs in their business. The findings can be used by policymakers and development agencies in their teaching and training interventions.

**Keywords:** Information and communication technology, Small business, Women small business owner.

**Ship breaking regimes of India and Bangladesh: An assessment of their compatibility with international laws**

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**Abstract**

Ship-breakings an inseparable part of the global shipping industry. The activity is mostly concentrated for last 40 years on the open beaches of only three countries of Indian subcontinents namely Bangladesh, India and Pakistan. Ship-breaking on the intertidal zone of the beaches is recognized by the International Labor Organization as the most dangerous occupation in the world and widely known as a pollution haven industry. Currently there is no enforceable international law that directly governs this international industry. Being the top two ship recycling nation in the world since 1980s the ratification by India and Bangladesh to the recently adopted international convention on ship recycling namely the Hong Kong Convention is extremely crucial for the enforcement of this convention based on its complex three stage entry into force criteria. On the other hand, both Bangladeshi and Indian laws on ship-breaking have recently undergone stringent review by their supreme judiciaries which ultimately has led to the enactments of Ship Breaking & Recycling Rule 2011 and Ship Breaking Code (Revised) 2013 respectively. The international law, constitution of both these countries, domestic policy, national economy and regional & international politics have made important contributions leading to a dramatic and disparaging shift in both Bangladesh and Indian environmental jurisprudence pertaining to ship-breaking. The paper starts with an overview of the long-standing and prestigious environmental jurisprudence of Bangladesh and India as well as the position of their constitutional laws. Endeavour has been taken using a comparative research methodology and critical analysis to assess the efficacy of the current legal and institutional frameworks of Bangladesh & India with respect to the Hong Convention to ensure a sustainable safe and environmentally Sound recycling of ships and their preparedness to ratify this much debated international convention. Building a sustainable industry of ship-breaking in both these countries through adequately addressing the safety and environmental concern in their domestic legislations is currently a deep-rooted concern of the environmental and labor activists not only in these two countries but throughout the globe. The research has identified three policy gaps badly overlooked in the international law and domestic regimes of both Bangladesh and India alike. The research has ended with several policy recommendations for the Government of Bangladesh and India as well as the International Maritime Organization that has adopted the convention in 2009. The recommendation stressed the importance of including certain primary stakeholders in the policy making process and certain socioeconomic issues of predominant ship recycling countries which were utterly ignored by the International organization and consequently the Domestic authorities. Analytic Hierarchy Process (AHP) has been suggested to locate the best cost-effective policy for Bangladesh and India in this regard so that a prompt and meaningful ratification of this international convention becomes a reality.

**Keywords:** Environmental sustainability, Hong Kong Convention, Ship-breaking, Ship recycling,, Ship-breaking code,



## **Gender Based Violence and Women Empowerment at the Grassroots In Lagos State, Nigeria**

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### **Abstract**

Globally, policies have been made in an attempt to eradicate Gender Based Violence (GBV). In spite of all these concerted policies, GBV continues unabated among women the world over and this phenomenon is endemic in Nigeria and Lagos State in particular. The overall objective of the paper was to establish whether women's economic empowerment was the cause of GBV in Lagos Mega City. The study relied on both primary and secondary data. The study utilized ex-post facto and survey research designs. The primary data was gotten from the primary source of data through a structured questionnaire, focused group discussions (FGDs) and interviews. Secondary data was gotten from published textbooks, journals, newspapers, magazines etc. The study adopted social structural theory precisely Theory of Gender and Power (TGP) as postulated by Robert Connell as theoretical basis. The paper revealed that GBV is a complex issue cutting across different strata of the society and its root is traceable to the structural inequalities between men and women. In addition, the findings indicated that there is a direct relationship between GBV and women empowerment in Nigeria. GBV is generally considered to be a violation of human rights, and tackling this menace is crucial to poverty alleviation and socio-economic development in the country. It was also established that GBV is not very common in societies or homes where women are educated and in elevated positions. The study recommended among others that in order to combat GBV and also promote women empowerment, the Lagos State Government and Ministry of Women Affairs and Poverty Alleviation should formulate a multi-sectorial program aims at developing mechanisms to prevent violence against women by addressing socio-economic status and vulnerabilities. A National Action Plan for the advancement of women that will introduce gender mainstreaming into the country's planning should be instituted. Government should also formulate policies that will strengthen the legal and policy frameworks in Lagos state and other parts of the country. Finally, community-based approach, sensitization and awareness are required more to drastically reduced the menace if no totally eradicated.

**Keywords:** (Domestic and Sexual Violence, GBV, Psychological effect, Women Economic Empowerment(WEE) and Governmental/NGO Actions )

**Contribution of Hygiene Behavior Change interventions in trachoma elimination efforts in Uganda: A case study of Napak and Nakapiripirit districts.**

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**Abstract**

Trachoma is the leading infectious cause of blindness in the world thriving especially in living conditions where there are shortages of water, inadequate sanitation and where numerous eye-seeking flies are present. Hand and face washing as critical component of world Health Organizations SAFE (Surgery, Antibiotics, Facial cleanliness and Environmental improvements) strategy are therefore essentials to prevent and eliminate the disease. This paper seeks to exhibit the contribution of Hygiene Behavior Change, particularly adoption of Hand and face washing in addressing Trachoma in Napak and Nakapiripirit districts of Uganda. Despite significant progress noted in reducing the burden of Trachoma in Uganda, the prevalence is still high in the country. As part of the National Uganda Trachoma control programme, WaterAid Uganda implemented a three-year Sanitation and Hygiene for Personal Improvement project in Napak and Nakapiripirit districts out of which these lessons are derived..

**Keywords:** Trachoma, Hygiene, Education, Health, Environment, Uganda

**Social Return on Investment on Improving Access to Sustainable Water Sanitation and Hygiene Services in selected Health care facilities in Rwanda – A Reflective Analysis**

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**Abstract**

Investment decisions in a project or program requires a judgement of whether the expected development results justify the costs. This generally and ordinarily calls for rigorous processes and systems to be institutionalized to help in projecting clear results at both output and outcome levels as well as the costs associated with achieving those results. Social Return on Investment, in this regard, is one critical measure that is increasingly being deployed by development agencies in respect of the afore mentioned but also to measure the social value of interventions. This study is a reflective analysis of social impact of Water Sanitation and Hygiene services implemented by WaterAid Rwanda in selected Health care facilities in Rwanda. Social Return on Investment analysis was used as the assessment tool based on SROI 7 principles. The analysis has significantly helped to determine the impacts that the project has created and to identify the most productive aspects. To augment the SROI analysis core aspects of Value for Money - economy, efficiency and effectiveness were also employed.

**Keywords:** Health, Water, Sanitation, Hygiene, Social Return, Rwanda

**The Cost of Justice in the European Union: A budgetary analysis of the performance of the Court of Justice of the European Union**

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**Abstract**

It is well established, both in academic bibliography, as well as in the sphere of international public policy, that the judicial system has evolved to one of the most important factors affecting the potential of economic growth. Either in the form of a mechanism of judicial review regarding the protection of rights, or in the form of a mechanism of dispute resolution on cases pertaining the involvement of various institutional actors, the courts of all instances have been acknowledged as crucial elements of an integrated scheme, designed to uphold the principles of the rule of law and, at the same time, to operate as the appropriate fora for exchanging arguments and examining points of view, leading to a universally accepted outcome, in the form of a judgment delivered by impartial, independent individuals, equipped with all the guarantees of the judiciary.

The economic impact of the well-functioning justice systems has been verified in various studies identifying the strong correlations between the improvement of court efficiency and the growth rate of the economy, and businesses' perception of judicial independence and the growth in productivity. Where judicial systems guarantee the enforcement of rights, creditors are more likely to lend, businesses are dissuaded from opportunistic behaviour, transaction costs are reduced and innovative businesses are more likely to invest. Furthermore, the importance of the effectiveness of the justice systems for small and medium-sized enterprises (SMEs) has been highlighted in surveys which revealed in particular that cost and excessive length of judicial proceedings were among the main reasons for not starting court proceedings over infringement of various rights. The beneficial impact of well-functioning national justice systems for the economy is underlined in a range of literature and research including from the International Monetary Fund, the European Central Bank, the OECD, the World Economic Forum, and the World Bank.

Taking all these into account, it is very interesting to examine the relevant performance of one of the most prominent judicial institutions in Europe, whose activity has a global impact, the Court of Justice of the European Union (CJEU). Assessing the CJEU's performance will focus on its case management process, in particular whether the procedures in place promote the efficient handling of the cases lodged and whether their timely resolution could be enhanced. The assessment and accountability tools in place at the CJEU will also be examined. This will demonstrate whether or not the significant organizational and procedural actions to enhance efficient case handling (ie the introduction of indicative time-frames for the accomplishment of key steps in the lifecycle of a case, the progressive development of monitoring tools and reports, the increase of the the number of Judges and their respective Cabinets, etc) and the reporting thereon, taken by the CJEU, have produced results, or is there any other action to be taken.

**Keywords:** Budgetary Analysis, Court of Justice, European Union, Performance

**Sanitation and Hygiene status in Kabale Municipality  
A pre Behavior change design Assessment, Uganda East Africa**

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**Abstract**

Hygiene behavior forms a key component in the success or failure of most WASH interventions globally. It has been established that even with massive infrastructural investment, change in hygiene behavior has a greater impact in health outcomes. Water Aid Uganda conducted formative research study to provide baseline information for the anticipated Water, Sanitation and Hygiene project in Kabale Municipality, Uganda with a view of establishing the current sanitation and hygiene practices.

This paper seeks to identify sanitation arrangements (disposal of excreta and wastewater where applicable), establish current hygiene and sanitation practices to inform development of strategy for promoting health and hygiene through behavioral change and development of healthier habits. Despite the massive investment in WASH infrastructure in Kabale municipality mothers do not perceive a clear, immediate link between hand washing and health or any other benefit. Even when they do, diarrhea is not regarded as much of a threat. The Kabale Water, Sanitation and Hygiene (WASH) Project builds on Water Aid's experience of school WASH programming in Uganda and responds to the emerging needs of the WASH sub-sector and forms a key strand of Water Aid Uganda's Country Strategy.

**Keywords:** Behavior, Education, Environment, Health, Hygiene, Uganda

## **A Study of Energy Related Greenhouse Gas Emissions of High Income Urban Residents in Accra, Ghana**

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### **Abstract**

The objective of this study was to examine the energy related to Greenhouse Gas emissions (GHG) of high-income suburban residents of the city of Accra in Ghana based on the views of residents of Devtraco Estates.

Activity data was gathered and default emission factors from the IPCC 2006 GHG Inventory Guidelines were employed to calculate emissions. A survey was conducted for 60 randomly selected households of Riverdale Cluster at Devtraco Estates, with a response rate of 42% (n=25) to assess activity data.

The results which emerged were that; the average mobile combustion emission was calculated as 0.001516 Gg CO<sub>2</sub>e, average stationary energy combustion emission was calculated as 0.0003666 Gg CO<sub>2</sub>e. Based on fuel combustion alone, the average household combustion GHG emission was determined as 0.00287446 Gg CO<sub>2</sub>e.

The study conclusions were that residents who are aware of climate change had higher emissions than those who were unaware of climate change. And, households with higher income presented higher GHG emissions, and also households that used generators frequently had strikingly higher emissions than those who did not.

The study participants recommended that national and local government authorities in Accra and other cities in Ghana would have to consider investing heavily in climate change and GHG awareness programs and improve upon the current urban public transportation systems and consider alternative energy sources to ensure a cleaner air and sustainable options for our cities.

This study is one of the few regarding Greenhouse Gas emissions (GHG) of high-income urban residents in Ghana.

The results and recommendations might be helpful to many countries, cities and urban communities where Greenhouse Gas emissions and its negative effects upon human health and life is a pressing issue.

**Keywords:** Energy Emissions, Greenhouse Gas, Ghana, High-income, Urban Residents

## Addressing Inequality through Sustainable Development Goals at the Grassroots in Lagos State

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### Abstract

Sustainable Development Goals (SDGs) can be accomplish more with deep grassroots inclusiveness towards addressing the prevalent inequalities and failures that hamper development progress. Local government is the third tier and most accessible legal institution to the grassroots. While institutions are certainly not the only means to reduce inequalities, but are critical enablers of equity and are intermediary to achieving objectives of leaving no one behind. Lagos metropolis encounter ecological issues boarding more on; squatter settlements and slums, population growth, income inequality, clean water, hospitals, roads, electricity, water disposal and perennial flood. The purpose of this study is to determine how SDG goal (10- reduced inequalities and 11- sustainable cities and communities) can solve urban-slum at local government, examine level of inequality urban-poor occupiers and investigate level of institutional autonomy at grassroots to attain resilience city. Primary and secondary data were utilized for the study. Primary data was collected through copies of questionnaire administered on 400 respondents in 10 selected rural-urban-community in Lagos state using purposive and cluster sampling techniques in three selected local government area.

The primary data collected was analyzed using both descriptive statistics while the stated hypotheses were tested using chi-square analysis. Secondary data was sourced from books, journals, internets, newspaper articles and government publications and so on. The study adopts the stakeholder theory as a theoretical basis. The findings of study that SDGs' inventiveness is a vital mechanism through partnership to drastically reduce urban-slum at grassroots level. Also, inequality is heavily conditioned towards rank of individuals' opportunities which are deeply influenced by socio-economic status. Until matter of general well-being such as employment, entrepreneurial, health and education, as well as the quality of social relations and social cohesion by all strata of government are aligned toward genuine policy realization. Finally, financially, local government autonomy is questionable practically, as most decision are taken by component government even when constitution explicitly accord each sphere ambit of jurisdiction. The study recommends that integrated approach to policymaking, multiple dimension vis-a-vis coordination across multiple ministries to harmonized the agenda to reshape, rekindle and remodel agenda 2030 for better society. Others SDGs partners are to enact desirable means through which local capacity in local area can facilitate result oriented outcome on inequalities and ideal resilient city in Lagos state, Nigeria.

**Keywords:** Sustainable development, reduced inequality, Sustainable cities , Local government and inclusiveness

## **Economic Integration vs. Social Policy? The case of changing schemes of healthcare systems in the EU**

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### **Abstract**

The European Union (EU) has long been the most developed model of economic and political integration that has brought a common market, a common currency and a standardization of national policies in certain areas in consistent with EU values and principles for Sustainable Development. To this direction, there is a parallel process of social integration that effect public policy decisions of member states.

Even though social policy, i.e. social protection and moreover healthcare policy, still remains in state's responsibility to develop, EU applies different mechanisms in order to influence health policy regimes since from a more federalist point of view, EU ought to expand its regulatory and legislative roles in as many policy areas as possible.

Public nature of healthcare provision in Europe has been challenged through a series of reforms in a way that the overall policy direction suits a market-liberal approach, with increasing emphasis on decentralised decision-making, private provision, and patient choice. At the same time, however, the overall tendency is not one of convergence towards a unique European model, neither one of persisting divergence, where traditional models simply keep growing apart. So, where are European healthcare systems heading? What can we expect from 21st century health policy in an integrated economy? Is there a common social dimension which is consistent with EU values and principles for Sustainable Development? Are, after all, Economic Integration and Social Policy in contrast?

The purpose of this paper is to discuss the above issues and provide an insight on the impact of economic integration in formulating market oriented national healthcare systems.

A systematic research will be conducted on EU regulation papers, directives and other acts in order to identify the directive regulatory and legislative role or the indirect actions of EU that influence healthcare provision in member states. Particular attention will be paid to the Cohesion Policy process, the deepening of Economic and Monetary Union, the EU Internal Market with its four freedoms (freedom of movement of people, goods and capital and of establishing and providing services), the EU austerity measures, the International Trade Agreements and the rulings from the European Court of Justice.

Afterwards, by using the case study research method, the impact of the EU integration policies in national healthcare systems of four European countries, UK, Germany, Sweden and Greece that represent, according to the literature, the welfare state regimes in Europe (Liberal, Conservative, Social Democratic and Nordic) will be addressed. A matrix will be used to compare the recent healthcare reforms in the four countries, regarding specific fields of interest (population coverage, decentralization of the healthcare system, state of ownership of the healthcare units, funding of healthcare system, the share of private sector in healthcare and doctor's wright to practice medicine privately) and identify the characteristics of the health care systems today.

The overall purpose of the case study data collection method is to find out how EU's integrated economy has influenced public policy decisions and formulated the health care systems of four representative countries as well as to explore the issue of convergence/divergence among national healthcare systems in Europe.

This paper is about to review theoretical and empirical evidence relevant to EU economic and social integration experience in order to develop guidelines for policy intervention and orientation which will be of interest to economic theorists, empirical social scientists, policymakers and the informed general reader.

**Keywords:** European Union, Economic Integration, healthcare reforms



**Urban agriculture: opportunities and challenges to food and income insecurity in Bindura, Zimbabwe**

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**Abstract**

Population increases in urban centers have become the norm in Zimbabwe. Due to the current economic and political challenges, rural people are migrating to urban areas, Bindura being one of the provincial towns in Zimbabwe in search for better opportunities. Rural areas have proved difficult for many people to survive the harsh economic situation prevailing in the country which is worsening by day. Urban migration is seen as a better move for these rural people as they anticipate to eke a living from getting employment yet this turns out to be the opposite. Urban agriculture (UA) is known to provide an alternative source of livelihood to some residents. However, little is known about the extent of UA contribution to livelihoods when it is in conflict with other livelihood activities like gold panning. This paper provides an overview of UA and its role in sustaining livelihoods of the resource-constrained Bindura urban residents. A sample of 80 participants from the purposively selected Chipadze high-density suburb was used. The study used a questionnaire to solicit information about the resident's socio-economic status, opportunities and challenges, and their views on UA. The findings of this paper illustrate that the UA farmers' income remains low. About (80%) of the respondents are not employed and depend on urban farming while engaging themselves in menial jobs for their survival. Most of the respondents (90%) indicated that urban farming is sustaining their cereal food needs as well as plant protein needs while the remaining 10% are still struggling to meet their food needs. Thus, UA farming plays an important role among the poorest in Bindura agricultural activities. The results revealed that gold panning is one activity threatening UA in Bindura. The challenges faced by UA farmers include; theft, continued increase of prices of basic commodities, lack of cash and its unavailability as well as its fast rate of losing value, lack of capital, market access, information, technical and entrepreneurial skills. The paper recommends the government to allocate peri-urban small farming areas to the residence in need. Additionally, there is need to raise overall urban farm yields through improved UA management practices. Government support is necessary to address the UA development needs of urban farmers in order to lessen poverty. Specific actions may involve providing institutional credit that is easily accessible to urban farmers, providing them UA training on proper agronomic practices, marketing and conflict resolution. In addition, the government needs to put to an end to illegal gold panning activities taking place in Chipadze.

**Keywords:** Agronomic practice, gold panning, livelihood, resource-constrained, urban agriculture (UA)

**Africa Free Trade Area foretold: A reflective analysis of Kwame Nkrumah's views for Africa in line with the benefits of the agreement establishing the African continental free trade area**

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**Abstract**

A United Africa was Kwame Nkrumah's dream. A dream he pursued during his reign as Ghana's President from 1958 to 1963 through a continuous tradition of Pan-African congresses. The conferences played a major role in gathering African nationalists, particularly Pan-Africanists from all over the continent. Along with his relentlessly pursuit of Pan-African commitments Nkrumah intensely opposed "nuclear imperialism." His ideology was "political union would provide the framework within which any plans for economic, social and cultural co-operation can, in fact, operate to the best advantage of all. The African Union emanated from the Organization of African Unity (OAU) which Kwame Nkrumah had advocated for. Kwame Nkrumah, on 24 May 1963 as 32 independent African countries met in the Ethiopian capital, Addis Ababa gave one of the greatest speeches of his life, a speech which has since become the definitive blueprint for African Union with economic integrated highly amplified as a priority. Decades later in 2018, the Continental Free Trade Area is launched and has already been rectified by majority of African countries. This is goal oriented at integrating Africa's markets by creating an expanded and secure market for the goods and services of State Parties through adequate infrastructure and the reduction or progressive elimination of tariffs and elimination of non-tariff barriers to trade and investment. It establishes clear, transparent, predictable and mutually-advantageous rules to govern Trade in Goods and Services, Competition Policy, Investment and Intellectual Property among State Parties, by resolving the challenges of multiple and overlapping trade regimes to achieve policy coherence, including relations with third parties. This paper thus takes a reflective approach in analyzing how the ideas enunciated by the visionary Pan-Africanist Kwame Nkrumah are incorporated in the Agreement establishing African Continental free Trade Area thereby potentially bringing his ideas to fruition to the benefit of the African Continent.

**Keywords:** Africa Free Trade Area, Pan Africanism, Kwame Nkrumah, Africa Union

## **Education, Good Governance and Development in Nigeria: The Missing Link**

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### **Abstract**

This paper examines the nexus between education and the development of a nation. This is because functional education system provides the bedrock for all round development. Essentially, human capital development, Technology and Science, information communication technology (ICT), social, political, cultural and democratic development are all dependable variables, depending on the independent variable of education. The paper adopts the structural functional theory to explain the interconnectedness of society. According to the functionalist theory society is a system of interconnected parts that work together in harmony to achieve a state of balance and social equilibrium for the whole. The thrust of the theory is a focus on how each part influences and is influenced by other parts. The paper adopts the analytical approach using qualitative method and historical design especially of the funding of education to unravel the nexus between education and development. The study is a critical and a systematic analysis of data series extracted from federal allocation to education sector since 1999. This paper posits that education is the solid foundation on which societal development is anchored. The paper argues that in Nigeria, for the last 20 to 30 years, education has suffered tremendously from total neglect and one can say that education is in a state of near collapse. This present state of near collapse, the paper blames on the attitude of the various Nigerian Governments towards funding of the education sector. The education sector received the lowest budgetary allocation from 1999 to 2013. This is because the total budget “between” 1999 to 2013 was 35.13 trillion naira with education taking 3.12 trillion naira. This is just 8.3% of the total budget. This illustrates the lacklustre attitude of the Nigerian Government towards funding of the education sector. The apparent neglect of the sector has resulted in the very slow pace of development in the country. Analysis, also reveals, that this rot stems from the weakness on the part of the supervisory authorities while the political ruling class pays only lip service to the education sector. The paper concludes, regrettably, that this attitude of the successive Nigerian Governments to fund the education sector inadequately places a limitation on the capacity of the education sector to provide the needed impetus to drive development. Some recommendations are made to reverse this trend.

**Keywords:** Development, Education, Governance, Funding and Nigeria

**Organized Private Sector Agricultural Contributions towards Sustainable Food Security in a Multinational Oil and Gas Region of Nigeria**

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**Abstract**

This research examined Organized Private sector agricultural contributions towards sustainable food security in the oil and gas region of Nigeria with strategic role to address unemployment and poverty. Specific objectives were to assess main contributions of organized private sector agriculture to food production, look out for possible influence of multinational industries in the Niger Delta and to ascertain individual farmers and group benefits from private sector agriculture. Multi stage sampling technique (purposive and random) was adopted in selecting 120 respondents. Questionnaire, Interview and focused group discussion were used to collect data for analysis. Descriptive statistics were used to analyze socio economic characteristics while four point Likert scale was used to evaluate the benefits. Mean of  $\geq 2.5$  was adjudged acceptable, while a mean  $\leq 2.5$  was not accepted. Influence of Multinational agricultural services was positively deduced using the Focused Group Discussion. Findings showed the absence of synergy between public and private sector agriculture in addressing sustainable food security in Nigeria. Organized Private sector agriculture had actually provided employment (mean of 3.4), capacity development (3.4), ensuring availability of food during (3.8), increase in agricultural produce (3.7), transfer of agricultural techniques (3.4) and Agricultural produce farm price reduction (3.4). The problem of food insecurity and unemployment in the region will be addressed by encouraging organized private sector to invest in agriculture. It is recommended therefore that the organized private sector agriculture should play roles in Nigerian Economic Development road-map to create employment and sustainable food production. Indigenous agricultural extension systems should be encouraged by private sector agricultural development actors. There should be synergy between the organized private sector agricultural sector and the multinational oil and gas sector to leverage on available opportunities in the Niger Delta.

**Keywords:** Food, multinational, oil and gas, security, sustainable

## **Status of the smallholder value chain in Gauteng province, South Africa**

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### **Brief background**

The importance of the smallholder value chain is rarely appraised or investigated in the agricultural sector of South Africa and let alone in its provinces. Although, the inevitability of the value chain in running viable and sustainability of any form of business and smallholder farming enterprises is not an exception.

### **Aims and objectives**

The study aims to determine the existence of the smallholder farming enterprise value chains and the factors that are associated with the creation of a value chain framework for smallholder farming enterprises.

### **Methods**

The study used a quantitative research methodology within a cross-sectional research design. A sample of 111 Gauteng smallholder farmers was interviewed using a close-ended questionnaire.

### **Results**

The study revealed that only 39 (34.82%) out of 111 smallholder farmers are linked with value chains. Of the 73 (65.18%) of the 111 smallholder farmers are not linked to the value chain. The study further uncovered four critical factors such as access to production loan, distribution channels, transport and compliance to standards to crucial for the creation of the value in the smallholder farming sub-sector of Gauteng province.

### **Conclusion and recommendation**

It is concluded that the smallholder value chain creation or linkages are critical for the economic viability of this sub-sector. The existence and ties of smallholder farming enterprises to the values can have a high positive impact on the job creation aspiration espoused by national development plan vision 2030 of South Africa.

**Keywords:** Enterprise, Smallholder, farming, Value chain, business

**Nigeria's Quest For Sustainable Socio- Economic  
and Political Development and the Dilemma of Western Models.**

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**Abstract**

This paper examines post-colonial Nigeria and her desire for sustainable social, economic and political development using documentary analysis. Its scope begins from 1945 when the Second World War ended and radical nationalism began with the desire for development. The period which was prior to independence witnessed division among Nigerian nationalists especially in the area of foreign investment and development which stemmed decision on development plan.

After independence, there was the dilemma of whether to continue with European models of development plan. When decision was taken, it adopted the Neo-classical Keynesian model without understanding European intent with development plans. This ushered in development plans which was embraced by the military after takeover of government. The irony was adopting western model without understanding the peculiarities of their environment, culture etc.

The scope terminates in 2009 when a new development plan vision 20:2020 came into being. This paper ask the question, should Nigeria have adopted the Neo-classical Keynesian model of planning and why has sustainable socio-political and economic development eluded Nigeria?

It examines the impact positive or negative, of the model and others, and highlight their effect of preventing the development of an indigenous model and why Nigeria is yet to experience sustainable development after an indigenous model was created.

In the political scene, the decision was to embrace the Westminster parliamentary system of government hook line and sinker, until 1966 when the military terminated it and introduced military rule. When in 1979 the military decided to hand over power to elected civilians, the American model, presidential system was adopted and operates till date. In addition, the process of constitution making which involves constitutional conferences, a model or legacy of colonialism, was adopted and has continued even with the existence of the legislature.

The problem that has emerged is the prevention of Nigeria from evolving its own indigenous political system and process of constitution making and failure to exploit adopted models to build its own political culture into a political system.

Some explanation for the above is lack of continuity, corruption, inadequate statistical data on all aspect of the economy, gross errors where they exist, problem of macro - economics, development plans are mostly and merely political documents of the ruling party and the military when in power, and intervention by the military who emerged as non-contenders of political offices yet dominated political power for decades.

The paper identify possible solutions to include continuity, discipline in planning and execution, efficient data collection, storage and usage, patriotism, proper financial management amongst others.

It concludes in part that Nigeria, being an emergent nation was on the right path in adopting western models for a start and to ensure continuity at independence. But argue that the leaders and planners ought to have used them as spring boards to develop unique and indigenous models that would proffer solutions and ensure sustainable development. Also that sustainable social, political and economic development was hindered by military intervention and this gave indigenous political and economic culture little room to incubate.

**Keywords:** Development Plan, Military, Models, Neo- Classical, Parliamentary

**Multinational Oil Industry Corporate Social Responsibility for Sustainable Stakeholders Management in Nigeria: The Case of Total Exploration & Production Nigeria Limited (TEPNG)**

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**Abstract**

Multinational oil and gas production industries in Nigeria have the mandate to produce hydrocarbons. There is usually an Agreement that exists between Multinationals and Federal Government of Nigeria known as Joint Venture Agreement (JVA) or Joint Operating Agreement (JOA). Shell Petroleum Development Company, Total Exploration and Production Company and Nigerian Agip Oil Company are three majors of Multinational Oil and Gas companies in Nigeria. These Multinational Oil and Gas industries expect safe environment (social and ecological) to operate optimally. Total Exploration and Production Nigeria Limited (TEPNG) introduced MoU as strategic leadership relationship model for host communities to accept and provide her with safe operating environment. It delivers this strategy of Memorandum of Understanding (MoU) through community projects delivery where impactful enumerated projects would be nominated by stakeholders who also promised Freedom to operate (FTO) in the MoU and or addition to TEPNG Corporate Social Responsibility (CSR) programmes. Objectives of research were to evaluate Acceptability and Functionality of company's CSR and ability of TEPNG to provide safe operating environment as FTO as promised. TEPNG maintained leadership in corporate social responsibility among other Multinational competitors. MoU and CSR define Industries stakeholders' management style in Nigeria. Research studied water projects delivery and maintenance in 16 producing communities. Purposive and random samplings were used to select 210 respondents. Questionnaire, Interviews, Personal observations and photography were data collection methods. Descriptive statistics were used for analysis. Results presented in percentages, charts and pictures. Likert scale was used to quantify degree of Sustainability.

Results revealed TEPNG delivered water projects as enshrined in Mou. Awareness and Acceptability of projects that recorded 99% and 86% respectively were demonstrated as key elements of sustainability. Stakeholders (Host communities) of Multinational Oil industry did not meet their obligations as agreed in the MoU. Prevailing scenario created fights and militancy among cult groups. Payment for most CSR activities completed without delivery of projects as projects were to be delivered by host communities' vendors. This situation threatened CSR projects Sustainability and therefore calls for management strategic review of the model to avoid industry reputation constantly going down. Concluded that TEPNG CSR could not deliver Freedom to Operate as declared by 60% of the respondents. Recommended that TEPNG should educate stakeholders through regular planned engagements like Open fora and town-hall meetings. CSR projects' maintenance should be left for community youths and Periodic evaluation should be institutionalized to enhance Sustainability of Community development projects including agriculture. The study exposed that SUSTAINABILITY is driven by PEOPLE to achieve ENVIRONMENTAL and ECONOMIC benefits and should be given priority position in the sustainability equation.

**Keywords:** Community Development Projects, Corporate Social Responsibility, Freedom to Operate, Memorandum of Understanding, Sustainability

## **Market and Learning Orientation Effect through Organization Governance on Competitive Advantage of Universities in Jakarta**

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### **Abstract**

This research tries to examine the effects of market orientation and learning orientation toward competitive advantage through organizational governance. The population of this paper are universities under the Regional Coordinating Office for Higher Institutes (Kopertis Wilayah-III) in Jakarta. Data of this paper are collected from 3 (three) biggest private universities in Jakarta, namely: Trisakti University, Atma Jaya Catholic University (UNIKA Atma Jaya) and Bina Nusantara University (BINUS) by using 960 questionnaires and the respondents in this paper are the Head of Academic Division of Trisakti University, Deputy Chancellor I of Atma Jaya Catholic University and Vice Rector in charge of Research & Technology Transfer of Bina Nusantara University. Furthermore, the data will analyzed by using Structural Equation Modeling (SEM) through the WarpPLS 4.0 program.

Computational results show that all hypotheses are acceptable, uch as follows: i).There is a negative and significant effect of market orientation towards organizational governance; ii). There is a positive and significant effect of learning orientation towards organizational governance; iii). There is a positive and significant effect of organizational governance towards the competitive advantage; iv). Market orientation negatively affect competitive advantage but insignificant; and v). There is a positive and significant effect of learning orientation towards competitive advantage.

The implication of this research shows that eventhough the organizational governance is influenced negatively and significant by the market orientation, and market orientation also negatively but insignificant affect the competitive advantage, there are no matter with them because they are already have the specific market throughout their operation. Organizational governance and competitive advantage those already generated by these 3 universities are able to improve their marketing performance. This finding also proves that these three universities do have specific learning orientations and differ from each other. In the end, every new academic year, new prospective students will come by themselves to these universities.

**Keywords:** Market Orientation; Learning Orientation; Organizational Governance; Competitive Advantage; Structural Equation Modeling.



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**Analyzing Sustainable Development in OPEC countries VS OECD countries: comparative study  
by Topsis methodology**

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**Abstract**

Sustainable Development, SD, is a compatible compound of economic, social and environmental dimensions for achieving admissible welfare for current citizens without hurting welfare of future generations. Nowadays, sustainable development, SD, is considered as an inevitable necessity in different countries. Unlike traditional development, Sustainable Development maintains on comprehensive concept of development which covers social justice, environmental considerations, and economic wellbeing for all citizens. Thus, it is the crossroad of society, economy and environment as well. Providing necessary conditions for Sustainable Development, is a mission of public policy for both developed and less developed countries. Hence, this article by using different social, economic and environmental indexes alongside with Topsis methodology, is analyzing the situation of OECD, for achieving Sustainable Development on one hand and that of OPEC countries on the other. The findings of this article indicates that: firstly the level of SD is not unique for OPEC countries and some distinctive different is obvious. Secondly, and as Sustainable Development is concerned, there is a huge gap between developed and less developed countries.

**Keywords:** OPEC and OECD, Political Economy, Sustainable Development, Topsis Methodology,

## **Sustainable Development: Exploiting Renewable Energy for Blockchain Technology**

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### **Abstract**

As the world economy becomes more globalized and developed, it requires more energy to carry out vital socio-economic daily activities, the need to reassess its energy requirements becomes imperative. However, traditional means of power generation keeps depleting at an alarming rate coupled with the degradation of our natural habitat, thereby bringing about the need for increase in energy demand around the world. Nature itself provides a lot of natural source of green energy such as sunlight, tides, wind rain, plant, heat and geothermal heat which can be harnessed in terms of sustainable energy to meet the present need without compromising the future generation. Renewable energy and energy efficiency serve as the main components in achieving sustainable energy around the world, striking a balance between how energy is used properly and reduction in greenhouse gas emission via energy generation sources. Making use of renewable green energy will provide clean, non-toxic environment thereby giving an excellent climate habitable and sustaining for all living organisms. Blockchain is an incorruptible digital ledger of economic transaction that can be programmed to record not just financial transaction but virtually everything of value and importance. It's an overhyped technology that has had proofs of concepts which are applicable to financial services, supply-chains and simple explanations. Blockchain is typically managed by a peer to peer network collectively adhering to a protocol for inter-node communication and validating new blocks. Smart contracts is a computer protocol intended to digitally facilitate, verify or enforce the negotiation or performance of a contract which allows credible performance without third parties being involved. The entire process is automated and can act as a complement, or substitute recorded in a computer language as a set of instructions with the ability to self execute and self enforce itself on a chain request system. This study formulates a supply chain model of how energy demands can be met, sustained and optimally administered via blockchain smart contract technology using renewable green energy system, and a decentralized market ecosystem to bring forth different supply and energy distribution chain of energy between renewable energy manufacturers and energy demands in our society at large. It also focuses on handling challenges that hinder the green sustainable renewable energy infrastructures. It shows that process measurement via block chain smart contracts can enhance reduction of toxic gas emission, and bring about conducive climate change, clean affordable energy, conducive environment, better livelihood and healthy standards through speedy, transparent and secured technology.

**Keywords:** Blockchain, climate change, power generation, technology, toxic energy, renewable energy

## **Research for Sustainable Development and The Burden of Law in Nigeria**

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### **Abstract**

Developments in the society have their compost roots in the researches being carried out in the universities world over. Industries and hi-tech companies all invest in researches with the view to having a cutting-edge advantage over their competitors. This translates to the need for serious investment in the education sector being the hub for these researches. While the government in other places invests heavily in education, the Nigerian government provides merely 'maintenance' fund for education development. In other climes, the private sector and individuals invest heavily in education and their profit comes in terms of the scientific discoveries which research churns out for the advancement of humanity.

Within this context, most universities in the world have committed themselves to the principles of sustainable development goals. They invest in researches; organize conferences, workshops and seminars where experts converge to advocate on the way forward. Their websites convey advancements being made in term of these goals. With these goals, the world is bound to enjoy a better future and the generations yet un-born. Based on this background, it is essential that Nigerian universities reposition their curriculum, training as well as their thinking towards these SDG goals. The Nigerian government has not shown much commitment to the realization of these goals beyond lip service. It has not provided seed fund to the universities or its research centres for any research on the SDG goals. This impacts negatively on the university system because of lack of funds to pursue such lofty dreams. This major disconnect has impacted negatively on sustainable development in most developing nations. It is this diversity that has brought about the need for strategies and procedures adaptable to evolve sustainable development.

This paper through discursive analysis and comparative methodology examines the steps Nigerian universities could take to tap from the ideas of SDGs. It examines the principle of sustainable development by analysing the strategies and procedures adopted by the developed countries; and advocate that for developing nations such as Nigeria to achieve the objectives of sustainable development, development plans and strategies must be backed by the venoms of law. It avers that the goals themselves are springboard of ideas which must be studied and internalized. The universities must not wait for the government. Committees and mission groups must be established to engender the development that can catapult the system into realistic goals. Both private and public universities could collaborate on this. It concludes that notwithstanding the tardiness of the government, the universities could extricate themselves and be buffers of development if broadly teleological in their aspirations for sustainable education.

**Keywords:** Education, researches, sustainable development goals, university, sustainable education.

**The Social Phenomenon of Honour Killing:  
A Case Study of the Cultural Zones of Haryana**

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**Abstract**

The phenomenon of honour killing is prevalent in a number of north-western states of India. This study was thus undertaken to analyze this phenomenon, and is based on primary data collected through intensive a field work conducted in several places of Haryana, wherein information was collected from 300 respondents. The data has been classified on the basis of both socio-cultural attributes as well as regional specificities. Honour killing, which implies the murder of one's own family members for alleged violations of traditional marital strictures and social norms, can be seen as a pathological social phenomenon that attacks the basic human rights of an individual and universal value of freedom.

It is a veritable assault on humanity. In Indian society, the phenomenon of honour killing takes place if any boy or girl in a family decides to enter into an inter-caste marriage, an intra-*gotra* marriage, an inter-religious marriage, or a marriage of one's own choice. This study concludes that an individual is subordinate to other elements of society like caste, family, religion, and village community, among others. It finds that honour killing actually conveys the following message to the people of the country: "If you wish to live within your family, including your parents, parents-in-law, your community, your village and region, then you must strictly observe the social norms of caste, religion, community, village and region." In other words, the concept of honour killing works by instilling fear among the youth, especially the female members of the community, that they "need" "to keep the honour of the family intact" and that for any violation of this honour they would have to pay with their lives.

It has been observed that social ills like sex-selective abortions, honour killing, and decline in the child sex ratio, domestic violence, and female infanticide have shown an alarming rise during the last three decades. Women are also becoming increasingly insecure and unsafe in both the domestic space as well as the non-domestic or public space. This study reveals that 'homelessness' and 'society-lessness' are appropriate frames for analysing the status of women in Indian society. The phenomenon of 'honour' (killing) is more complex because the victims are not only 'women' but in several cases 'men' also, as both the boy and the girl are killed or humiliated for committing a marital 'transgression'. Further, the family members of the boy and girl concerned are also punished and humiliated in the village. Members of the upper or dominant castes punish those belonging to the lower or subordinate castes and also on occasions the members of minority religious groups.

**Keywords:** Honour Killing, Khap Panchayat, Intra- Gotra marriage, Intercast marriage, Patriarchal System

## **‘Sustainable Fashion’ and Water Pollution: A Constitutional Analysis of Enforcing the Use of Organic Raw Materials for Dying in the Fashion Industry**

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### **Abstract**

The Fashion Industry is the second largest polluter of river bodies. The major reason for this is the harmful chemicals used in the dying, colouring and bleaching processes of fabrics. The toxicity of the synthetic chemical dye used, which includes corrosive ingredients like zinc, formaldehyde, Chromium IV, poses threat to the environment, workers and consumers in the form of various health hazards. By virtue of such harm, the industry, through the processes it undertakes and the toxicity it discharges into water bodies violates several statutory and Constitutional provisions which will be addressed in this paper.

Apart from violating labour laws and environmental laws, the industry also challenges Fundamental Rights of citizens including the ubiquitous Right to Life guaranteed under Article 21 of the Constitution of India which extends to not only the dependants on the (polluted) river bodies, but also workers who come in contact with these chemicals. The usage of toxic ingredients and the process undertaken to dye fabric not only leads to injury to the workmen, which resultantly denies them the right to a safe and hazard-free workplace, but the discharge of the same leads to pollution of water bodies and therefore, violating the right to clean water included under Article 21.

Moreover, India’s Constitution has imbibed in it the Directive Principles of State Policy, placing duty on the State to protect the natural resources for future generations, which is the crux of ‘sustainability’. The question which will be explored is whether there can be a balance between trade, human rights and environment in practice if fashion industries become ‘sustainable’.

Water Pollution in the India is governed mainly by the Water (Prevention and Control of Pollution) Act, 1974 and the Environment (Protection) Act, 1986. Industries in India require ‘Consent to Establish’ before they are set up and ‘Consent to Operate’ before they start manufacturing. For purpose of both of them, it must be shown to the authorities that the said factory or unit will not release harmful effluents, or, where permitted, it will only release such effluents up to a prescribed limit. Prevention of violation of laws will be examined in this paper if sustainable ingredients and methods are employed by the fashion and textile units for dyeing.

The nexus between water pollution and climate change in the context of dyeing is that highly contaminated water discharge not only disseminates effluents into the water but also raises temperature of the water bodies. However, the private companies globally have now come together to contribute their part in achieving the goals of climate change under the Paris Agreement. The ‘Fashion Industry Charter for Climate Change’ is an initiative by them (including ‘raw materials’ as an area of work), and perhaps use of natural products can be an effective alternative. This will be discussed in this paper by creating parallels between water pollution and climate change and how natural ingredients can reduce both, as well as profit the companies.

In the quest of such ‘sustainable fashion’, the concept of ‘sustainable development’ is promoted, which has now become a phenomenon recognized by the law. At the same time, reducing pollution in water bodies can contribute in attaining SDG #14 for improving the marine life which is an international obligation for India. Through precedents and legislative history as well as local examples such as case studies based on Rajasthan’s block painting and Assam’s Sualkuchi wherein organic materials are used for dying of clothes, the paper will show how this environment friendly alternative can also empower small scale industries to pave way for economic growth and attempts to resolve environmental concerns at the same time.

Although these will form hurdles for the industries in their pursuit to want to carry out their activities freely, the focus is on how it can be seen as a practical alternative, especially in the wake of sustainable fashion among consumers to save the environment and various forms of life. This also brings us to the core of this debate – whether the Fundamental Right of Freedom to ‘practise any profession, or to carry on any occupation, trade or business’ is violated through such policy which is drawn up to protect the Right to Life, and the even more pressing question is – if so, on what basis does either Fundamental Right get precedence over the other when the Supreme Court of India has itself ruled that the two rights are not mutually exclusive.

The aim is to help move past the legal crossroads which are holding up the process for a step close to a better world where environment and human rights are both protected without causing any harm to trade. Merely shutting down units for environment pollution is not the solution; we must find a way through which ‘sustainable fashion’ resonates sustainable development while acting within the constitutional limits.

**Keywords:** Climate Change, Constitution of India, Dyeing, Water Pollution, Sustainable Fashion.

**Corruption, Human Rights' Abuse and Sustainable Development:  
Critical Reflections on Nigeria's Anti-Corruption Strategies**

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**Abstract**

Corruption where pervasive perpetuates human rights abuse, exacerbates poverty and inequalities which ultimately undermine sustainable development. In Nigeria, corruption is pervasive in all its forms and has fueled fragility, violent extremism, organized crime and conflict. These premises have then provided fertile ground for human right abuse by security forces. Corruption has also undermined the ability of government to provide public goods such as security, education and health care services in requisite quantity and quality. The resultant effect is excruciating poverty at its highest level in Nigeria's history. Concomitantly, public trust in government has waned to its lowest level. Reducing corruption has therefore become imperative in order to checkmate human rights abuse and in turn reduce poverty levels in the country towards the attainment of the lofty goals of sustainable development. So far, Nigeria's anti-corruption strategies have been ineffective and inadequate due to the absence of a broad-based elite consensus on the crucial need to eliminate it from the country's governance space. It is this lack of consensus that has led to haphazard, non-comprehensive and selective application of anti-corruption measures leading to low results while corruption widens and intensifies. A broad consensus is required among Nigerian elites on the egregious effect of corruption on delivery of public goods, human rights violations and poverty and public confidence in governmental authority. Developed nations must take a hard stand on corrupt leaders in Nigeria by turning away questionable money that is always finding its way into their economies, a tendency that is a strong incentive to corrupt leaders.

**Keywords:** corruption, governance, human rights, poverty, sustainable development

## **Land Expropriation in Zimbabwe and Its Lessons for Namibia and South Africa**

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### **Abstract**

The land question has remained an albatross on southern African countries that were born out of European settler colonialism. Zimbabwe attempted to put a closure on the land question through compulsory land expropriation without compensation for the land, after the failure of the willing buyer willing seller policy and the British reneging from their colonial responsibility to fund land purchases for resettlement. However, the policy which was triggered by land occupations / invasions in 1998, and 'officialised' by the government in 2001 had some disastrous consequences on the national economy. Given that Namibia and South Africa are now facing land agitations as was the case with Zimbabwe, it is prudent for these countries to look at the Zimbabwean case and derive beneficial lessons, which was the primary objective of this paper. The paper concluded that the most important lesson is that any land reform should not be undertaken under emotional conditions or for political expedience. Such policies fail to appreciate important socio-economic factors that should be taken on-board. The paper was undertaken primarily using the review of literature on the land question as well as the economic issues of Zimbabwe.

**Keywords:** Land Expropriation, Settler Colonialism, Land Reform, Zimbabwe, South Africa, Namibia

## **The Quest to Rebalance Human and Capital Migration in SADC**

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### **Abstract**

Since the dawn of colonialism South Africa has battled with its northern sisters on the control of human and financial capital. In the colonial times, the Witwatersrand Native Labour Association (WENELA), mobilised labour from Southern African countries like Zimbabwe, Malawi, Mozambique and Zambia to work in the mines. The discovery of large deposits of gold and diamonds also meant that capital went south. While South Africa was still under apartheid, regional independent member countries created the Southern Africa Development Coordination Committee (SADCC) in 1980. The organisation intended to whittle down South African hegemony by creating alternative industrial and transportation hubs. The fall of apartheid South Africa in 1994 ushered in a new political dispensation in the region. However, the hegemony created in colonial times persisted especially with the fall of the Zimbabwean economy which was an alternative challenge to South African hegemony. In 2015, SADCC's successor, Southern African Development Community (SADC) launched the Agenda 2063 that seeks to industrialise the whole region and neutralise South African Hegemony. This paper looks at how South Africa gained hegemony in the region that has seen it dominating both the human and financial capital of the region. It will also analyse regional countries' response, the level of their successes and South Africa's attitude to regional industrialisation.

**Keywords:** Migration, Political Economy, SADCC, SADC, South Africa, Zimbabwe,



**Reconnoitring Social-Workers' Advocacy Problems in Promoting Social Justice Effectiveness  
in Rural High Schools**

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**Abstract**

This paper explores the social justice advocacy and the role of rural high school's social workers' engagement within the school systems, where administrative and ambiances of social injustices create particular challenges for social work practice. This paper examines the social justice types and advocacy problems and reports on an empirical pilot study that was done amongst school social workers in a district of rural Imo State in Nigeria. Using quantitative data from an on-site research questionnaire to solicit views, and by employing the one-sample T-test and Inpar/Binomial Tests for Analysis of Variance (ANOVA) to test for differences between means, the Chi-Square Goodness of Fit Test was used to test for independence between variables of diverse analysis interpretation, towards examining social workers' perceptions on social justice issues and the apparent importance of this concept in their practice. These thoughts confront foremost discourses and highlight a progression of pro-active awareness and commitment with society to oppose discrimination, unfairness and injustice and demand change at rural high schools. Implications for social work on social justice effectiveness and social advocacy problems were measured. Findings specify that school social workers' understanding of the effective implementation of social justice types and advocacy problems at rural schools are global issues and were enriched by the investigation; the conclusion revealed that 'eustress' enables the empowerment of social advocacy and the need for social workers to reflect on its utilization is affirmed.

**Keywords:** Rural schools, Social justice, Social advocacy, School social workers,

## Violence against Women by the Army Personnel

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### Abstract

Protectors or predators? Guardians of the Nation or devils outraging a women's modesty? The very simple question being asked here is how often in lieu of construction of National Security the protectors turn into predators? How does sexual desire get channelized into construction of National security? Do the gruesome acts of that of rape and other hideous crime conducted on the 'No Man's Land' justify as an immunity? And ironically, the most respected troop of the nation are the one traumatizing the women of the. As one rightly announces, atrocities against women, it not only exists within the boundaries of the nation rather it is in its most brutal form in the 'disturbed area' and that too in its most brutal form. The most heinous crimes are committed where the state boundaries end.

Vulnerability of the she-gender: is like being in a constant state of war fighting for the very basic rights of being a human and not just rights as a women, be it within the borders or beyond and not being confined to any cultural boundaries. Crime against women is like being in an existing state of war against humanity and will prolong if necessary steps aren't taken. These can be clubbed in specific different spheres, and it ranges from acts of sexual violence, forced prostitution, of all cross border trafficking and murder.

In areas such as Manipur, Guwahati, Assam, Jammu and Kashmir which fall under the category of 'disturbed areas', the cry of the physically weaker section of the society goes unheard to the extent that they have to initiate the walk of shame by stripping down their clothes to get the inconsiderate audience, the media, the unsympathetic government and even the judicial authority to hear them. Such immunities to the men in uniform raise the question as to whether the society will ever emerge to be an egalitarian one. Manorma rape case in Manipur (2004), Khairlanji rapes and killings (2006), Shopian Kashmir rape case (2009) aggravated sexual violence in Guwahati (2012) and the incident as that of Delhi gang rape case; shifted the focus to re-evaluating and reframing protection of women under the present law based on recommendations from Justice Verma Committee, which was constituted to look into possible amendments of the Criminal Law within the State.

While the Verma committee called for a review to AFSPA (Armed forces special protection Act). It noted that "impunity for systematic or isolated sexual violence in the process of internal security duties is being legitimised by the AFSPA" and "women in conflict areas are entitled to all the security and dignity that is afforded to citizens in any other part of our country". While the central committee adopted all the recommendations of the subsequent anti-rape bill, it left out those about AFSPA. Though India is a signatory to many international Conventions on issues of human rights and conflict agenda, such as the Geneva Convention and CEDAW (The Conventions on the Elimination of All Forms of Discrimination against Women, the ground reality remains is different due to poor implementation of the international standard protecting women in armed conflict situation.

The armed personnel use various acts like AFSPA, Army's Act, 1950, Disturbed Areas Act 1992, as appanage against the punishments which relate to the crimes they commit against civilians. Various provisions of AFSPA are inconsistent with the laws relating to violence against the women in the country. The AFSPA calls for a separate tribunal for the army. The crimes which fall out of their 'call of duty' such as rapes, sexual assault are to be tried by court martial and not by the ordinary criminal court. In the year 2016 and 2018 after the landmark judgments in Manipur Murder Case and in the case of death of three civilians in Shopian, Jammu and Kashmir respectively the Hon'ble Supreme Court of India held against the Army Personnel using excessive force and ended the impunity for the armed forces. It is only then that the 60 year old legislation again invoked sharp responses on the issue of immunity and the 'Army Doctrine'.

The paper initially deals with giving the backdrop of the Indian society which still has a traditional patriarchal set up that influence the law of land as well. The paper further lays down the provisions of AFSPA digging its inconsistencies with the penal law of the country and also the international law.

Suggestions have been put forward to lessen such crimes in the future. Demand for separate protocol for women who have been victims in the armed conflict has been put forward along with few basic suggestions of not providing any immunity for armed personnel for sexual offences. The social development of the nation depends on how secured an individual feels without having to worry about their gender.

**Keywords:** Army; AFSPA; Crime; Sexual offences; Women

## **Plastic Pollution in India: An Evaluation of Public Awareness and Consumption Behaviour**

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### **Abstract**

Plastic is a cost-effective, durable and easy to manufacture material and its usefulness and convenience has resulted in its ever-increasing demand. The demand for plastics has also been fuelled by the rise of the ‘use-and-throw’ culture resulting in much of the plastics being designed to be disposed after just one use. These single-use plastics, mostly used as packaging material, account for a substantial chunk of the total plastics manufactured today. However, most plastic is non-biodegradable and it takes up to a thousand years for certain types of plastics to decompose resulting in accumulation of plastic waste, much of it ending up in oceans, causing adverse consequences marine life. The scale of plastic pollution has become alarming with millions of tonnes of plastic waste existing in oceans today. Single-use plastics are the responsible much of this plastic waste and individual consumption behaviour and habits must change to reduce their demand. Presently more than 120 states across the world have some form of regulation on the use of certain types of single-use plastic. India has adopted plastic waste management rules and is committed to abolish all single use plastics in India by the year 2022.

While regulating the manufacture and use of these single-use plastics through bans and taxes can influence consumer behaviour, these regulatory policies would be most effective when coupled with increasing the public awareness regarding the risks and harmful effects of plastic pollution, the need for such regulatory policies and the significant impact individual consumption choices can have on reducing the individual’s plastic consumption. This paper examines the public attitudes to combating plastic pollution in India, extent of awareness of plastic pollution, level of public satisfaction with government policy relating to plastic pollution and individual plastic consumption behaviour. The methodology adopted in this research paper is empirical and analytical and the authors will collect primary data through the means of a questionnaire to evaluate the public attitudes to combating plastic pollution in India, extent of awareness of plastic pollution, level of public satisfaction with government policy relating to plastic pollution and individual plastic consumption behaviour. The questionnaire was administered to a random sample of 110 respondents belonging to the age group of 18 – 77 years, selected from urban areas in India. The research paper shall examine the public attitudes to combating plastic pollution in India, extent of awareness of plastic pollution, level of public satisfaction with government policy relating to plastic pollution and individual plastic consumption behaviour and make recommendations for effective outreach programs regarding plastic pollution in India.

**Keywords:** Attitude to Plastic Pollution, Plastic Consumption Behaviour, Plastic Pollution Awareness

## Sustenance of a joyous and leisurely life

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### **Abstract**

The issue of sustainable development has come-up following intense or hard use of technology (hard-tech). Evaluation of hard-tech vis-à-vis sustenance of a joyous and leisurely life, against the backdrop of The Laws of Nature clearly shows the limitations of hard-tech. This is a scientific evaluation, based as it is on a “systematic study and knowledge of natural phenomena” (i.e. The Laws of Nature), the dictionary meaning of ‘science’.

As per The Law of Entropy, every technology is inherently inefficient as regards matter and energy, i.e. “the output is always lesser than the input”. At every step, energy efficiency has to obey the Carnot cycle limit. In fossil-fuel based technology (hard-tech) the number of steps is very large and so there are huge losses even at the best possible efficiency. Working for inefficient hard-tech entails huge physical and mental effort (labour), harm (to health), pressures of commitments (loss of freedom), tensions, and risks for the majority of human society. Some have to carry out – difficult and/or dangerous and/or dirty jobs – or ‘3d jobs’.

For hard-tech we draw large quantities of raw materials (from mines) and oil from under the surface of the earth. These then continue to remain above the surface in the form of slag, rubble, scrap, goods, garbage, and other toxic and dangerous pollutants. Unwanted matter cannot be destroyed as per The Law of Conservation, and as per The Law of Entropy it always increases causing degradation of air, water, and soil quality, global warming and undesired effects thereof with the sustainability of the entire human race at stake. As per The Laws of Nature hard-tech can never ensure a joyous and leisurely life for all.

As per The Law of Entropy energy generated by photovoltaic cells, windmills, and hydro-power stations in their whole lifespan is less than the energy spent in making and maintaining them. Or, the energy generated by one photovoltaic cell does not suffice to make another photovoltaic cell of the same capacity. The same is true for windmills and hydro power stations and in harnessing all other renewable or non-conventional or ‘green’ energy sources. They release more green-house gases for the same job. Hence, they are neither friendlier to the environment nor a real alternative to fossil-fuels.

Automatic machines controlled by silicon-based technologies substitute humans for many jobs but we are not paid for sitting at home. Development of Silicon life is today considered subservient to us doing 3d jobs, but their superior power in data processing can, and is already enslaving humans, and may one day finish unwanted humans! (As we did with animals and other living-creatures.) So it is not just sustenance of a joyous and leisurely life, but also a dignified human life, that is at stake.

Selective use of technology; – selection being based on low cost (in terms of effort and harm) technology (**soft-tech**) and be friending diversity (for better living and beating uncertainty) is the basis of an ecological solutions that are in tune with The Laws of Nature. These will facilitate a joyous, leisurely and dignified life; in other words, sustainable development.

**Keywords:** Ecological-solution; Hard-tech; Laws-of-Nature; Self-reliance; Soft-tech

**Establishing a Transit-Oriented Development (TOD) Policy for Urban Sustainability in Ho Chi Minh City, Vietnam: A Theoretical Model**

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**Abstract**

Ho Chi Minh City is the largest city and the economic center of Vietnam. It has a land area of 2,095 square kilometers with a population of 8.2 million. Its increasing population growth, rural-to-urban migration, high density development in the center, huge and increasing travel demand, insufficient road infrastructure and limited public transit, present an enormous challenge for its urban planners to develop an efficient and sustainable transportation system. A city built at sea level, its faces serious climate change issues as flooding and increased carbon use add to its environmental problems. This paper provides a theoretical model for the development of a Transit-Oriented Development (TOD) Policy for urban sustainability in Ho Chi Minh City. This model acts as a sustainable transportation planning strategy designed to produce vibrant neighborhoods with compact, walkable, mixed-use development centered on rail and bus transit systems. The paper addresses three basic questions. First, what is Transit-Oriented Development and how is it a model for urban sustainability? For this question, a recent research literature on TOD's is undertaken within the framework of its relevance for establishing a TOD Policy for Ho Chi Minh City. Second, how does a TOD Policy offer a solution to urban traffic problems in Ho Chi Minh City? For this question, an in-depth review of transportation problems in Ho Chi Minh City is undertaken with an analysis of how TOD's can provide a solution. And third, how can a TOD policy be implemented in Ho Chi Minh City? For this question, a pathway to how a TOD Model can be implemented for Ho Chi Minh is presented. This model discusses the present urban planning system; the tools that exist for a TOD policy to be implemented; and the barriers to that implementation. This research project was the result of a Fulbright Specialist Program Grant provided by the United States Government.

**Keywords:** Development, Planning, Transportation, Urban, Vietnam

## **Innovation: The Key to Achieve Sustainable Development**

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### **Abstract**

*“Reflecting on the [Millennium Development Goals] and looking ahead to the next 15 years, there is no question that we can deliver on our shared responsibility to put an end to poverty, leave no one behind, and create a world of dignity for all.”*

- The then Secretary General of the United Nations ,Ban-Ki Moon in 2015

The concept of ‘sustainable development’ was highlighted for the first time at Stockholm in the United Nations Conference on human environment in 1972. However this term was coined two years later in the Cocoyoc (Mexico) Declaration on Environment and Development and further emphasized upon at the Rio Declaration at the Earth Summit in 1992. It may be understood, as the development that meets the needs of the present generation without compromising the ability of the future generations to meet their own needs. Sustainable development is thus an integration of developmental and environmental imperatives. It can be also equated with being a new way of science that involves, an integration of technology and social philosophy.

The United Nations adopted a new set of global development goals for 2016-2030 known as the Sustainable Development Goals in September 2015 as part of the 2030 Agenda for Sustainable Development. This agenda puts forward a comprehensive agenda for global action to be taken on sustainable development and is aimed at inter alia ending poverty and reducing inequality in all forms. However in order for the agenda to succeed, new innovative approaches are required with respect to the goals.

This includes innovation as a new form of social practice coupled with new or improvised technological products especially in the light of achieving Goals 2 and 9 amongst other goals. Goal 2 focuses on ending hunger, achieving food security and improving nutrition and promoting sustainable agriculture. Similarly Goal 9 deals with building resilient infrastructure, promoting inclusive and sustainable industrialization and fostering innovation.

Therefore this paper will deal with how innovative approaches are integral in order to achieve the sustainable development goals and thereby not compromising the ability of future generations to meet their needs while at the same time, meeting the needs of the present generation. The paper will delve into how the agenda of the goals puts forward a tremendous opportunity for new forms of innovation to contribute to ensuring sustainable development while also explaining the constraints that might be encountered in the process of doing so.

**Keywords:** innovation, sustainable development, goals, technology, social

**Climate-smart agriculture (CSA) and smallholder farmers' income: the case of soil conservation practice-adoption at Qamata Irrigation Scheme, South Africa**

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**Abstract**

**Introduction**

Farmers in Africa, like their counterparts in other continents, are confronted with the problem of rising temperatures and more cases of extreme weather due to climate change. Changes in temperature and precipitation patterns are a major threat to agricultural development. In fact, in many parts of the globe, agriculture is already being seriously challenged. The above changes have both immediate and long-run implications for food production and security all across Africa. Africa has been noted as the continent most susceptible to climate change. One main reason is because close to 70% of African population live directly or indirectly on agriculture, whose agricultural systems are largely in smallholding, and climate change is expected to impact more negatively on the livelihoods and food security of such farmers. As a panacea for climate change, climate-smart agriculture (CSA) is being progressively promoted globally as an agricultural strategy for sustainable food security while responding to the challenges due to climate change. CSA focuses on three main objectives of sustainably increasing productivity and incomes; adapting to climate change and reducing greenhouse gas (GHG) emissions where necessary. CSA includes tested practical soil conservation techniques such as mulching, intercropping, zero tillage, agro-forestry, improved grazing and improved water management. In other words, the adoption of soil conservation practices is also an adoption of climate-smart agriculture. Due to the fact that when soil qualities deteriorate either due to soil degradation and/or climate change effects, one main area of farmers' livelihoods that suffers is their incomes.

**Objectives:** Based on the foregoing, this study was designed to evaluate how CSA as a sustainable agricultural measure influences the overall income of smallholder farmers, with particular reference to the soil conservation practice adoption at Qamata Irrigation Scheme, South Africa. The null hypothesis is that; smallholder farmers' adoption of CSA/soil conservation practices has no significant influence on farmers' overall income in the study area.

**Materials and method:** This study was conducted at Qamata Irrigation Scheme, Qamata, Intsika-Yethu local municipality, Chris Hani District Municipality, Eastern Cape, South Africa. The scheme was established to address the hunger and food insecurity situation of Qamata and its environs, due to the aridity of the area, focusing mainly on the cultivation of crops. Following the case study research design, data were collected from 70 smallholder farmers with the aid of pre-tested questionnaires, using the group interview method. Data analysis was conducted using basic descriptive statistics and the multiple linear regression model, because the dependent variable was continuous in nature.

**Results:** According to findings, average age of farmers in the study area is 60 years, and only 3% exceeded Grade 12. Also, a larger percentage (86%) of farmers claimed awareness of the soil conservation practices promoted by extension in their area. At 5% level of significance, the p value was .002. P thus is less than .05. Farmers' age (AGE) and awareness of soil conservation practices promoted by extension (AWARE) were both positively significant in relation with smallholder farmers' overall income. On the other hand, household (HHEAD) and farmers' perception regarding extension recommendation for soil conservation (PERCEXT) were negatively significant in relation to smallholder farmers' overall income.

**Conclusion:** Based on empirical results, older farmers have more likelihood for increase in their overall income. This was partially expected as several literatures supported this findings, mainly due to the wealth of experience associated with age. However, other studies also have found that younger farmers have more probabilities for adoption and its associated benefits, due to their innovativeness, quicker access to information, and willingness to take risks. Similarly, farmers who are aware of extension recommendation for soil conservation in the study area have more likelihood for increased overall income. This result was predictable, because awareness has been highly acknowledged as the first step in the adoption process. More so, female-headed households in the study area have more likelihood for increase in overall income. This may have been particularly so because the soil practices promoted by extension in the study area are not complicated beyond the capacities of women. Further, farmers who hold negative perception of extension recommendations have more likelihood for increased income. This was unexpected because several studies find that there is a positive relationship between agricultural extension and increase in farmer's productivity and incomes. Based on the results, the study concludes that smallholder farmers' adoption of soil conservation practices (an example of CSA) has significant influence on the overall income of farmers in the study area. Therefore, all significant factors should be considered when policies relating to smallholder farmers' adoption of CSA/ soil conservation practices are to be implemented.

**Keywords:** Climate-smart agriculture; smallholder farmers' overall income; Qamata Irrigation Scheme; soil conservation practices; South Africa



**The Measurement of the Volatility of Market Risk of Viet Nam Insurance Industry After the Low Inflation Period 2015-2017**

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**Abstract**

This paper measures the volatility of market risk in Viet Nam insurance industry after this period (2015-2017). The main reason is the necessary role of the insurance company system in Vietnam in the economic development and growth in recent years always go with risk potential and risk control policies.

This research paper aims to figure out how much increase or decrease in the market risk of Vietnam insurance firms during the post-low inflation environment 2015-2017.

First, by using quantitative combined with comparative data analysis method, we find out the risk level measured by equity beta mean in the insurance industry is acceptable, as it is little lower than ( $<$ ) 1.

Then, one of its major findings is the comparison between risk level of insurance industry during the financial crisis 2007-2009 compared to those in the post-low inflation time 2015-2017. In fact, the research findings show us market risk level during the post-low inflation time has increased much.

Finally, this paper provides some ideas that could provide companies and government more evidence in establishing their policies in governance. This is the complex task but the research results shows us warning that the market risk might be higher during the post-low inflation period 2015-2017. And our conclusion part will recommends some policies and plans to deal with it.

**Keywords:** risk management, asset beta, market risk, financial crisis, insurance industry, macro policy

**Modern Corporate Governance Standards- Cases in Some Western European Countries After Financial Crisis, Corporate Scandals and Manipulation**

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**Abstract**

After the recent global crisis, corporate scandals and bankruptcy in US and Europe, there is some certain evidence on weak auditing, risk management, accounting and audit system. This paper chooses a different analytical approach, using qualitative combined with comparative analysis method, and among its aims is to give some systematic opinions on corporate governance criteria as a benchmark for stock markets.

Firstly, it classifies limited Western European representative corporate governance (CG) standards into two (2) groups: The Netherlands and Belgium latest CG principles covered in group 1 and, group 2, including corporate governance principles from Italy and Austria, so-called relative good CG group, while it uses OECD and ICGN principles as reference.

Secondly, it , through analysis, identifies differences and advantages between above set of standards which are and have been used as reference principles for many relevant organizations.

Third, it establishes a selected comparative set of standards for Western European representative corporate governance system in accordance to international standards.

Last but not least, this paper covers some ideas and policy suggestions.

**Keywords:** corporate governance standards, board structure, code of best practice, financial crisis, corporate scandals, market manipulation, internal audit

Ref#: 072/USA/19

**The Influence of Sustainable SHRIS, Human Capital Development on Organizing Productive Informal Economy Workers through Decent Work in the Online Work in Dki Jakarta**

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**Abstract**

This paper investigates: firstly, brief descriptions and advantages of sustainable human resource information system (SHRIS), human capital development, decent work, and productive informal economy workers in DKI Jakarta and secondly, to analyze both the influence of sustainable HRIS, human capital development directly on organizing productive informal economy workers and the influence of sustainable HRIS and human capital development indirectly through decent work in the online work in DKI Jakarta. A survey method was used to cover information and gather primary data from a sample of 300 informal economy workers in DKI Jakarta. Structural Equation Modelling (SEM) was used for the statistical analysis. The findings of this research are based on the hypotheses that sustainable HRIS, human capital development and decent work positively and significantly influence on organizing productive economy workers in the online work in DKI Jakarta. The research findings indicate that decent work in the online work would be a central driver of achieving productive informal economy workers in DKI Jakarta. So, it is a critical time to suggest that the informal economy workers need strategic responses from Indonesian government in order to reveal dignity, stability and peace for the informal economy workers in DKI Jakarta, Indonesia.

**Keywords:** Decent work, human capital development, productive informal economy workers in DKI Jakarta and sustainable human resource information system.

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**Urban Informality Discourse in the Global South: Are the Perspectives Objective or Subjective in Pigeonholing the Urban Poor?**

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**Abstract: (400 – 800 words).**

The adoption of the capitalist economic system in the 1970s by most countries in the Global South brought about economic development and the growth of urban informality, respectively. As a result of the continuous movement of rural dwellers and migrant workers in droves to the cities in search for better economic opportunities; corresponding provisions for the accommodation, economic and infrastructural needs for this category of people by the concerned government(s) is mostly neglected. However, as these cities grow with more people and their activities, so is the need for the provision of additional accommodation, creation of more economic opportunities and expansion of the existing infrastructure. Consequently, housing, economic and infrastructure provisions become an essential and vital commodity for both formal and informal activities in the city. These urban needs inform the construction of illegal structures on vacant land for shelter purposes and development of informal economic activities as a mean of livelihood by the urban poor. Subsequently, urban informality is the outcome of these developments and activities. This paper, as a part of the literature review of ongoing research in urban informality, delves into the debates, categorises the discourse into themes for robust synthesis and review. These themes as categorised in this paper, revolve around informalization of informality; informality as a survival mode of livelihood; legality or illegality of urban informality; the relationship between formal and informal activities; informality as a mode of economic liberalization market system; and questioning the regulatory powers of the government on urban informality. Thus, after a comprehensive review of these discourses, the paper argues for the decriminalization and understanding of urban informality in both objective and subjective contexts. The paper, therefore, concludes that approaches to urban informality should be disentangled from the shackles of economic liberalization and globalisation. Instead, future research should explore how this urban phenomenon can be mainstreamed into the context of the Global South's peculiarity and considerations. This shall inform new vista of scholarships and expand the existing body of academic debates on the phenomenon.

**Keywords:** Global South; Urban Informality; Informal Settlement; Informal Activities

**The Socio-Perspective of Landfills Effects on Land and Water Resources in Eswatini:  
A Case Study of Mpolonjeni**

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**Abstract**

Municipal Solid Waste (MSW) landfills can cause pollution of all environmental components. MSW inventory conducted in the Kingdom of Eswatini in 1997 estimated waste generated to 0.02 kg per person per day and 20 years later, it escalated to 0.5 - 0.8 kg per person per day. It is therefore imperative to take proper initiative for their sustainable management, which if not will turn the whole city into waste. Henceforth, this study provides an assessment of the impacts of Mbabane (the country's capital) municipal landfill located in Mpolonjeni, in the Kingdom of Eswatini on land and water resources. A questionnaire was developed and administered to 132 homesteads, within a radius of 1 km from the landfill to solicit information on perception of landfill effects. A 5% margin of error and a 95 %confidence level determined the sample size. Additionally, field visits and water samples collected at selected points of interest were used to validate the respondents' perceptions. More than 80 % of the respondents felt their water quality was below standard, with 25% attributing the compromised quality to the nearby landfill. The results were found unsurprising because only 24 % of the respondents were using piped and treated water provided by the major water supplier in the Kingdom, the Eswatini Water Supply Cooperation (EWSC). Respondents (46.2 %) further attributed the landfill to the deteriorating surrounding land and poor harvests from their fields. The landfill attracted scavenging birds, in the processing causing damages to the nearby agriculture fields. Despite the less agricultural activities, as indicated by the 35 % respondents who practiced it, all the practicing respondents perceived their poor yields to the presence of the landfill. It is also worth noting that 82 % of the respondents had been in the area for more than 5 years, suggesting reliability of the findings observed. Water samples collected from both surface water and wells indicated the pH, Nitrate, COD as O, BOD as mgO<sub>2</sub>/L and ammonia concentration to be in the range, 5.12 – 7.29, 2.7 – 7.6, 0 – 217, 5 – 40 and 0 – >10 respectively. The findings clearly demonstrate that a lot needs to be done in addressing the handling of MSW in the country. Not limited to, we propose other alternatives of dealing with the waste, such as the waste to energy plant. This could further help the energy sector in the Kingdom, which currently imports most of its energy from the neighbouring countries.

**Keywords:** Environment, Eswatini, landfill, Municipal Solid Waste, perspective on landfill

## The Role of Tax Avoidance on the Effect of Firm Performance on Dividend Policy

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### Abstract

In the community's view, the company's ability to distribute dividends is assumed to be a profitable company. In other words, more investors will invest their funds in the company. Managers must consider decisions in dividend distribution called dividend policy. Levy and Sarnat (1990), define dividend policy as determining the portion of profits to be shared with shareholders and which will be held as part of retained earnings. In addition, Jensen (1986) states that dividend policy has an important role in controlling agency conflict. This is due to the distribution of wealth to all company shareholders as principals, thereby increasing their satisfaction with the management as agents. But dividend policy is very dependent on company performance such as free cash flow, investment opportunity set and sales growth. Company performance is a level indicator of achievement and reflects the success of management in managing the company with the expected results of the behavior of the people in it (Gibson, 1998).

Pratama (2013) states that tax rates influence dividend policy. Taxes undoubtedly reduce the profits available in an organization, both to be maintained or distributed as dividends to the shareholders of the company. Nnadi and Akpomi (2008) state that if no profit is made then the dividend is not announced. Tax avoidance is generally used to reduce the amount of debt tax based on existing weaknesses of tax law so that the perpetrators do not violate tax laws as stated in the tax laws (Chasbiandan and Martani, 2012). This causes the amount of profit generated after the tax to be greater, making it possible to make dividend policy in dividend distribution to shareholders. So it can be concluded that tax avoidance is a positive factor that influences management decisions in dividend policy in terms of dividend payments.

This research aims to know the role of Tax Avoidance in moderating the influence of firm performance toward Dividend policy on LQ45 companies that listed on Indonesia Stock Exchange in 2014-2017. Data was collected by using purposive sampling where total samples are 19 companies with 76 observation years. This research is analyzed using PLS (Partial Least Square).

The result of this research show that Free Cash Flow, Investment Opportunity Set have influence significantly and positively toward Dividend Policy. Meanwhile, Sales Growth does not influence Dividend Policy. Beside that, the result also shows that there is no influence of tax avoidance in amplifying the effect of Free Cash Flow and Investment Opportunity Set toward Dividend Policy. Lastly, result show that there is an influence of Tax Avoidance in amplifying the effect of Sales Growth toward Dividend Policy. For future research, researcher can extend sample from some sectors in Indonesian Stock Exchange and use financial ratio such as EPS, ROA dan ROE.

**Keywords:** firm performance, tax avoidance, dividend policy

## The Effect Macro and Micro Indicators on the Growth of Earnings Assets in Bank

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### Abstract

Failures in banks especially those that are regular or bound will result in increased potential to become a crisis that can disrupt economic performance. In Indonesia, the Indonesian banking industry has almost 93% of total assets in the financial industry. This situation ensures that if the banking industry is not healthy and cannot function optimally as it should, it will result in economic activities being hampered. The health of the banking sector is a component of the stability of the financial sector and is closely related to the health of the country's economy. If the asset is in good condition, naturally the bank company is in a healthy and liquid state to carry out its duties as a bank, namely to stabilize the country's economy and other duties, especially in conducting lending and borrowing activities. Therefore, banking management is focused on increasing all activities to absorb or collect funds, carry out financial traffic, channel debt and exchange foreign currencies. Problems from management can also cause the quality of bank performance to decline. Earning Assets are the provision of Bank funds to pocket income, in the form of loans, securities, interbank fund placements, expectation bills, invoices for securities purchased with reverse repurchase agreements, derivative bills, investments, administrative account transactions and other fund procurement framework that can be equated with that (Bank Indonesia Regulation No.14/15 / PBI / 2012). There are several micro and macro factors that influence the growth of productive assets, namely credit growth, growth of securities, inflation and gross domestic product. The four indicators can determine the performance of the bank so that it determines the growth of the bank's productive assets.

According to Alilia and Herdiningtyas (2005), banking performance is strongly influenced by the increase in non-performing loans. For corporate companies, securities can be an alternative way for companies to get liquidity, so that the company's cashflow is maintained more in the short term. Gross domestic product shows the income of individuals and companies and the ability to pay debts. The lower GDP will affect the increase in non-performing loans (Ahmad & Bashir, 2013). Ouhibi and Hammami (2015) also found that the inflation rate that occurred had a negative and significant effect on non-performing loans.

The population in the study is banks in Indonesia listed on the Indonesia Stock Exchange in 2012-2016 where 30 banks were selected by purposive sampling. This study was analyzed by multiple regression linear analysis using SPSS 22.0. The results of the study show that credit growth and the growth of securities positively influence the growth of bank earnings assets. However, in the macro aspect it is evident that inflation and gross domestic product do not influence the growth of bank earnings assets.

Then it can be concluded that micro-economic factors are the dominant factor in the growth of bank earnings assets. Future studies can use World Bank data for gross domestic product variables and inflation. In addition, you can add new variables, namely the global competitiveness index of a country.

**Keywords:** bank earnings assets, credit, securities, inflation, GDP

## **Eradicating Poverty and Promoting Prosperity in a Changing World (COTFONE)**

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### **Abstract**

Poverty is much more than the mere lack of resources e.g. food, clothing and shelter. It is also about deprivation in education, health and water. COTFONE tackles poverty from two root causes: lack of stable family life and lack of education which are related to each other. Most OVCY families, missing key family members, are led by a single mother, frail grandmother or even a child who is struggling to keep the family afloat, and therefore perpetuating common manifestations of poverty .

Education increases incomes and economic growth. Due to little funding public school (*Bonna basome*) is not free. The poor of the poor are not accessing school. This is the background that gave rise to the COTFONE School.

Poverty is both a cause and a result of the mindset of many. Since childhood most have lived poverty; and don't know any better. Many people have come to rely on inconsistent family, government and foreign aid.

High Unemployment. Many youth out of school have no regular work or income and don't perceive agriculture as employment.

Low agricultural productivity due limited access to appropriate technologies, extension services, input availability and quality.

Poverty stricken communities harvest any available resources including cultivating in marginal or fragile ecosystems, accelerating environmental degradation. The poor face the consequences even harder: vermin (like the army worm?), natural disasters, soil exhaustion, droughts and climatic shocks, water scarcity, landlessness, landslides and floods

### **Actions By Government Eradicate Poverty:**

Uganda's long term goals and objectives, such as Vision 2040, describing national aspirations, to guide detailed medium term sector plans, district plans, and the budget process. Vision 2040 aims at transforming Uganda from a predominantly peasant and low income country to a competitive upper middle income country. It builds on the progress that has been made in addressing the strategic bottlenecks that have constrained socio-economic development since independence. UPE, NAADS, OWC, USE, YLF, the minimum health package and many non state interventions contribute to Vision 2040).

### **Actions about Eradicating Poverty Undertaken By COTFONE**

1. COTFONE promotes self-managed and self-capitalised microfinance. To reach the unbanked thousands COTFONE mentored community groups to build community revolving funds schemes while providing members with the means to cope with emergencies, build capital and re-create social dynamics that support genuine self-reliance.
2. Together with FINCA bank, Masaka Branch, COTFONE also promoted saving culture among Girl Child OVC. FINCA has a scheme targeting 9-19 year old girls to save money with FINCA. These girls are allowed to open free charge accounts with any amount of money.
3. Promoting Sustainable Agriculture. In partnership with the Slow Food philosophy, this project works with local communities to create concrete models of sustainable agriculture, sensitive to different contexts (environmental, socioeconomic and cultural) and easily replicable. Also COTFONE Organized training on Agri-business management.
4. COTFONE continues to provide free basic education for 289 OVCY to empower them to cope up with their situations
5. COTFONE promotes literacy through a community Library.
5. COTFONE member schools continues to provide vocational skills training to the underprivileged orphans and vulnerable children
6. COTFONE also worked with the districts to identify VHTs, distribute condoms and follow up people for comprehensive HIV prevention services
7. COTFONE trained community members to make African Energy Saving Cook Stoves (EKYOTO) that use small amount of fire wood thus reducing on deforestation in its areas of operation. 80% of targeted OVC households have constructed these stoves.
8. 100+ volunteers (local and international) were recruited and served at COTFONE to date. Volunteers help teach in the COTFONE member schools and also render their professionalism in several sectors.
9. COTFONE



together with member organizations and partners continued to prepare communities for the East African Crude Oil Pipeline (EACOP) Project through trainings on Land Rights, Environment Protection etc.

### **Challenges**

1. narrow notion of poverty which has led to poor strategies e.g. needless credit deepen poverty as borrowers lose assets to creditors
2. Uganda's development analysis seems to be concerned, more with modernisation and economic growth statistics than the social well being of its citizens. The economic gains expressed in statistical figures do not critically relate to socio-economic well being of households
3. Many households remain vulnerable to poverty owing to limited availability of safety net programs.
4. Uganda has a high fertility rate, one of the biggest in Africa. Smaller family sizes can have positive effects on living standards.
5. Healthcare is also not free and in the absence of health insurance, it is out of reach for the most needy. When chronic disease strikes at times assets are liquidated to cope
6. Inadequate means by which local communities can demand accountability from local political and technical leaders
7. Many young Ugandans are leaving the country in search of 'greener' pastures.

### **Recommendations**

- 1) Achievements in poverty reduction remains fragile. There is need for careful reflection on appropriate safety nets
- 2) There is need to improve access and quality of health, electricity, education, and this should not be left to government only
- 3) The critical role that the agricultural sector continues to play in poverty reduction deserves agricultural policies with a focus on access to extension services, input availability and quality, and access to credit
- 4) Colleges should craft courses depending on how helpful they are to our youths after graduating. We need realistic labour market information system

**Keywords:** COTFONE, Development, Goals, Sustainable, Uganda

## **Dynamic Environmental Policy Instruments through Effective Decision-making to enable National Park Biodiversity Conservation**

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### **Abstract**

Environmental Policy Instrument is a tool for decision-making on conservation issues which include loss of biodiversity, climate change and decrease ecosystem services. The problem of biodiversity loss has been raised as a dominant global issue for several years due to the lack of dynamic conservation policy and application of technology, institutional supports, stakeholders' engagement, and administrative decisions. So, this study aims to assess the environmental policy instruments including legal, *in-situ* and informational instruments for conserving biodiversity systems through primary and secondary data analysis focusing on Lawachara National Park (LNP) at Kamalganj in Moulvibazar district of Bangladesh (BD). The study showed that biodiversity conservation related legislations produced highest for the period of 2010 to 2018 with policy weight scoring 96% of LNP, where the growth of National Parks maximized in BD within the same period. These results reflect the importance of biodiversity conservation and the ecosystem services that the State provides. Almost 64% of the respondents agreed on the development of Biodiversity Clearing House Mechanism for digital conservation services. The study boosts the essential information needed for comprehensive data exchange, geo-data indexing, annotation, reporting and web-publications for effective decision-making with the connections of Digital Bangladesh for Vision-2021: a positive sign for BD towards achieving Aichi Biodiversity Targets 2020 through connecting with national parks in the world database on protected area networks. The research also found that LNP is in good conditions on the basis of co-management grant financing compared to other National Parks in Sylhet division. About 59% of the respondents agreed to continue afforestation and reforestation programmes at LNP according to national forest policy of Bangladesh to support policy and decision-makers in assessing options on climate change prone area priority to modify existing Biodiversity Law, and Wildlife Conservation and Security Act. Knowledge of environmental policy instruments is essential for biodiversity management but such knowledge is poorly documented. Most (65%) of respondents supported decisions on augmenting environmental conservation programmes, like systematic environmental education policy, scientific action-oriented projects and enthusiastic to digital conservation activities among visitors and communities surrounding the national park area. The results enhance the effective policy-making decisions on sustainable biodiversity protection at protected areas in Bangladesh incorporating a dynamic and adaptable framework which includes social, environmental, economic, institutional and technological (SEEIT) domains in order to foster target oriented Sustainable Development Goals 2030. The study identifies the issues that influenced the main priorities for policy integration and proper applications of modern technology for the improvement of the current policy-mix in order to foster an enabling national park's environment to attain national vision and goals ensuring sustainability of biodiversity conservation.

**Keywords:** Biodiversity, Instruments, National Park, Policy

**Conjunctive use of surface and groundwater resources for sustainable water resources management in Sekhukhune District Municipality Limpopo Province South Africa**

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**Abstract**

Water is a fundamental natural resource for multiple uses and a critical part of the normal functioning of any human settlement. However, direct per capita availability of freshwater resources continues to reduce as demand for freshwater soars and quality worsens. The sustainability of the current water system Sekhukhune District Municipality (SDM) is under pressure from problems ranging from rapid population growth to climate change. While the emerging trends of challenges point to a worsening scenario of water scarcity, it has become increasingly clear that alternative technical solution is certainly required in the face of prolonged water scarcity. SDM is one of the semi-arid municipal districts of South Africa where there are serious problems in water supply and demands that include municipal, agricultural, and industrial users. The conventional water resources, largely surface water, in the country have been fully exploited with little opportunity for further expansion. On the other hand, groundwater has become over-extracted where it is the main source leading to a series of groundwater problems. Conjunctive use of surface and groundwater resources is considered an important tool for alleviating the strain of water scarcity. SDM has not taken full advantage of the conjunctive use. The knowledge gap is hampering its mainstream uptake. Among others, the paper reviews conjunctive use and the benefits gained from other areas. The need for adoption in an effort to optimise the water demand and supply balance, thus alleviating the risk of water scarcity in SDM, is theorised.

**Keywords:** Conjunctive use, groundwater, Limpopo, rural water supply, surface water

**Language and Creativity for Sustainable Development and Social Empowerment:  
A Syntactic Study of Joseph Edoki's *The African Dream***

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**Abstract**

Many African countries are bedeviled with bad leadership and corruption which have slowed down sustainable development and social empowerment of the people of the countries. Thus, Joseph Edoki in *The African Dream*, presents a scenario where a good leadership style by Fernando, the protagonist as a model of imitation for other political leaders in the continent. This paper focuses on the syntactic study of Joseph Edoki's *The African Dream*, a post-colonial creative writing in metaphorical Savannah setting. Analysis of the text reveals that, not only will poor leadership result in misery, poverty and hardship of the citizenry, but also that, good leadership is required to change the narratives of an impoverished and corruption ridden society. The concern in this paper is on the structural aspect of *syntax*, where various sentence types: simple sentences, compound sentences, complex sentences and compound complex types are considered. From the analysis we discovered that simple sentences in declarative form and interrogative mood are mostly in use by politicians to present their political ambition, while compound sentences are employed to balance their ideologies; complex sentences are highly used to regain political power. The compound complex sentences are utilized to balance ideas for attacks and counter attacks. The theoretical framework for this study is the Halliday's Neo-Firthian Systemic Functional Approach which sees language as a system; and considers it as a social semiotic system, that is, as a resource for meaning across the many changing human interactions. The findings reveal how the sustained effective use of the various structural devices and the implementation of promises made by the protagonist were fulfilled. The import of this is that, genuine and committed leaders should convey their promises and manifestoes in measurable and meaningful, convincing and verifiable structural patterns. The recommendation here is that, leaders should emulate the ideals of the protagonist, Fernando, especially in well thought out developmental needs for the people which are succinctly expressed in structural patterns of language. Therefore, clear sentence patterns which are measured and verifiable will consciously commit leaders to promises made. It is also recommended that people should be weary of perceived leaders who cloak their deceitful ideas in flattery, ambiguous, and political jargons in unmeasurable language.

**Keywords:** Corruption; development; Fernando; leadership and president.

## **A Gendered Development: Intersections of Family and Society in Educating a Girl Child in India**

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### **Abstract**

In a society that persists on maintaining unequal notions of gender, a woman's education is deeply interwoven with social institutions of family and state. Her educational tangent is dependent on the will and inclinations of her family. Jumping to a pan-Indian declaration; a woman's education shapes her whole future and in a diverse and heterogenous society such as ours, we have a uniting factor which places utmost importance on maintaining the hierarchies of a patriarchal family.

Socio-cultural reasons such as dowry (monetary benefits provided to the groom's family), the notions of a man being carrying the legacy of a family and so on have resulted in Haryana, a state in India having one of the lowest sex ratios (Bakshi, n.d.) in the entire country. A woman's education is considered a waste as it thought not to provide any benefits to her maternal family. Furthermore, as demands for a literate bride have grown, a few "soft" disciplines (such a streams within Humanities) are considered the optimum choice. Education reinforces traditional roles is seen as appropriate and dissenting or largely masculine areas are avoided as that might make her undesirable in the matrimonial market.

However, various schemes by the government right from primary to higher education have been formulated to incentivise families to educate their girl child. Ladli Scheme - which provides monetary help to the family for having a girl child enrolled in a school, schemes such as providing cost of transportation to the family for educating their girl child, various scholarships to foot the cost of educating a girl child, pan-Indian schemes like Beti Bachao, Beti Padhoa (Save Girl Child, Educate Girl Child) – which aims to tackle the problem of declining child sex ratio and raise awareness on benefits of education for a girl are some of the efforts on a state level to put the girl in school. However, their efficacy remains to be seen.

Women's education only gained momentum in late 19<sup>th</sup> and 20<sup>th</sup> century. An educated woman was seen as an integral part of maintaining the heteronormative and patriarchal idea of a family - "the pressure to get women educated is part of the process of securing good husbands for them" Srinivas (quoted in Chanana, 1994). The institutions of marriage and family have had a strong influence on the historical trajectory for educating a woman.

This paper is an attempt to trace the influence of social institutions on a woman's education in an androcentric society with a touch of historical picture that has contributed in shaping how we view education in a gendered context.

**Keywords:** Gendered Education, Higher Education, Public Policies, Women's Education, Feminist pedagogy

## **The Role of Political Parties in Attaining Democracy in Nigeria**

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### **Abstract**

Nigeria gained her independence in 1960 from the colonial rule of the British colonial government. Ever since then, Nigeria has undergone various systems of government from military rule to civilian rule all in the sake of attaining good governance and political stability. Nigeria's 1999 transition to civilian government cumulated a long, turbulent period of military rule and failed democratic experiments. This paper examines the growth of democracy in Nigeria, focusing on the role of the political parties in attaining democracy. Looking down at the history of Nigeria, it can be pointed out that a substantial democracy cannot be achieved except there is a reform of the electoral system of Nigeria. This is so because in any democratic nation, the electoral body is the only means to seek legal power to influence the machinery of policies of the government. This is done through the vehicle of political parties. The study is based on the case study of People's Democratic Party in Nigeria. The function of the political parties in a democratic state is also analyzed looking at the activities of People's Democratic Party in Nigeria and how their activity has brought about development. Data were obtained from secondary sources such as relevant books, journals magazines and newspaper articles, encyclopedia and the internet. The study proposed some recommendations such as, the party must develop leadership. Leadership of the party must be involved in policy articulation, policy making and implementation and suggestion of the adoption of a two party system

**Keywords:** Democracy, Electoral system, Political party, Political stability, Policy making and implementation.

**Substance use/abuse among undergraduates of Federal University of Lafia, Nasarawa State, Nigeria**

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**Abstract**

Substance use/abuse is a contemporary global phenomenon that has eaten deep into the moral fabric of the society. The situation is worsened by the fact that youth and students who are supposed to be the leaders of tomorrow are more engrossed in substance use/abuse than any other category of persons in society.. This paper sought to empirically explore the role of substance use/abuse on school attendance among undergraduates; specifically, the study identified the reasons why students use substances, examined the source of substances that students use and abused and ascertain the effect of substance use on students' school attendance. The study employed survey research design and used Taro Yamane to determine the sample size of 195 from a population of 4162. Simple random sampling techniques were used to select the respondent while questionnaires and key informant's interview were used to collect data. Data analysis involved the use of percentages and transcription of the responses. Results indicated that students used all kinds of substances including Alcohol, Tobacco, Indian hemp, Petrol, Glue, Tramadol, Diazepam, Codeine, Snuff, Rohynol, Shisha, Septic tank, Nail polish removal, Azzakami, Dried excretal, Lizard excreta, Pawpaw leaf, Solution and Cocaine. It was established that students used these substances to enhance performance, satisfy their curiosity, escape worry and anxiety. The research also discovered that male used substances more than their female counterparts. It was further found that substance abusers take these substances three to four times a day, mostly in the morning and evening and these substances are locally sourced from campus outlet, mobile vendors, patent medicine shops and hideouts within Mararaba and Akunza areas. It was recommended that campus securities should mount surveillance in alliance with NDLEA and local vigilante to adequately fight the scourge. Counselling, harsh penalty, sophisticated technology and provision of funds were among the recommendations to help contained the problem.

**Keywords:** Substance use/abuse, undergraduates, University, Nigeria.

## **Intractable Insecurity: Nigeria's Corporate Existence and Sustainable Development in the Balance**

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### **Abstract**

June 2019 marks ten years of the beginning of the Boko Haram insurgency in Nigeria. Since then, insecurity in Nigeria has continued to deepen and spread in a manner that threatens the very existence of the country. Boko Haram activities has been localized in the North East region of the country except the few flash attacks in Abuja, the nation's capital between 2013 and 2014. The insurgency which set in on the heels of the Niger Delta Conflict differs remarkably from the Niger Conflict which was an environmental and resource control conflict in the Niger Delta region of Nigeria. Boko Haram insurgency is a religious insurgency and has continued to advance in complexity and modus operandi. In the past ten years, insecurity has gradually spread to most parts of Nigeria. The Fulani Herders-Farmers conflict in the North Central region and some states in the South East escalated in the past two years. These conflicts have resulted in massive displacement of local populations, especially native farmers who are sacked by the arm-wielding Fulani herders. There is growing fear of large scale food shortages hitting the country next year. Killings and kidnapping for ransom by bandits surfaced in the Northern states of Sokoto, Katsina, Kaduna, Taraba, Zangaria and Adamawa, and has taken an alarming dimension. The most recent spread of kidnapping for ransom and killings by suspected Fulani herders to the South West region of the country has, more than any former experience, unsettled whatever quiet that may had left in the Country. The recent killing of the daughter of a leader of the pan Yoruba organization in the South West Nigeria did not only receive condemnation from the Yoruba but also calls resistance, revenge, separation, and for all Fulani herders to withdraw for the region. Many other things followed. The Northern Elders Forum called on all Fulani resident in other parts of the country to return to the North. Former President Obasanjo wrote an open letter to the President warning of an impending genocide of the Rwandan magnitude. A Coalition of Northern Groups calling for the former President's arrest within twenty-four hours. This was followed by a counter response from his region and condemnation from other ethnic nationalities. The tension is palpable and situation unpredictable. This paper examines the implications of sustained state of insecurity for national development and the corporate existence and survival for a multi-ethnic and multi-religious societies such as Nigeria. It reviews the utterances and actions of the some leaders from the various regions and religious divides in Nigeria which tend to inflame the fear of possible disintegration of the country. The paper also argues that in this kind of state, sustainable development becomes a casualty. It finally makes some suggestions on the reduction of the current tension. It also recommends possible lasting solutions to the intractable insecurity.

**Keywords:** conflict, corporate existence, disintegration, insecurity, sustainable development



**The Curious Case of Environmental Refugees: Environmental Refugees may be better protected without being declared as “refugees”**

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**Abstract**

The concerns of the authors with respect to Environmental “refugees” arise from the available data that estimates the number of people who are being affected by Climate Change and associated events. As per the environmental migration expert Norman Myers, when global warming takes hold, as many as 200 million could be affected. The data is alarming and predicts the doom of most of the island countries and coastal regions. Even with the availability of this data and the severity of the problem, the issue is far from being addressed and there is an intellectual gulf among international community on how the affected people should be designated and protected.

The scale of impact is unimaginable as there are some gradual and some immediate effects of Climate Change. It manifests as floods, cyclones, droughts, famines, epidemics and so on. If we look at the Special Report of the Inter-governmental Panel on Climate Change, this number is only going to increase with the rise in temperature (compared to the pre-industrial levels) which has already crossed the one-degree mark. A direct corollary to this is the rise in displacement of people, especially climate induced cross-border movement. Such displaced persons are referred to by different nomenclatures such as Environmental Refugees (a term coined by Essam El Hinnawi in 1985), Climate Refugees, Environmental Migrants, Displaced persons, Humanitarian Refugees, etc. The internally displaced persons are protected by the individual states however, cross-border migrants require protection under the International Law. For the purpose of this paper, we will refer to cross-border migrants as Environmental Refugees.

Today, there is a gaping hole in the International Law regime as to the protection of these people. This chasm is evident from several decided cases of municipal courts where people belonging to small island nations have been refused protection under the United Nations Refugee Convention’s narrow definition of refugees. However, as argued by JA McGregor, even an amendment of the Convention to create a new category of refugees may not be the panacea. United Nations High Commissioner for Refugees also does not support expansion of the definition of refugees. This is partly because the reasons for migration, in most cases, are a mix of social, economic, political and environmental factors as argued by McGregor and A Suhrke. Moreover, many of the displaced persons do not wish to be designated as refugees. Instead, they demand that climate resilience be strengthened so that they are not forced to leave their homes and otherwise, proper channels of migration to be established for them to move with dignity. Although programs run by international organizations such as United Nations Environment Programme, United Nations High Commissioner for Refugees and United Nations Migration Agency are active in tackling the issue of environmental refugees, but the need of the hour is a collective international effort.

To understand the magnitude of the problem, this paper will study the possibility of an agreeable definition of Environmental Refugees as per Richard Black a faulty definition tends to exaggerate the situation. The paper will also delve into the debate surrounding their inclusion under the Refugee or Environmental Laws. It will try to understand why political action has been lacking in the legal identification of these people so far by relying on the work of Karen Elizabeth McNamara and Gaim Kibreab. It would provide arguments as to why the treatment of Environmental Refugees as refugees under United Nations Refugee Convention, 1951 may not be the best approach to deal with this predicament. It will examine Kibreab’s argument that it might lead to withdrawal of asylum benefits from those who receive it at present. In the end, basis the analysis presented in the paper, it will attempt to determine and propose the best model of protection.

The analysis, arguments and conclusions presented in the Paper shall be based on detailed exploration of literature available on the effects of Climate Change and potent threat it poses. The paper will be based on available data from international organizations that demonstrates the effects of rising temperature and will also rely on proven cases of displacement of people as a result of Climate Change. The Paper will also consider the arguments and theories proposed by various scholars to arrive at the most appropriate model of protection of Environmental Refugees outside the Refugee law. Climate change is an omnipresent threat and no country can escape its adverse effects. Sooner or later, people from almost all countries would be vulnerable to its effects. Therefore, it would be prudent to institutionalize protection to Environmental Refugees through consensus.

**Keywords:** Climate Change, Environmental Refugees, International Law, Migration, Protection

**Leadership and Accountability: Tools for Achieving Community Development in Navy Community Area in Offa Local Government Area of Kwara State, Nigeria**

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**Abstract**

This study examined leadership and accountability as tools for achieving community development in Navy Community Area in Offa Local Government Area of Kwara State. The style and characteristics of a leader determines to a large extent the successful achievement of goals of any organization or community. The researchers adopted a descriptive survey design using a sample of 100 respondents who were landlords and were purposively selected through simple random sampling techniques. This technique was used because of the availability of sampling frame. The landlords selected were those that have lived in the community for 10 years and above. Twenty respondents were chosen from the five communities that made up Navy Community Area in Offa Local Government Area of Kwara State. A researchers' design questionnaire titled 'Leadership and Accountability in Community Development Questionnaire' (LACDQ) was used to collect data. On data analysis, frequency and percentage were used to perform descriptive analysis while Pearson Product Moment Correlation (PPCM) was used to test the research hypotheses at 0.05 level of significance. Four research hypotheses were raised while the study revealed positive relationship between accountable leader and community development; leadership accountability and members' participation in community development; accountable leader, members' initiative and community development and accountable leader, self – help and community development. Based on the findings of the study, it was recommended among others that government and communities should appoint monitoring group whose membership should be people of proven integrity to check activities of community leaders to make sure they follow due – process in their conduct, spending and execution of community projects in order to enhance leadership and accountability in the process of community development

**Keywords:** Accountability, Community development, government, goals and Leadership.

## **Creating a Business Model that Bridges the Gap between Human Rights and the Market in Development Projects: A look at the Philippines**

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### **Abstract**

The regimes of international investment law and international human rights law have rarely converged due in large part to the exclusion of human rights provisions, both in the substantive aspect of investment treaties, as well as the procedural aspect that deals with investment arbitration. An evolving perspective on development, that takes into primary account the accountabilities embedded in international human rights conventions, presents a first step in bridging this human rights-market gap. This is especially significant when recognizing that the shift in global agenda on development from the United Nations' Millennium Development Goals to the Sustainable Development Goals aims to address issues of economic and social inequality by putting human rights at the heart of development.

The landmark decision made in *Urbaseer S.A. v. Argentina* also sets a precedent that may be used to promote human rights in instances of unsustainable investments. There are two main reasons for this: 1) this is the first time an actual investment arbitral tribunal accepted jurisdiction over a human rights counterclaim; and 2) this is also the first time where a private investor was determined to be accountable for human rights violations arising from inadequate and unsustainable investments. This award paves the way for the creation of a more dynamic business model that does not just incorporate human rights provisions in an investment or financing contract, but also makes it an integral part of the parties' contractual rights and obligations.

This rights-based business model is a viable innovation in the rapidly expanding USD228 Billion social impact investing market. Such a business model, more than a human rights accountability scheme for the private sector, may also have the potential to add clarity to the way social impacts are being measured today. In this regard the measurement of social impacts is essential primarily because return of investments is determined through the generation of measurable social and development impacts in the world.

Using the Philippines as the primary point of analysis, the financing agreements of transit-related development projects are scrutinized in order to show how a rights-based business model of social impact investing may be used as a viable public-private partnership scheme for funding such projects, as well as a more sustainable alternative to Official Development Assistance. Considering that the heart of discourse on these development projects remains rooted in land, and because of the nature of land in the Philippines as *jura regalia*, and the origin of its value, a rights-based business model must necessarily take into account land value, with a consideration of, among others, the type of project involved, the extent of capture (full or cost recovery) and the originator (whether private, solicited or a government-initiated project) in order to determine the proper instruments that will best capture it. Furthermore, this business model not just directly ensures the protection of human rights in the evaluation, approval and implementation of development projects, but also corollarily ensures compliance with the sustainable development goals.

**Keywords:** human rights, impact investing, international investment law, Philippine infrastructure, sustainable development

**Spatial Study of the Awareness and Altitude of higher institution Students towards Environmental Problems and Management in Owerri Nigeria.**

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**Abstract**

Environmental problems in recent time has become of great concern to man. The impact is felt more in developing countries where urbanization and development has continued to thrive with less attention to the environmental consequences. Government, stakeholders and Non-governmental organizations has been drawing attention to environmental issues with developing nations still dragging their foot on curbing the fast approaching menace. Adequately, students who are potential leaders ought to be abreast with environmental management skill and knowledge. A lot of scholarly work in various literatures has it that the continue global warming, climate change and other environmental issues have been receiving low awareness and mitigation process especially from developing countries. This paper examines the awareness level and altitudes of students of high institution have towards Environmental problems and management in Owerri, Nigeria. The four institutions of higher learning in the study area namely Imo state University, Federal University of Technology, Alvan Ikoku Federal College of Education Owerri and Imo State Polytechnic Umuagwo-Ohaji near Owerri were used for the study. Focus group discussion and total of 360 designed questionnaires that was systematically sampled and retrieved from the field were used to elucidate information from the students in the study area. Both parametric and non-parametric statistical tool of analysis were employed in the study. Graphs, tables and chats were also employed to express the research outcome. Our finding shows that students of higher institutions in Owerri have unsatisfactory level of awareness on Environmental problems and management. The finding also reveals that student's awareness level is significantly related to their altitude. The paper argues that the youthful group of the society is the bedrock of the future and so not been properly informed of the environmental issues in their domain is a setback for the society. Accordingly, that students of higher institutions are not been armed with the adequate environmental management skills especially with the rising global environmental threats means doom for the only one environment. There should be an Infusion of environmental issues in the curriculum of the general programme of higher institutions in the study area. Environmental awareness centers should be set up in the study area which will in collaboration with the management of higher institutions keep the students abreast of happenings in the environment world.

**Keywords:** Altitudes, Environmental Management, Environmental Problems, Owerri, Students.

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**The Significance of Salinity Level on Seed Germination and Seedling Growth of Selected *Commiphora* Species in Yabello district, Southern Ethiopia**

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**Abstract**

The experiment was carried out in Wanja Public Nursery sites in Gera, Southwest Ethiopia; in transparent plastic greenhouses on pots and laboratory in the 2018 season for *Commiphora boranensis*, *Commiphora habessinica* and *Commiphora corrugate* species by using complete random block design with four treatments and five replications. All salinity levels (0.49dS/m or control, 8, 16 and 24dS/m) were then applied to each species with 5 replications making 20 treatments among the total of 60 pots. Data was collected on root and shoot length, root length density, root and shoot biomass by destructive methods. Germination percentage was recorded on completion of germination in lab. All data were tested at  $P < 0.05$  for significant differences. *C. corrugate* and *C. boranensis* recorded only 0 and 40% seed germination, respectively at 24dS/m salinity level, and *C. habessinica* was more tolerant to salinity with 51.3% germination at 24dS/m. As salinity increased to 24dS/m ECe, the shoot length of *C. corrugate* was null. The result of *C. habessinica* recorded the highest shoot dry matter at control level and was radically declined to 2.05g and 1.43g at 16ds/m and 24ds/m levels respectively, while shoot dry matter of *C. corrugate* and *C. habessinica* at 24ds/m showed no statistical differences. No statistical differences were observed between *C. boranensis* and *C. corrugate* at 8ds/m for root length and density. As salinity increased to 24dS/m, the root dry matter decreased for all species. Generally, *C. habessinica* showed best tolerance in salinity increment followed by *C. boranensis* and *C. corrugate* respectively. So, we can conclude that *C. habessinica* better fit to restore dryland ecosystem with salt affected soils at least with less or equal to the current level of salinity used in the experiment.

**Keywords:** *Commiphora*; root length density; root dry matter; significance of salinity level; shoot length.

**Assessment and development of forage biomass estimation system using satellite image: Case of Harshin district, Eastern Ethiopia**

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**Abstract**

The study was conducted in arid and semi-arid part of Ethiopian Somali region (in the Harshin district), which is known for recurrent drought episodes and the dominant livelihood is pastoralism. The aim of this research was to develop forage biomass estimation models by using remote sensing techniques, and to assess the current production (biomass) and carrying capacity of rangelands in Harshin district. Two sites were specifically selected to conduct the measurement using quadrat method. Sentinel-2 images were also processed to identify available land use and cover, and quantify proportional coverage of grazing lands. The dominant Land Use and Land Cover (LULC) that we identified in the study area includes, woodland (35.5%), shrubs (28.3%), grass lands (10.6%) and bare land (25.5%). The region has browse-rich shrub lands that are edible to dromedary and goats, as well as, massive grassland plains to graze for sheep and cattle. The range of forage production is between 105 and 2310 kg/ha, whereas the average productivity of the district is 742.6 kg ha<sup>-1</sup>. The result indicates that the average carrying capacity (CC) of the district is 0.3 TLU ha<sup>-1</sup> yr<sup>-1</sup> (4.9 ha TLU<sup>-1</sup> yr<sup>-1</sup>) while the existing stocking rate is 5.4 TLU ha<sup>-1</sup> yr<sup>-1</sup> (0.18 ha TLU<sup>-1</sup> yr<sup>-1</sup>). We used results of 28 observed plots for model calibration and 27 plots for validation. Thus, our result shows that EVI has better fitness and correlation with forage biomass compared to NDVI. Polynomial function provides better results in both indexes than any other functions. Statistical analysis of the validation results revealed that the EVI index model explained about 92 % of the forage biomass variability in the district, while the NDVI based model explained about 87%. Thus, the results from both models are acceptable to be widely implemented for biomass prediction in the district. After calibration and validation, both models were applied to predict forage biomass of Harshin district. Thus, the NDVI based model estimated the average biomass value of the area to be 0.76 ton/ha and the total 38, 772.2 ton, while EVI based model estimated the average forage biomass 0.78ton/ha and the total 39,792.3 tons.

**Keywords:** calibration and validation; carrying capacity; estimation models; forage biomass; forage production

**An assessment of food safety practices in the bread supply chain in Nigeria**

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**Abstract**

The current study examined food safety practices in the bread supply chain in Nigeria; using Ekiti State as a case study. Specifically the study examined the bread supply chain, potential bread supply chain quality deterrents, food safety arrangements in the bread supply chain and the level of compliance to food safety regulations. A descriptive cross-sectional survey was used to select thirty-two (32) bakers and ninety six (96) bread sellers. Though most of the respondents were found to have had basic primary school education, their food hygiene and sanitation knowledge was poor while standard food safety regulations were poorly adhered to. Bread sellers' retailing apparatus and environment were not ideal for safe handling of bread to the final consumers. The various agencies charged with food safety mandates were also found to be passive in their responsibility to educate and enforce food safety laws. The study recommends prompt and adequate enlightenment of bread bakers and retailers on the ills of unsafe bread by, agencies mandated to cover food health matters, favourable government policies, provision of soft loans for equipments, food hygiene and environment and the orientation of the citizenry on safe food to influence healthy practices by the handlers of bread.

**Keywords:** bakeries; bread supply chain: deterrents: food safety: hygiene

## U.S. Climate Change Law and Foreign Policy in the Time of Trump and Beyond

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### Abstract

As the world's second most profligate greenhouse gas ("GHG") emitter, the United States is one of the two keys to any successful global effort to limit global climate change to sub-catastrophic levels, which in turn is a prerequisite for efforts to achieve sustainable development worldwide. The world's most profligate GHG emitter -- China -- is the other. Yet meaningful, sustained progress toward limiting U.S. GHG emissions remains an elusive goal. Domestically, the Obama Administration's Clean Power Plan regulations and new Corporate Average Fuel Economy ("CAFE") standards for passenger cars and light trucks were a step in the right direction. They also paved the way for the executive agreement on limiting GHG emissions signed by U.S. President Barack Obama and Chinese President Xi Jinping in 2015, and for their joint effort to bring the Paris Agreement into being the following year. Donald Trump's surprise election as U.S. President in 2016 has undermined the promise of even these modest steps, however. It has done so by empowering further an ideologically radical minority within the U.S. political system. These traditional conservatives are mostly white, Christian evangelicals who are concentrated in the States of the South, Midwest, and Intermountain West. They remain hostile to nearly all laws or policies that would limit U.S. GHG emissions or that would require the United States to provide financial or technical assistance or to make other concessions to less developed countries -- especially China -- to help them to limit their own emissions. Although Donald Trump himself does not seem to profess any coherent political ideology, he has managed to assemble the most traditionally conservative administration in memory. He also has managed to empower further the traditional conservatives who dominate the Republican Party in the U.S. Congress. These developments have had predictable effects on U.S. climate change and related policies both domestically and internationally. The predictability of these effects flows from the Calvinist moral content of American traditional conservatism, which entails certain beliefs about wealth, science, and environmental exploitation. This moral content leads American traditional conservatives to oppose in the strongest terms nearly all domestic laws and policies that would limit U.S. GHG emissions. It also leads them to believe that the proper role of the U.S. Government internationally is to propagate Calvinist moral teachings worldwide, which has profound implications for U.S. foreign policy in the climate change context, especially with respect to less developed countries. It also has important implications for traditional conservatives' view of the validity of international law. Although simmering tensions within the Republican Party inject some uncertainty into the task of making long term predictions, certain structural and other features of the U.S. Government likely mean that even the election of a new President before 2024 will not eliminate these barriers to progress in limiting GHG emissions in the United States or anywhere else. Even so, other structural features suggest that traditional conservatives will have a hard time rolling back the existing U.S. GHG and related regulations that would provide an indispensable foundation for reviving progress over the long term. Still other structural features suggest that the most fruitful opportunities for progress over the short term will revolve less around the U.S. Federal Government than it will around the U.S. States.

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## **India's First Brownfield Airport- A Case of Delhi International Airport**

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### **Abstract**

The stupendous growth in the civil aviation sector has made it inevitable for India to develop state of the art airports. It has become the need of the hour to develop world class airports in shortest possible time and with the available resources. Public finances alone are insufficient to fund the infrastructure needed to support the tremendous growth in passenger and cargo movements across the nation. There is a need to adopt innovative ways and lure the private players to participate in the growth process through Public Private Partnership (PPP) model. Thus, this study is undertaken to understand the working of PPP model in the aviation sector through the experience of Delhi International Airport Limited (DIAL). DIAL is one among the first airports to be privatized under the Public Private Partnership (PPP) model in India. The current study uses descriptive case research method to analyze and highlight the journey of DIAL to be a world class airport catering close to 35% of the total passenger movements in India, and one among the top 30 busiest airport in the world. Further, it also discusses the key struggles of DIAL and also the lessons learnt from the DIAL experience.

**Keywords:** Airport, Aviation Sector, Brownfield Airport, DIAL, PPP

## **Linking Geriatric Empowerment to Sustainable Development**

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### **Abstract**

The Sustainable Development Goals (SDGs) were adopted by the UNO in 2015 as a universal call to –to end poverty, Protect Planet and to ensure all people enjoy peace and prosperity by 2030. The development policies must balance social, economic and environment sustainability. Sustainable development is also about meeting the needs of people in different communities, social cohesion, creating equal opportunities to ensure a healthy society. The rapid graying of population is a common problem world over. The magnitude of the problem differs from countries to countries. With urbanization and rising costs of living, the need for adequate old age support programmes arises. The paper finds that our old population needs to be taken care and needs to be empowered with rights to safeguard their vulnerability and also in terms of intergenerational equity. The SDGs goals call for partnership of government, private sector, the civil society and the citizens. The rise in longevity of life calls for more savings to look after the rising medical costs and also the cost of living. With the waning of joint family system in India , there is a great degree of insecurity for the ageing parents. Also, due to the absence of a social security system in India, the old population becomes more prone to sufferings .There is a great need to show them respect and dignity on humanitarian ground too. This paper wants to emphasize that preserving the dignity of the old population by ensuring the basic amenities of life as an essential step towards an inclusive environment and preventing poverty. The paper attempts to study and emphasise the need for more old centric programs in the interest of economy, equity and environment. Efforts towards healthier India by allowing the private sector to partner the government in provision of affordable and comprehensive health care are steps in the right direction. Also, efforts to control inflation and secure higher returns on old age savings should be a priority for achieving equity and sustainable development. There is a great need to design policies which make life more comfortable and worth living. Though in India, many recent efforts towards bettering the life of the old may have been taken, but much needs to be done. Our elders are our valuable assets and they should not be deprived of the basic right to live a respectful life.

**Keywords:** health care. Intergenerational equity, poverty, social inclusion, sustainable development

## Environmental Quality and Health Effects in Nigeria: Implications for Sustainable Economic Development

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### Abstract

This study examined the relationship between environmental quality and health effects in Nigeria and its implication for achieving sustainable economic development. Various pre-estimation tests were carried out with the aid of the standard ADF, PP tests and Johansen Co-integration test. All the variables of interest are stationary after first differencing and possessed a long run relationship. Consequently, Dynamic Ordinary Least Square and Granger causality techniques were employed to address the objective of the study. The major findings in this study are summarized as follow. CO<sub>2</sub> emission (adopted measure for environmental quality) and mortality rate have a negative but insignificant relationship in Nigeria. Similarly, total electric power consumption and mortality rate have positive relationship which is significant at 5% level. Life expectancy and mortality rate have a significant negative relationship with each other in Nigeria. Fossil fuel consumption and mortality rate have a significant positive relationship. This implies that the combustion of fossil fuel is hazardous to human welfare in the country. Finally, government expenditure on health and mortality rate have a significant positive relationship. Also, there is an existence of a unidirectional causality which runs from CO<sub>2</sub> emission to electric power consumption in Nigeria. CO<sub>2</sub> emission granger causes government health expenditure. There is a bi-directional causal relationship between mortality rate and electric power consumption in the country. Life expectancy granger causes electric power consumption in the country. However, there, is a presence of unidirectional causality from life expectancy to mortality rate. Fossil fuel consumption granger causes mortality rate. There is a unidirectional relationship flowing from life expectancy to government health expenditure. Mortality rate granger causes government health expenditure and life expectancy granger causes mortality rate. Due to the crucial findings that originated from this study, it could be recommended that the policy makers in Nigeria should embark on appropriate policy measures that will reduce mortality rate through a reduction in combustion of fossil fuel and an increase in government expenditure on health and electric power consumption in the country. Also, the policies and programs that will guarantee an increase in life expectancy on a sustainable basis should not be undermined by the policymakers in Nigeria.

**Keywords:** Economic Development; Environmental Quality; Health Effects; Nigeria; Sustainable,

**Bioremediation Of Heavy Metals In Cement-Contaminated Soil Using White Rot Fungus  
(*pleurotus sajor – caju*)**

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**Abstract**

Environmental pollution by toxic metals has increased steadily owing to industrial revolution, thereby causing serious ecological problems. The cement industry is one of the polluting industries (listed by the Central Pollution Board) releasing heavy metals into the environment. Also the production of cement produces vast amount of carbon-monoxide (CO) which seriously damaged our climate.

The ability of the white-rot fungus (*Pleurotus sajor-caju*) to mineralize heavy metals in cement contaminated soil was therefore investigated. In this work, 15 soil samples were used, and five kilograms of soil were collected for each sample. The soil were collected from the vicinity of Ewekoro cement factory in Ogun State, Nigeria.

The soils were analysed for Ni, Cr, Pb and Zn using Atomic Absorption Spectrophotometer (AASP) results of the metal analysis indicated that some metals were in excess of natural background and critical limits for the soil.

The cement – contaminated soils were then thoroughly mixed with clean soil to give 0.1%, 0.2%, 0.3% and 0.4% contamination levels. A set of control (0%) was also weighed. The ability of the fungus to mineralize the contaminated soil was investigated by adding the fungus to the soil samples using a rice-straw as substrate. The samples were then kept under incubation for one month.

There was a significant decrease in the heavy metal content of the soil after one month of incubation with the fungus. (*P. sajor-caju*) being able to mineralize the heavy metals and enhance the soil nutrients after one month. Thus, *P. sajor-caju* can be employed as a bio-remediation agent for cement-contaminated soil to kick-start the ecological restoration process.

**Keywords:** Cement contamination, Ewekoro Cement Factory, Heavy Metals, Mineralise, *Pleurotus sajor-caju*.

## **Nutritional, phytochemical and economic potential of marama bean: The ‘green gold’ of southern Africa**

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### **Abstract**

Developing countries need to adopt food systems with an inward-approach by exploring their undervalued indigenous plants in order to fully enhance their food-nutrition security, health and economic potential. The current review explored the nutritional, phytochemical and economic potentials of the marama bean (*Tylosemaesculentum*, family: Fabaceae), an indigenous legume that can be cultivated and well-adapted to the dry or low moisture conditions. It is predominant in the southern African countries, such as South Africa, Namibia and Botswana. Marama bean is popularly referred to as the ‘green gold’ due to the considerable value derived from its above and underground organs. The seeds have a higher nutritional value than exotic legumes, such as peanut and soybean, and it is a good source of fatty acids, amino acids, ash, dry matter, protein, non-structured carbohydrates, vitamins, zinc, iodine, iron and calcium. In addition, marama beans are good sources of phytochemicals such as phenolic, phytosterols and flavonoids while the tuber is rich in behenic acid and griffonilide. Currently, the potentials of the marama bean remains poorly explored, being mainly anecdotal, with limited scientific information available to support its uses and economic benefits. This has been ascribed to shortage of clear research goal(s) and or limited resources specifically directed at this underutilized indigenous leguminous species. To fully explore the nutritional, phytochemical and economic power of this plant, consumers need to know its detailed nutritional contributions, toward a realizable sustainable goals. We also reported the bioactivities and health benefits of marama bean, which shows that marama bean consumption can assist to inhibit bacterial, viral and fungal infections by enhancing immunity, wound healing, gut health, neuro protective, anti-adipogenic, cardio protective, anti-cancerious and anti-inflammatory. This work has re-affirmed the previous existing names and potentials of the marama bean such as (“magic bean”, “orphan legume”, “green gold”, “marginalized people’s meat”). Another principal message of this this review relates to the drought resistant nature as well as the ability to provide a dynamic and rich dietary diversity in poor rural communities as well as the urban settings. Marama bean’s adaptation to harsh agro-ecologies makes it suitable for incorporation into strategies aimed at food sufficiency. Governments and funding organization need to give the marama bean research a greater priority to explore genome editing, genotyping, marker-assisted selection, high-throughput phenotyping, genomic selection, galvanized de novo domestication to speed breeding to enable marama plant development, commercialization , economic opportunities hence, rural-urban food-nutrition sustainability in the developing nations of the world.

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**Keywords:** Fabaceae. Food policies. Genome. Next-generation crop. Nutrients. Phytochemicals.

## **Learning To Forget: A critical review on knowledge management and knowledge exchange initiatives in the Detective Service**

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### **Abstract**

The adoption of knowledge management (KM) and knowledge exchange (KE) have recently become commonly used terms within the law enforcement agencies. These concepts imply a number of different relationships between researchers and practitioners, and between research and practice, although these have often remained implicit or underdeveloped. This paper, reviews factors that influence the success or failure of KM and KE initiatives as manifested in the South African Police Service (SAPS), with an emphasis on the Detective Service. Both KM and KE initiatives are of critical importance to solve criminal cases. Results from the consulted literature review; highlighted five main dimensions, which are critically influential in the implementation of KM and KE within the Detective Service. These are namely; the negligence of the foundation phase, during which the building blocks for a successful schooling career are laid; once recruited – a lack of mentorship programme, and training curriculum, that lacks coherence, connection, as well as depth of understanding that accompanies systematic critical thinking.

The findings further highlighted that the movement of knowledge across individual and organisational boundaries is dependent on knowledge-sharing behaviours of employees. The current practices within the Detective Service frustrate these initiatives. The fifth dimension a lack of organisational intelligence. Organisational intelligence is the ability of an organisation to perceive, interpret and respond to its environment in a manner that meets its goals while satisfying multiple stakeholders. Against this background, the Detective Service is unable to respond adequately, to an environment of rapid change, increasing complexity and great uncertainty. The Detective Service is a principal role player within the criminal justice system (CJS) cluster, with a specific function and mandate to investigate crime.

To combat crime effectively together with the collective intelligence community, comprising of the Division: Crime Intelligence; the Detective Service should be able to leverage, a qualitative expertise, knowledge and gathering capability to deliver effective crime detection. This should be executed within a complex adaptive system in order to form a symbiotic relationship with its cooperative enterprise, virtual alliances and external environment, while simultaneously retaining unity of purpose and effective identification and selection of incoming threats and opportunities. This paper therefore, contributes to a body of knowledge, reflecting on a paucity of critical thinkers within the Detective Service, due to but not limited to the above factors. These factors, either directly or indirectly, frustrate KM and KE initiatives towards the improvement of service delivery. It also proposes some recommendations regarding critical success factors for KM and KE initiatives within the Detective Service.

**Keywords:** Curriculum, detective, knowledge exchange, knowledge management, mentorship

### **Impact of Microbial Degradation on Polychlorinated Biphenyls (PCBs)**

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#### **Abstract**

Polychlorinated Biphenyls congener (PCBs) is the most ubiquitous and xenobiotic contaminant, which pose an ultimate threat to human health and environment. In this study, the microbial degradation of PCB congeners was assessed with indigenous *Alcaligenes* sp. bacteria strains isolated from PCB contaminated sites. Our data showed that *Alcaligenes* sp. was able to dechlorinated the PCB congeners 18% di-, 12% tri- & 8% tetra-chlorinated PCB congener over period of 90 days. The finding suggested that the microbial dichlorination of PCB could represents one of the viable options towards bioremediation in sustainable environment.

**Keywords:** Aerobic oxidative, *Alcaligenes* sp, Microbial Degradation, Polychlorinated Biphenyls.

## **Nigeria's Quest for Sustainable Socio- Economic and Political Development and the Dilemma of Western Models**

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### **Abstract**

This paper examines post-colonial Nigeria and her desire for sustainable social, economic and political development using documentary analysis. Its scope begins from 1945 when the Second World War ended and radical nationalism began with the desire for development. The period which was prior to independence witnessed division among Nigerian nationalists especially in the area of foreign investment and development which stemmed decision on development plan.

After independence, there was the dilemma of whether to continue with European models of development plan. When decision was taken, it adopted the Neo-classical Keynesian model without understanding European intent with development plans. This ushered in development plans which was embraced by the military after takeover of government. The irony was adopting western model without understanding the peculiarities of their environment, culture etc.

The scope terminates in 2009 when a new development plan vision 20:2020 came into being. This paper ask the question, should Nigeria have adopted the Neo-classical Keynesian model of planning and why has sustainable socio-political and economic development eluded Nigeria?

It examines the impact positive or negative, of the model and others, and highlight their effect of preventing the development of an indigenous model and why Nigeria is yet to experience sustainable development after an indigenous model was created.

In the political scene, the decision was to embrace the Westminster parliamentary system of government hook line and sinker, until 1966 when the military terminated it and introduced military rule. When in 1979 the military decided to hand over power to elected civilians, the American model, presidential system was adopted and operates till date. In addition, the process of constitution making which involves constitutional conferences, a model or legacy of colonialism, was adopted and has continued even with the existence of the legislature.

The problem that has emerged is the prevention of Nigeria from evolving its own indigenous political system and process of constitution making and failure to exploit adopted models to build its own political culture into a political system.

Some explanation for the above is lack of continuity, corruption, inadequate statistical data on all aspect of the economy, gross errors where they exist, problem of macro - economics, development plans are mostly and merely political documents of the ruling party and the military when in power, and intervention by the military who emerged as non-contenders of political offices yet dominated political power for decades.

The paper identify possible solutions to include continuity, discipline in planning and execution, efficient data collection, storage and usage, patriotism, proper financial management amongst others. It concludes in part that Nigeria, being an emergent nation was on the right path in adopting western models for a start and to ensure continuity at independence. But argue that the leaders and planners ought to have used them as spring boards to develop unique and indigenous models that would proffer solutions and ensure sustainable development. Also that sustainable social, political and economic development was hindered by military intervention and this gave indigenous political and economic culture little room to incubate.

**Keywords:** Development Plan, Military, Models, Neo- Classical, Parliamentary



## **The challenges of regulatory integration in renewable energy frameworks: A case study of the Brazilian regulatory framework**

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### **Abstract**

#### **Overview**

Over the last decades many efforts have been placed on climate change mitigation, including a profound transformation of the energy sector. Renewable energy is considered to have much to contribute in assisting to decarbonize the energy sector (OECD/IEA, 2015).

With major shifts occurring in the energy sector, growing attention has been placed on the spill-over effects of the increased production and use of renewables on related sectors, in particular, the water and food sectors.

While renewable energy can be a path to aid in the decarbonization of energy systems, an unregulated increase in their use can impact key sectors, such as water and food. The push to renewables and the interactions exposed by the Water-Energy-Food nexus (Hoff, 2011) reveals the importance of an integrated regulatory framework. The nexus introduced a major shift of perspective (Al-Saidi & Elagib, 2017), providing for visibility to interactions between key sectors and addressing the externalities that ties them together (Allouche, Middleton, & Gyawal, 2014). The nexus is embedded with complex governance challenges such as integrated governance and policy coherence, however, its literature in those aspects is either limited and lacking in legal analysis, creating gaps in processes where the nexus seeks to influence (Weitz, Strambo, Kemp-benedict, & Nilsson, 2017). Choosing the case study of Brazil, because of its long experience with renewable energy and strong reliance on hydropower, this paper analyses the Brazilian regulatory framework, focusing on hydro energy. In doing so it evaluates the level of coordination between food, energy and water legislation and its adequacy in avoiding further cross sector and environmental damage from energy output. Finally, the paper sheds light on whether and how it is possible to apply the WEF nexus concept to the development of more integrated regulation on renewable energy.

#### **Materials and Methods**

The research follows a documentary analysis on the matters of the WEF nexus approach while the evaluation of the regulatory framework follows a doctrinal approach.

Considering the specific aim set for the study, it evaluates a specific case in Brazil for its vast experience deploying renewable energy (Oliveira, 2018). Brazil was also chosen because it relies greatly on hydropower for electricity supply, and has a long history of legislative regulation of these developments (EPE, 2018). The study analysed the Santo Antonio hydropower, a controversial dam built in the heart of the Amazon.

#### **Results and Discussion**

The study showed that the regulatory framework in Brazil do possess some level of integration, however it is not sufficient to fully address the intricate interconnections posed by the nexus. A key sector, food, falls short on specific regulation to manage the spill over impacts caused by the increase in hydropower generation. The analysis of the Santo Antonio dam showed that several impacts of the nexus key sectors could have been better addressed if a more integrated regulatory framework was in place. Based on the case study, the paper suggests some steps for achieving policy integration as a means of closing nexus gaps and developing coherent regulatory frameworks. Finally, the study raises awareness to the results of the lack of integration between renewable energy regulations and the food sector, the impacts deriving from the implementation of the hydropower and the challenge of regulating to address this issue.

#### **Conclusion**

It is undisputed that any energy transformation is bound to cause some environmental alteration. Developing coherent and integrated regulation is of utmost importance so that spill over effects from renewable energy generation do not deepen the pressures on water and food – resources already under severe stress.

The nexus certainly is an advance in the integrative thinking, bringing more visibility to each sector while making it possible to address the externalities that ties them together. Nevertheless, gaps in the literature still hinder the development of nexus concepts. This study showed that the Brazilian regulatory framework for hydropower integrates water and energy but it fails to accounts for the food (agricultural) sector. This lack of integration led to several impacts to communities with the construction of the Santo Antonio dam.

**Keywords:** Integrated Management; Policy Coherence; Regulatory Framework; Renewable Energy; Water-Energy-Food nexus

## **Education as a pillar for sustainable development in Tanzania**

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### **Abstract**

Education is a pillar of development, if and only if, it addresses the challenges of the society. Several international forums and meetings have come up with the need for sustainable development strategies. But equally there seem little to be done to allow sustainability of education systems in particular for developing world such as Tanzania. Sustainable development education which means an education which will carry out the objectives of sustainable environment to allow employment both self and being employed. This paper addresses the challenges that education face in Tanzania, and a way forward towards sustaining it for development. It recalls on the several concepts of education and educators, and makes a sound way of providing education that is sustainable to the development of our countries, hence our continents. Sustainable development is crucial to human beings and the entire creatures of the world. Hence an implementation of strategies that would overlook the sustainability of it, is equally the zeros of that strategy.

It is from the stance of sustainable development that this paper has been immerged. This paper is a result of the research work which was carried in Tanzania in 2019 during the official meeting of the Local Government Administration of Tanzania (ALAT), which was held in Mwanza. The paper has assimilated the qualitative analysis study. And it reveals both the challenges as opined by the interviewee and the way forward as proposed by them. The total number of interviewee involved in this research work is 95, being the City Directors, Municipal Directors, Town Directors, District Executive Directorsof ninety-five councils who responded firmly on our research work. The total number of heads of councils in Tanzania is 185. Hence this study involves about half of the Directors. The article concludes that the perception of Directors of the councils in Tanzania has revealed worthy understanding on what should be done to attain sustainable development. 94 percent of the interviewees reveal that there is need to revamp education system so that it provides answers to the community. 90 percent of the interviewee revealed that the education system of Tanzania requires a change from primary school education to facilitate a transferable mind set. 84 percent advised the government on what to start with and what to end with if education need to revamp of economy. It is generally agreed that education is critical to sustainable development if major changes that will be effected to allow an education that allows employability of the graduates culturally and naturally.

**Keywords:** Change, development, directors, education, Sustainable development.

## Issues of Conflict between Adolescents and their Parents in Nepal

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**Abstract:** Adolescence is a temporary period that leads towards adulthood and is characterized by frequent and diverse sources of conflict. The purpose of this study was to discover the sources of conflict that adolescents most frequently encounter. This study was designed to fill the gap of a previous study done on adolescents and sources of conflict. The designed research was a descriptive research design. Our research revealed that most adolescents had issues with their mothers more frequently than with their fathers. We concluded that females faced more issues than males, and that these conflicts were related to mothers more than fathers.

**Keywords:** Adolescents; Conflict; Issues; and Parents.

### Introduction

Adolescence is a transitional period of developing the autonomy required for adulthood. During this period, adolescents may encounter conflict with their parents' norms and advice [1]. Therefore, this study was conducted to find out the major issues of conflict experienced by adolescents and their parents.

### Methodology

Descriptive research design was conducted in the southern part of Nepal. 123 adolescent students from grade 9 and 10 were selected from different public schools in Chitwan District, using a convenient sampling technique. Data was collected using a semi-structured questionnaire, interview schedule where participants rated statements for 7 sources [2] of conflict on the Likert scale.

### Results

Autonomy (52.8%) was the major issue of conflict between parents and adolescents, followed by disciplinary measures (41.2%) and issues of family rules/regulations and obligations (36.5%).

There was a significant correlation between an adolescent's sex [3] and reported conflicts over autonomy ( $p$ -value 0.014) with female adolescents facing more conflict with parents (64.2%) in issues of autonomy than male adolescents (41.3%). There was also a correlation between an adolescent's sex and academic conflicts ( $p$ -value 0.0) as well as conversational issues ( $p$ -value 0.0). Girls (54.7%) experienced more conflict with parents in academic matters than boys (12.7%). Additionally, girls (24.5%) had more verbal disagreements with parents than boys (1.6%).

Regarding household chores, the adolescents with a younger father (48.0%) had more conflict than those with an older father (22.1%). Similarly, adolescents with a younger mother (43.5%) had more conflict than those with an older mother (15.6%). The results also showed that more adolescents experienced conflict with their mother (69.8%) than they did with their father (30.2%).

### Conclusion

Adolescents and their parents encounter many sources of conflict during the adolescence period. Autonomy was the major reported issue, followed by the disciplinary measures and issues of rule/regulation and obligation. The study also showed that female adolescents had more conflicts with their parents than their male peers, particularly with their mother rather than their father.

### Acknowledgement

The researcher feels privileged to have had this opportunity and wishes to express deep appreciation and sincere thanks to the District Education Officer, Chitwan and all respective government School Principals for accepting and providing permission to conduct this study in their schools in Chitwan, Nepal. The study was conducted with participants from Khairahani High School, Chitwan Higher Secondary School and Sharada Secondary School, Chitwan, Nepal.

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## **ASA Philippines' Water and Sanitation Financing Program: Leveraging a Quality of Life Financing to Obtain Financial Gain**

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### **Abstract**

ASA Philippines Foundation is a not-for-profit organization devoted to helping an increasing number of poor Filipino families rise out of poverty by providing microfinance to help them establish or improve their own microenterprises. This shall hopefully result in increased family income and savings, while giving them greater access to life support goods and services in the most cost-effective and sustainable manner. Established in 2004, ASA Philippines serves more than 1.8 million underprivileged clients through its more than 1,650 branches spread across all 82 provinces of the Philippines.

Water.org is a U.S. based non-governmental organization working to increase access to water, sanitation and hygiene (“WASH”) services for low-income households. Through its WaterCredit Initiative, Water.org partners with financial institutions, such as microfinance institutions, to develop loan products to finance construction of WASH facilities. Since 2003, Water.org has empowered 22 million people across 13 countries with access to safe water and sanitation through affordable financing.

In 2014, Water.org Philippines approached ASA Philippines to explore the possibility of collaborating under its WaterCredit Initiative in order to address the need of poor Filipinos for sanitary toilet facilities and clean water for drinking, cooking, bathing and washing. At least 9 million Filipinos lack access to safe drinking water, while many more millions lack access to basic sanitation facilities. A major stumbling block for these impoverished Filipino families is their limited access to financing related to water and sanitation. ASA Philippines welcomed the opportunity to address this important yet often overlooked need of poor households, and expand its services to its clients. The two entities signed a cooperation and service agreement whereby Water.org provided technical support in the form of market research, training, product development support and materials development while ASA Philippines reached out to its clients. With Water.org’s technical assistance, ASA Philippines designed and developed a Water and Sanitation Financing (“WaSaFin”) program – its very own brand of WaterCredit. In order to meet the water and sanitation financing needs of as many interested clients as possible, ASA Philippines floated a ₱2 billion (USD 40,000,000 equivalent) corporate notes issue which was partially guaranteed by the Credit Guarantee & Investment Facility. Successfully piloted in 2015, WaSaFin was then aggressively rolled-out starting in January 2016 to all branches of ASA Philippines nationwide. When the collaboration agreement was signed in 2016, ASA Philippines committed to a target of reaching 200,000 clients. By the end of the collaboration in 2017, it had surpassed this target having reached more than 225,000 clients. A second collaboration agreement was signed.

As the program had reached a significant scale, ASA Philippines set about determining the impact of the program on the lives of its clients. An impact assessment survey was undertaken to determine the benefits generated by the program to clients and their families. The results of the in-depth research showed that clients who took out a WaSaFin loan derived a range of benefits falling within two broad impact areas. First, they gained intangible welfare benefits which resulted in improved mental and social well-being. Examples of these benefits include clients feeling proud, improving their self-esteem, as well as enjoying a high level of ease and comfort. Second, clients experienced financial and economic benefits. Examples of these include a reduction in healthcare expenses, as well as the avoidance of productivity loss. What was surprising though, was that in addition to these expected benefits, clients were able to turn this quality of life financing (a non-business related financing) into an income generating opportunity. This paper explores the full range of benefits, both expected and unexpected, experienced by ASA Philippines’ clients under the WaSaFin program. It delineates the differences in impact on clients and their families between loans extended to:

- improve water facilities and
- improve sanitation facilities,

and gives credence to the saying that “Water is life, toilet is dignity.”

**Keywords:** Dignity, Life, Sanitation, Sustainability, Water

## Synthesis and characterization of a novel biodegradable copolymer grafted with acrylic acid and vinyl acetate monomers

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### Abstracts

Polymers are with us since the beginning of life however synthetic polymers were introduced in nineteenth century. Synthetic polymers are abundantly used in packaging, medical and textile fields and are usually non-degradable and hence responsible for enormous increase in debris. In this research work, a novel biodegradable copolymer was synthesized by the grafting of acrylic acid and vinyl acetate on gelatin back bone in the presence of ammonium per sulphate as initiator. The two samples A-1 (polyvinyl acetate-co-acrylic acid) and A-2 (polyvinyl acetate-co-acrylic acid with nickel doped zinc oxide nanoparticles) were prepared by free radical polymerization. The synthesized copolymers were characterized by using different techniques such as Fourier Transform Infrared Spectroscopy (FTIR), Thermogravimetric Analysis (TGA) and Differential Scanning Calorimetry (DSC). Process of grafting was confirmed by the characteristics bands of acrylic acid and vinyl acetate obtained at  $1715\text{cm}^{-1}$ ,  $1350\text{cm}^{-1}$ ,  $1220\text{cm}^{-1}$  and  $1000\text{cm}^{-1}$ . It was observed that polymers were not completely exhausted up to  $500^{\circ}\text{C}$  and the addition of nanoparticles enhanced the thermal stability of copolymer. The degradation study of these polymers was carried out by using soil burial method. The results of degradation of grafted sample A-1 depicted 25.29% weight loss and that of A-2 showed 15.01% weight loss over two months. In the beginning of degradation process, the polymer absorbed water and its weight increased. After that the weight of polymer decreased continuously. It was also observed that biodegradable nanocomposite co-polymer was less susceptible towards moisture absorption and was resistant to microbes in soil. Results showed that the grafted copolymer is biodegradable and the addition of nanoparticles increased its shelf life so these polymeric materials can be efficiently used for packaging purposes.

**Keywords:** Acrylic acid, Vinyl acetate, Biodegradable polymer, Thermal stability

## **Analyzing the Effectiveness of Architectural Conservation and the Impact on Sustainable Built Environment**

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### **Abstract**

As our contemporary cities are becoming a more complex urban entity, there is more appreciation of the architectural heritage of the city. Architectural heritage refers to buildings or structures that have special historic values to the society. Even though buildings are constructed to be long-lasting, they require continual maintenance and restoration. Otherwise, buildings can become inappropriate to serve their original functions due to obsolescence, or can become redundant due to changes in the demand for their services. Property owners and developers often have to make a choice among the following alternatives: demolitions to make way for construction of new buildings; refurbishment to upgrade facilities; or preservation to extend the life cycle so as to avoid building obsolescence. Property owners and developers, therefore, have to constantly weigh the pros and cons between property re-development vis-à-vis preservation of our city's architecture in order to create a sustainable built environment.

Architectural conservation has gained significant momentum worldwide since the establishment of the UNESCO in 1945 and the later international endorsement of the BURRA Charter as the doctrine for heritage conservation. While the environmental, social and cultural sustainability of architectural conservation has been widely discussed and researched, its economic impact is still under-researched, especially in high-density cities in Asia. This paper presents a territory-wide study on architectural conservation in one of the densest metropolises in Asia - Hong Kong. The paper studies the external effects of architectural heritage conservation on neighboring residential property prices and examines how such effects differ between privately-owned heritage and publicly-owned heritage using a quantitative methodology. By using the Hedonic Pricing Model, the study uses a sample of over 40,000 transaction records of private residential properties around fifty private and fifty public heritage sites, spanning from five years before to five years after the heritage grading, to estimate the external effects on the neighboring properties. Referencing to the Ronald Coase's Fourth Theorem and Alfred Marshall's Cluster Theory, the paper suggests that government involvement can bring advantages in information and innovation to conservation practices. Therefore, this research hypothesizes that publicly-owned heritage generates a larger positive external effect on surrounding properties to create a sustainable urban development. The research result shows that publicly-owned heritage sites outperformed those of privately-owned by 3.54% in property prices. In addition, the study also provides evidence for the presence of a positive cluster effect in various districts, which can potentially be generated by the ensemble effect of heritage sites, on the neighboring property prices.

The research findings can bring significance to society, benefitting multiple disciplines such as architecture, heritage conservation, urban planning and real estate by contributing both practical implications and academic knowledge for future conservation policies and management.

**Keywords:** sustainable development, heritage conservation, architecture, urban design, Hedonic Pricing Model

## **HDI of Dalits and Tribes in India: The Distance to be Travelled**

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### **Abstract**

In the recent decades, human development index has vastly been accepted as the measurement of overall socio-economic development of any region. Since 1990, United Nations Development Programme (UNDP), publishes Human Development Report, which gives the ranks to all the countries in Human Development Index (HDI). HDI is a composite index of three dimensions viz., Standard of living, Knowledge and longevity. Many countries have framed the policies and programme to achieve the higher human development. Hence, they initiated the construction of HDI at disaggregated levels. Now most the countries world over have the national human development reports taking into consideration of providence/states/regions at the unit of study. These national level reports have guided the policy makers in different ways. India is not lagging behind in this direction. In India, government as well as individuals have also constructed Human Development Indices. Further, many states have also constructed HDI for their districts and taluks/blocks. These reports have helped the policy makers in various ways to achieve the higher Human Development.

In India, due to rigid caste based hierarchical system, some social group are in the better-off position and some are lagging behind in many developmental fruits. With respect to Human Development also, some social groups are in good position and some are not. Hence, in India, many socio-economic indicators are studied at disaggregated levels like SC (Schedule Caste or Dalits), ST (Schedule Tribes or Tribes), OBC (Other Backward Communities), Minority, Non-SCST and so on. Similarly, for understanding of HDI of Dalits, Tribes and Non-SCST become more meaningful for the proper policy frame-work.

In the present paper an attempt has been made **construct HDI for Dalits, Tribes and non-SCST** for Indian states, using modified methodology of UNDP and Thorat's. Further, the way travelled and the **distance to be travelled by Dalits and Tribes in HDI** has been analysed. Appropriate policy measures are suggested to improve the data base for different disaggregated groups, which will help to understand the problem more meaningfully.

The study suggests that Like UNDP, India should have a Human Development Report for entire nation. This report should construct social group wise HDI for all the districts. These indices can be calculated once in a five year. In the next five years, implementation of good policy and programme towards achievement of higher human development based on the finding and recommendations of the report. Hence, inclusive balanced regional development can be achieved in India.

**Keywords:** Dalits and Tribes, Human Development, Inclusive Growth, Regional Development

**Establishing a Transit-Oriented Development (TOD) Policy for Urban Sustainability in Ho Chi Minh City, Vietnam: A Theoretical Model**

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**Abstract**

Ho Chi Minh City is the largest city and the economic center of Vietnam. It has a land area of 2,095 square kilometers with a population of 8.2 million. Its increasing population growth, rural-to-urban migration, high density development in the center, huge and increasing travel demand, insufficient road infrastructure and limited public transit, present an enormous challenge for its urban planners to develop an efficient and sustainable transportation system. A city built at sea level, its faces serious climate change issues as flooding and increased carbon use add to its environmental problems. This paper provides a theoretical model for the development of a Transit-Oriented Development (TOD) Policy for urban sustainability in Ho Chi Minh City. This model acts as a sustainable transportation planning strategy designed to produce vibrant neighborhoods with compact, walkable, mixed-use development centered on rail and bus transit systems. The paper addresses three basic questions. First, what is Transit-Oriented Development and how is it a model for urban sustainability? For this question, a recent research literature on TOD's is undertaken within the framework of its relevance for establishing a TOD Policy for Ho Chi Minh City. Second, how does a TOD Policy offer a solution to urban traffic problems in Ho Chi Minh City? For this question, an in-depth review of transportation problems in Ho Chi Minh City is undertaken with an analysis of how TOD's can provide a solution. And third, how can a TOD policy be implemented in Ho Chi Minh City? For this question, a pathway to how a TOD Model can be implemented for Ho Chi Minh is presented. This model discusses the present urban planning system; the tools that exist for a TOD policy to be implemented; and the barriers to that implementation. This research project was the result of a Fulbright Specialist Program Grant provided by the United States Government.

**Keywords:** Development, Planning, Transportation, Urban, Vietnam



**Reconnoitring Social-Workers' Advocacy Problems in Promoting Social Justice Effectiveness  
in Rural High Schools**

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**Abstract**

This paper explores the social justice advocacy and the role of rural high school's social workers' engagement within the school systems, where administrative and ambiances of social injustices create particular challenges for social work practice. This paper examines the social justice types and advocacy problems and reports on an empirical pilot study that was done amongst school social workers in a district of rural Imo State in Nigeria. Using quantitative data from an on-site research questionnaire to solicit views, and by employing the one-sample T-test and Inpar/Binomial Tests for Analysis of Variance (ANOVA) to test for differences between means, the Chi-Square Goodness of Fit Test was used to test for independence between variables of diverse analysis interpretation, towards examining social workers' perceptions on social justice issues and the apparent importance of this concept in their practice. These thoughts confront foremost discourses and highlight a progression of pro-active awareness and commitment with society to oppose discrimination, unfairness and injustice and demand change at rural high schools. Implications for social work on social justice effectiveness and social advocacy problems were measured. Findings specify that school social workers' understanding of the effective implementation of social justice types and advocacy problems at rural schools are global issues and were enriched by the investigation; the conclusion revealed that 'eustress' enables the empowerment of social advocacy and the need for social workers to reflect on its utilization is affirmed.

**Keywords:** Rural schools, Social justice, Social advocacy, School social workers,

## **Improving Healthcare Delivery in Nigeria through the Application of mHealth**

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### **Abstract**

The number three in the United Nations Sustainable Development Goals is “health”. The goal on health is succinctly captured thus: to “Ensure healthy lives and promote wellbeing for all at all ages”. This goal is then broken into a wide range of focus on multiple activities in the global and local health sectors geared towards the reduction of the numerous health challenges facing humanity across the globe and very especially, in the developing countries. Mobile Health (mHealth) has continued to gained traction as an important solution based application amidst the rising demand for healthcare and the cost medical services globally. In Nigeria, the challenge of accessibility to healthcare by people living in the rural areas compounds this global challenge. Technology has, therefore, sought the application of mobile health (mHealth) to certain facets of healthcare to make it more accessible to the users and also beneficial to the providers. mHealth also has the potentials of reducing the cost of healthcare services. However, while many initiatives have met with different degrees of success as a result of insufficient evidence, support or synergic action, few of them have been scaled up sufficiently and durably to make an appreciable impact, the full potential for Information Communication Technology to contribute to the control of infectious and contagious diseases has not yet been fully applied. This work, therefore, targets the development and deployment of an effective mHealth framework as a support to the healthcare industry in Nigeria in the control and management of infectious diseases. It is set to have the capabilities related to tracking, monitoring and controlling the outbreak of infectious diseases. It also seeks to deal with other healthcare problems like data privacy and security; information dissemination; data exchange and patient autonomy among other challenges. The system picks up all infectious diseases in a vicinity reporting the symptoms and proper location. This promises to be found to be workable and a huge breakthrough in healthcare delivery. In cases where the symptoms are new and/or unidentified, the system recommends the need for further tests on the patient in order to identify the exact illness. This study promises to be a very important breakthrough in healthcare delivery in Sub-Saharan Africa and especially in Nigeria where there are outbreak of infectious diseases every now and then. It will contribute in the reduction of the spread of infectious diseases as well as the containment of such diseases whenever there is an outbreak.

**Keywords:** detection, development, healthcare, infectious diseases, mHealth

## **De-Gendering Legal Education and Profession - Case Study of National Capital Region of India**

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### **Abstract**

Legal education that is conscious of gender equality reflects on the democracy of the country. One of the most important Constitutional guarantees in India is the right to equality, which includes the right against gender discrimination and bias. The Constitution of India also provides for affirmative action for women. The Indian legislature has also strongly advocated providing equal access to men and women in all fields. This is especially important in a country with a deep-rooted patriarchal culture. The impact of these guarantees and affirmative action can be seen in all areas of Indian society which is becoming more inclusive. The acceptance of women in male dominated professions such as advocacy is also gradually increasing. This paper attempts to identify the nature and extent of gender equality in the legal sector, focusing on legal academia and courtroom practice in the National Capital Region of India (NCR).

The article is a comprehensive study of the law schools affiliated to Guru Gobind Singh Indraprastha University (a public state university in New Delhi) India. This research uses use of quantitative and qualitative data to map women's experiences through law school and profession. The methodology followed in the paper is empirical and analytical using both qualitative and quantitative research methods. The researchers collected and used data relating to gender equality in law schools and the legal profession through the following sources:

1. Data relating to enrolment of male and female candidates in law schools affiliated with Guru Gobind Singh Indraprastha University, from 2013-2018 collected from the respective law schools.
2. Data relating to enrolment of male and female candidates in the Bar Council of Delhi from 2013-2018 collected from the rolls of Bar Council of Delhi (Enrollment with the state bar councils is mandatory for practicing as an Advocate in Courts situated in the territorial jurisdiction of a state)
3. Data relating to gender equality in law schools as perceived by law teachers in law schools of NCR through the means of a questionnaire administered to a random sample of 50 law teachers presently teaching in law schools in NCR.
4. Data relating to gender equality in law schools as perceived by law students in law schools of NCR through the means of a questionnaire administered to a random sample of 100 law students currently studying in law schools in NCR.
5. Data relating to gender equality in Indian Courts through the means of a questionnaire administered to a random sample of 100 lawyers currently practicing in the courts situated in NCR.

The researchers have used this data to identify the challenges to gender equality in legal education and profession in India, highlighting existing international best practices. The researchers have made recommendations for law schools to reconsider what values they cultivate and have also proposed suggestions to make legal education and profession more inclusive for women. The findings from this paper will be relevant to making legal education more inclusive in other jurisdictions as well.

**Keywords:** Gender Equality, Legal Education, Legal Profession

## Sustainable energy growth in Iran under reimposed sanctions; barriers and incentives

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### Abstract

Energy in countless ways has empowered human beings from poverty alleviation to increasing productivity and powering industrial and agricultural processes. Sustainable energy -from powering economies to achieving the Millennium Development Goals, combatting climate change to underpinning global security- is essential for sustainable development. Renewable energy, as an alternative energy source to fossil fuels, has long been recognized as a mean to mitigate the negative impacts of fossil fuels by many countries. In addition, the renewable energy industry in comparison with typical capital intensive fossil fuel technologies is more labor intensive. Clean energy also benefits local governments most often in the form of property and income taxes and other payments from renewable energy project owners.

In 2017, renewable power generation capacity in the world experienced its largest annual increase ever with an estimated 178 gigawatts added globally. By minor revisions, the world total renewable generating capacity in 2018 has been revised upward to 2,356 GW by 5 gigawatts. About 100 GW of solar photovoltaics (PV) was installed – accounting for 55% of renewable capacity additions – followed by wind power (28%) and hydropower (11%). In 2018, more than 90 countries had installed at least 1 GW of generating capacity, while at least 30 countries exceeded 10 GW of capacity. Currently, variety of renewables incorporates more than 20% of electricity mixes in the world. In 2019, Iran's total nominal power capacity has reached to 80868 MW while renewables account for only 760 MW (around 8%) in the country. Iran aims to expand a 5,000 MW in renewable capacity within the next 5 years to meet its growing domestic demand and to increase its share of the regional electricity market. Solar and wind plants generate around 85 percent of Iran renewable electricity. According to SATBA (Iran's Renewable Energy and Energy Efficiency Organization, 2019), Iranian households and small industries have eagerly adapted the new technology promising more investors in this area resulting in the number of small scale solar power plants across the country to increase noticeably. The relative low cost of energy in the Middle East in general and Iran in particular greatly undermined interest in alternative fuel and renewable resources. However, Middle Eastern economies are now beginning to turn to new and more sustainable energy production due to their increasing consumption, rising world oil prices and international demand. These have led to exploration of the renewable energy potentials in Iran. With highly attractive emerging market for renewable energy in Iran, still significant barriers in Iran to achieve the country goals.

The renewable energy development became a strategic task in the country since the government envisaged a greater role for renewable energy. To combat the effects of climate change Iran pledged to cut its greenhouse gas (GHG) emissions by 12 percent by 2030 in UN climate change Conference in Paris (COP21). However, serious technical and political issues such as extreme sanctions have slow downed the efforts. Before the U.S. reimposed sanctions in June 2017, as a significant supplier of electricity for neighboring countries, the country had made decision to boost power capacity via install 5 GW of renewable energy in the next five years and an additional 2.5 GW by 2030 as well as 3% renewable energy share in primary energy supply by 2050(20 GW).

Hence, based on an exciting new market for renewables in Iran and high electricity demand, this study aims to do new assessment of renewable energy policy and implementation in the context of advancing domestic renewable energy technologies through developing a matrix of strength(S), weakness(W) as internal issues and opportunities(O) and threats(T) as external factors(SWOT). the most important strengthen factors could be rewriting the energy policy to increase the guaranteed purchase price of renewable energy through facilitate Iranian local banks to finance instead of high interest rate loans, enhancing domestic knowledge and training about renewable energy especially in rural areas and facilitate land acquirement (time and cost) via legislation and public support. Getting benefited from international knowledge and facilitate developer international trainings discussed as significant opportunities to achieve renewable energy growth in Iran while reimposed U.S sanctions and lack of access to world advanced technologies are the most treats and weaknesses respectively. Therefore, precise analysis of renewable energy application in order to resilience response to climate ever increasing change seems imperative.

**Keywords:** Climate change; Economic sanction; Renewable energy; Sustainable energy;

**Sustainable Development and International Investment Treaties: Emerging Trends  
of Non-Economic Aspects of BITS**

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**Abstract**

With the increasing globalization, foreign investment, primarily through the International Investment Agreements (IIAs), has become an indispensable tool for the economic development of any country. Not only does the transnational investment help in bringing capital to the host State, it also helps with job creations, technological development, infrastructure and innovation etc. The IIAs, specifically the Bilateral Investment Treaties (BITs), have become the most important mechanism for foreign investment, mostly, by a developed country in a developing country. Presently there are around 3000 BITs signed between various countries. The number of BITs is continuously growing. This large network of BITs has provided an effective mechanism for private foreign investments. BIT is perceived as the most effective legal instrument to protect foreign investor against any arbitrary action of the host state. It also provides protection to the host State against any violation of treaty clause by the foreign investors.

Though BITs 'protection' was initially considered only for financial objectives in international trade, the trend of such protection is now constrained to include non-economic aspects of trade. A novel line of thought is developing, recognizing the need to balance the protection to the foreign investors with the freedom for host governments to pursue freely their chosen development policies. The host state sometimes finds itself in a quandary as to the compliance of international obligations under human rights treaties, and those under investment treaties such as BITs. The growing concern for incorporating social interest into international investment treaties is becoming predominant, owing to the challenges faced by a host state to legislate or amend its domestic laws for protecting and promoting sustainable development goals. One of the ways to meet this challenge is to include provision for sustainable development like environmental protection, labour laws and health standards, *inter alia*, in the BITs agreements. But, at the same time, it is argued to have a 'weak' impact on the International Investment Law.

Given this background, this paper seeks to analyze the emerging trends of incorporating sustainable development objectives, that is considered to be the 'non-economic,' into Bilateral Investment Treaties. It starts with a brief introduction of the history and the rapid growth of BITs in 1980s and 1990s highlighting its inherent economic character. Various United Nation Instruments on Sustainable Development, such as the "United Nations Conference on the Environment and Development", 1992; "World Summit on Sustainable Development, 2002 and UN Conference on Sustainable Development", 2012 (Rio+ 20) and "Agenda 2030 for Sustainable Development Goals" are mentioned from the point of view of trade and investment. It then succinctly discusses the case law wherein the foreign investors challenged the public health legislations and environmental concerns of the host state, as violation of BITs. A prominent case is of August 2010 of "Piero Foresti, Laura de Carli and others v. Republic of South Africa (ICSID Case No. ARB(AF)/07/1)", wherein eleven European claimants unsuccessfully challenged South Africa's mining rights legislation as violating their investment rights. These investment-human rights disputes gave birth to a debate on sustainable development aspects of international investment law. The paper proceeds to find the emerging trends of debate about the incorporation of sustainable development in BITs. In doing so, it identifies the relevant provisions of NAFTA and draws a specific comparison of Indian Model BIT, 2016; USA Model BIT, 2012 and Canadian Model BIT 2004 (known as "Canada Model Foreign Investment Protection Agreement (FIPA)"). It finds the latest trend of this debate in the "UNCTAD Investment Policy Framework for Sustainable Development, 2015" and concludes that the dominance of the debate is gradually, though inconsistently, moving in the direction of 'new generation' of investment policies supporting sustainable development.

**Keywords:** Bilateral Investment Treaties; International Investment Dispute Settlement; International Investment Law; Sustainable Development Goals

**Association between malaria and local climate variability in Jos, North central and Kano, North western Nigeria**

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**Abstract**

Malaria is a significant public health problem in Nigeria. The recurrence of malaria incidence across regions in Nigeria can be linked to regional climatic changes and environmental factors. This study explored what and how local weather/climate variability impact on malaria prevalence in Jos North central and Kano, North western Nigeria. Data on monthly malaria cases from 1997 to 2012 were obtained from the hospital archives and consulting room record books. The hospital is Abdullahi Wase Specialist Hospital, Kano a standard state government hospital that is situated in the Centre of the city. Also, same data were collected from Plateau state general hospital, Jos. Weather factors including rainfall, relative humidity, minimum and maximum temperature were considered in the analyses. Time series methods were applied to evaluate the associations between auto regression (number of malaria patients during the previous time period), seasonality and climate variability, and the number of monthly malaria patients (in and out patients) of the years considered. The results showed that malaria incidence was associated with local weather factors in Jos and Kano but at different lag times and in directions. The results suggest local weather factors strongly affect malaria occurrence in Jos than Kano.

The model explained a significant percentage of the variance in the number of monthly malaria patients. Nonlinear and synergistic effects of temperature and rainfall on the number of malaria patients were found in the stations. The results suggest that there was a high spatial variation in the sensitivity of malaria patient number to climate fluctuations in the highland area of Jos and that climate variability played an important role in initiating malaria prevalence in the area. Therefore for effective malaria control, interventions could be synchronized with some important climatic predictors of the disease for greater impact and reduce the prevalence of the disease.

**Keywords:** Climate Variability, Jos, Statistical Modeling, Time Series Analysis

**Effectiveness Of *Chromolaeeceae Odorata* (Siam Weed) For Phytoremediation Of Lead And Other Toxic Metals In Enyigba Lead Mines, Nigeria**

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**Abstract**

Mining and extraction of metals has been ongoing in Nigeria for many decades. Unfortunately environmental laws and policies are not adhered to by mining industries especially in the rural areas of Nigeria. Consequently metals are released into the environment via anthropogenic activities of miners. Presence of these metals in the soil constitute environmental pollution as some of the metals can be leached into the water bodies while others are absorbed by the root of plants. Ultimately these metals such as lead are transferred to man via drinking of polluted water and consumption of food from plants grown on the polluted soil thereby resulting to health challenges. Many *in-situ* and *ex-situ* remediation processes such as excavation, mechanical separation, detoxification, stabilization, solidification, immobilization, incineration, soil washing, liming, electrokinetic cleaning and cofferdam methods have been employed to clean up heavy metals in the soils. However, phytoremediation which is environmentally friendly, cost-effective, and aesthetically pleasing process was the method used to clean up a mapped out 50m by 50m portion of Enyigba mine using *Chromolaeeceae odorata*. The concentrations of lead and other toxic metals in the soil was analysed using X-ray Fluorescence (XRF) to reveal the current metal loads in Enyigba soil and their corresponding pollution indices (PI). Sequential extraction was done to ascertain the bioavailability of lead and other metals in different part of the mines. *Chromolaeeceae odorata* was planted for phytoremediation process and was monitored for 24 weeks. Samples of soil (top and sub) and plant (leaves and roots) were collected at fortnight interval and analyze for lead and other metals. The bioaccumulation factors (BAF) and translocation factors (TF) were used to evaluate the phytoremediation process. High values of the Bioaccumulation Factor (4.5) for Cd and Translocation Factors of Pb (8) and Zn (3) were observed. The results revealed that the concentrations of Pb, Zn and Cd were significantly reduced after the phytoremediation experiment. The percentage decontamination of the metals decreased in the order Cd (100%) > Pb (85%) > Zn (75%) by *Chromolaeeceae odorata*.

**Keywords:** *Chromolaeeceae odorata*, Bioaccumulation Factor, Translocation Factors, Phytoremediation, Toxic Metals, Enyigba

## Sustainability Issues in the Implementation of Biofuel Policies in India

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### Abstract

Biofuels, a non-toxic, renewable, carbon-neutral fuel are derived from various biomass feedstocks, which are excellent alternative to fossil fuels. Based on the nature of feedstocks used, biofuel is evolved into various generation. For instance, food crops or edible oils are grouped under first generation feedstocks, non-edible crops consisting lignocellulosic materials are termed as second-generation, while advanced and emerging biomasses such as microalgae, cyanobacteria and diatom is considered as third generation feedstocks. Major sustainability challenges in first and second-generation fuels are trade-off between food and fuel (first generation), surplus land requirement, high outlay, seasonal influences, low energy return and low productivity. At this juncture, algae have received rampant attention as a plausible feedstock for sustainable biofuel production. However, it is pertinent to note that algal based biofuel is also expensive and requires establishment of advanced lucrative technologies for “successful and sustainable” penetration of biofuel into the energy market. On a factual note, the success of the biofuel program is also driven by the effective biofuel policies. Thus, following the success of Brazil, India also prepared a detailed roadmap to encourage and regulate the production of biofuel through various schemes and policies.

Government of India launched ‘Ethanol Blending Program’ in 2002 to set 5% (E5) blending of ethanol with gasoline, subsequently the mandate had been raised to 10% (E10). In 2003, the Government also adopted ‘National Biodiesel Mission’ to increase biodiesel production and it had initially proposed to achieve 5% (B5) blending mandate and later, it gradually increased to 20% (B20). Indian government failed to achieve the blending targets due to the lack of feedstocks, not building the confidence among farmers and consumers, and *food v fuel* debate. These situations led government to adopt ‘National Policy on Biofuels, 2008’. It had proposed 20% blending mandate for both ethanol and biodiesel by 2017. But Indian government failed to achieve the targets within the stipulated time. Due to non-fulfilment of the 2008 Biofuel Policy, the Government has recently adopted ‘National Policy on Biofuels- 2018’. It has proposed a mandatory target of 20% blending of ethanol in petrol and 5% blending of biodiesel in diesel by 2030. It also envisages to use other raw materials including grains during surplus production and apparently, this will again effectuate *food v fuel* debate. It is significant to note that other sustainability challenges such as toxicity, safety issues, emission from biofuel blends, affordability of land for biofuel production, employment generation, technological issues and statutory obligations are still unanswered in the 2018 Biofuel Policy.

It is in this connection this paper seeks to answer what sustainability challenges and opportunities are presented in the National Biofuel Policy, 2018. For this purpose, it will make a detailed analysis of legal framework governing biofuels in India. The study also critically examines the implementation challenges that policymakers to address to achieve objectives of the biofuel policy. Towards this end, the study provides suggestions for effective implementation of biofuel policy in India.

**Keywords:** Biodiesel; Biofuel policy; Energy demand; India; Sustainability



**Harnessing Solar Energy Potential as an Alternative Source of Electrical Energy in North Central, Nigeria**

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**Abstract**

The demand for electrical power to drive the economy of Nigeria as a nation is on the rise geometrically, while its availability is either stagnant or in a decline due to inefficient or decay in the available sources of power energy generation and the interconnectivity to form national grid. This work examines the potentials of solar energy that could be tapped as an alternative source of power energy generation in North central states of Nigeria using experimental approach of measuring daily solar radiations across all the study area at interval of one hour using light meter (LX 101A) from which daily and monthly mean were then evaluated. The results obtained showed that north central states has an average solar radiation value of  $9.8\text{MJm}^{-2}$  ( $2.7\text{kWhm}^{-2}$ ) and  $27\text{MJm}^{-2}$  ( $7.5\text{kWhm}^{-2}$ ) as minimum and maximum, obtain in August and December respectively in 2018 and with 0.1% of land mass of states dedicated as solar panel farms, North Central, Nigeria has the potentials of generating 29,168.29 MW of Electrical energy which is far more than the current power energy demand of the Nation.

**Keywords:** Solar Energy Potential, Power energy generation and North central states

## Optimal Crop Plans for Climate Resilient Technologies in Indian Punjab

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### Abstract

Climate resilient technologies are an effectual measure at the farm level; it facilitates the rural households and communities to reduce adverse effects of climate change. The primary data collected from 200 farmers pertaining to the year 2016-17 was selected through three-stage stratified random sampling technique. Budgetary analysis was performed to work out the economics of different crops. Based on the adoption of climate resilient technologies at farm level, the paddy crop has been further classified into Paddy PR VAR (adoption of early maturing PAU recommended varieties), Paddy fields leveled with laser leveler (Paddy LL) and Paddy DSR (paddy sown directly in the fields without transplanting). The optimal crop plan I without irrigation constraint has revealed significant changes in production pattern with major shift in area under Paddy PR (72.58 %) and it facilitated more net returns (5.78 %) due to higher productivity. Imposing area restriction on Paddy PR VAR in alternative plan II upto one hectare on each farm resulted in shift of paddy area to paddy LL (0.46 ha) thereby increasing the net returns from crop production by 3.43 per cent along with groundwater savings of 1.52 per cent. Considering percentage overdraft of ground water of sample villages as a criterion for making plan III, the existing water usage was reduced by 10 per cent, which resulted into reduction in paddy area from 61 per cent to 53 per cent, increase in area under maize from 16 to 24 per cent in *kharif* season along with major shift of area under wheat IM VAR (67.8 %) and wheat ZTW (14.4 %) in *rabi* season without any adverse impact on productivity. The study suggests that adoption of climate resilient technologies such as adoption of paddy with early maturing varieties, direct plantation of paddy and paddy with laser leveler are some of the other techniques which can save water. These production plans are helpful to enhance the crop productivity and farm income and ensure sustainability of groundwater resources in Punjab.

**Keywords:** Climate Resilient Technologies, Crop Plans, Water Sustainability

## **Investigation of Corporate Social Responsibility in Multi-National Companies to promote Environmental Sustainable Development.**

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### **Abstract**

The world Governments has started to share their solidarity with the United Nations in achieving the Sustainable Development Goals (SDGs) by setting country specific Intended Nationally Determined Contributions (INDCs). But, in the present age of globalization, the contribution of MNCs and a socially responsible corporate governance is inevitable for achieving the aforesaid targets by 2030. Well aware of this situation, the MNCs are adopting critical strategies concerning the environment, in their core operations and policies, so as to be more accountable of their impacts on the society and promote sustainability. Hence, Corporate Social Responsibility (CSR), a concept for the future viability of society, which integrates the social, environmental and economic goals within a single framework, (Crawford & Scaletta, 2006; Weisz, Haas, Pelikan, & Schmied, 2011; Williams, 2005) is recognized as an effective tool for achieving sustainability (Baumgartner, 2014; Behringer & Szegedi, 2016). Consequently, the integration of SDGs in CSR has proliferated the corporate sector and is evolving as a significant and complex area of investigation. Especially, the environmental initiatives which promotes socio economic value has turned out to be a very significant strategy in propagating CSR. However, there are very less literatures available on the environmental-friendly initiatives that are taken as a part of CSR in MNCs.

This paper will investigate the UN - SDGs targeted to improve environmental sustainability. This research aims to gain a broader understanding of CSR in MNCs through a case-study and provides a steep learning curve, where not only the researcher, but also the company in question itself evolves it's understanding on CSR, its drivers, implementation and consequent difficulties. The case-study is limited to an international service company that provides facilities management services by combining commercial business operations with public service ethos. A qualitative interpretative case-study was conducted on the MNC by integrating staff questionnaires (collected through face-to-face interview) and analyzing the available company data and documents. During the research process, various CSR initiatives within the company were observed – providing an opportunity to acquire an insight on the history of CSR initiatives of the case-study company, its potential drivers and barriers influencing the decision to go ahead with a specific CSR initiative, evaluating the effectiveness of CSR environmental initiatives and its contribution in achieving environmental sustainability.

### **Raw Data**

The Case-study company has 'green purchased' and installed Deciphering Digital Addressable Lighting Interface (DALI) lighting system whose environmental impacts have been assessed and found to be less damaging to the environment and human health when compared to competing products/services. The graph illustrates the energy usage in two departments of the MNC, one using the conventional lighting and the other using LED lighting, observed over a time period of 24 hours. Although, both lights showed almost the same trend in usage, DALI lighting system consumed less energy when compared to conventional lighting.

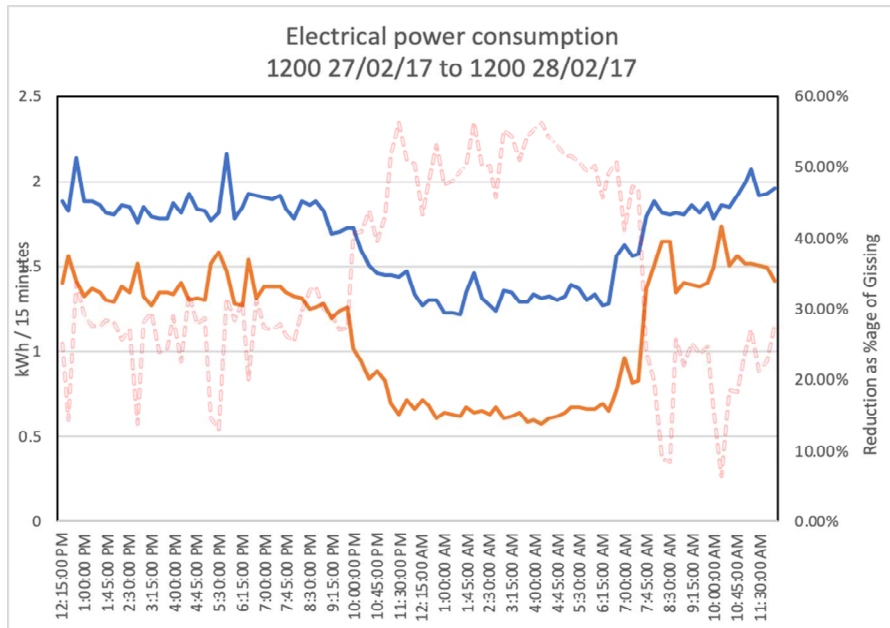


Figure 1: Electrical power consumption. Conventional lighting vs LED lighting system; Source: data collected through face-to-face interview

Also, the number of reported jobs in the departments using LED lights are low when compared to the conventional lighting system which makes the LED lights more sustainable and durable.

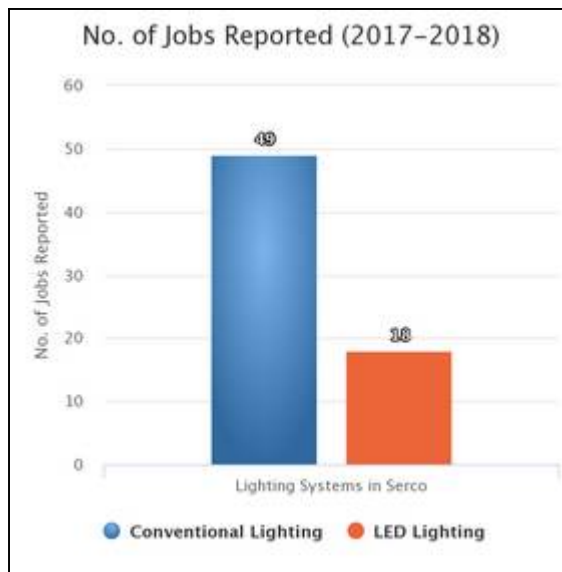


Figure 2: Number of jobs reported. Conventional lighting vs LED lighting; Source: Data collected from face-to-face interview

On analyzing the raw-data (above mentioned and other collected through interviews) from case-study, it is evident that CSR initiatives pose a huge impact on the climate change as well as global environment. Reducing the ecological footprint has been a main issue for the company and it has been constantly engaging with environmental CSR initiatives. Following are the ways by which the case-study improves the environment and engages with environmental sustainability.

- Efficient waste management system by using color coded bins. Additionally, a close watch of weight of regulated medical waste generation and its disposition is made. This helps to track the waste disposal, which helps to formulate strategies to reduce the waste in the mere future.
- Reduced consumption of energy by using energy efficient lighting system like DALI.
- Regulating the natural resources efficiently. For example, treatment of water and testing it regularly for bacteria like legionella.
- Reduced emission of hazardous substances by performing monthly waste monitoring.
- Using recycled and recyclable materials.
- Training and encouraging the staffs to look for additional ways to reduce the firm's environmental footprint.

By performing these activities, the case-study company directly and indirectly contributes to reduce the carbon footprint, thus addressing the issues related to global warming.

**Keywords:** Corporate Social Responsibility, Environmental Sustainable Development, Sustainable businesses, Environmental Initiatives, Multi-National Companies, Energy Efficiency.

## **The challenges of agriculture: feeding the world of tomorrow on a transitioning and endangered Earth**

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**Summary:** The challenge is now and for the future: which agriculture is needed to adequately and sustainably feed a population that is still growing exponentially while respecting the planet? Ensuring food security for nearly 10 billion people, a considerable challenge, especially since many factors combine and tend to hinder tomorrow and today's requirements. It's hard to name them all. However, demographic, climatological and cultural variables appear to be the main threats to food security. Indeed, it is difficult to talk about food and agriculture without mentioning the demographic context, even if all countries are currently on the road to demographic transition<sup>1</sup>. On this subject, there is still a debate between Malthus' supporters, for whom food production will be unable to meet future demand given the available agricultural resources, and those who support abundance, for whom development is significantly possible thanks to scientific advances. This questioning can only be studied on a global scale. In fact, sustainable development can only be the result of joint political actions, both multidisciplinary and transdisciplinary, which will be successful thanks to a consensus. This approach consists, on the basis of the current situation and case studies, in determining the effects to address requests and possibilities.

**Keywords:** sustainable agriculture, sustainable development, environmental requirements, nutritious food, food security.

### **Introduction**

Food security is a right. The UN Constitution identifies access to adequate food as an individual right and a collective responsibility<sup>2</sup>. Therefore, a crucial concern must be taken into account: to ensure the best preservation and distribution of available resources, to transform our production methods, while reducing environmental impacts. In this area, the situation is still alarming<sup>3</sup>, as the prevalence of malnutrition in all its forms is worsening in many countries<sup>4</sup>. There are 22 countries facing protracted crises, which could jeopardize the Zero Hunger Objective and Sustainable Development Goals by 2030.

In reality, food exists in part thanks to the yields of the "green revolution". The real problem is the accessibility of this food, which depends on far too many conditions and factors, only some of them will be addressed. As a result, contrasts are lost between countries with large agricultural areas and those with smaller exploitable areas that invest in foreign land. Thus, while some countries sell their land to foreigners to develop their economy, other ensures their food security and sovereignty. Food becomes a marketable value, open to the world market and to "food speculation" linked mainly to the state of supply and demand.

In a similar way, the notion of urbanization and its multiple effects on the countryside takes a prominent place. This phenomenon has led to a change in eating habits, to mention only the increasingly massive consumption of meat products, which are expensive in terms of land, water, energy and environmental impact. Productivist agriculture has had the merit of having considerably increased world agricultural production, yet it has generated many negative consequences. Today, agricultural production is partly responsible for and partly victims of global warming. Therefore, it is not a question of imposing a sustainable agricultural model on all the world's farmers, but rather of accompanying or encouraging different measures adapted to national, regional and local situations, while maintaining as a common objective sustainability in its various components and the optimization of production

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<sup>1</sup> On 1 January 2019, the earth's population was 7,637 billion. Growth is expected to slow down around 2050 (World Population Prospects Table, UN website)

<sup>2</sup> Further developed 20 years later, in 1966, by the International Covenant on Economic, Social and Cultural Rights (ICESCR) through the United Nations General Assembly

<sup>3</sup> Table of the new UN report, July 2019, by the leaders of FAO, WFP, IFAD, UNICEF)

<sup>4</sup> 820 million people suffer from hunger, 1.3 billion do not have access to sufficient nutritious food and more than 670 million are obese!

conditions. A society of lower consumption, known as "moderation", of socially acceptable ethical limits would have to be considered. What is at stake? A reconsideration of consumerism and the establishment of inclusive, sustainable production methods, bearing in mind that the cultivable area cannot be extended under penalty of environmental pressure. None of the proposed innovations should be neglected and all should be analysed. Never before has the world community had so much knowledge, resources and technologies at its disposal to ensure that everyone has the food they need. We would expect from everyone a participation, a responsible engagement, for a land of solidarity.

**Keywords:** environmental requirements, food security, sustainable agriculture, sustainable development, , nutritious food.

**Factors affecting the willingness to adopt Internet of Things in the construction industry**

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**Abstract:** In the era of rapidly changing technology, the development of information technology has grown tremendously and has given a range of technological tools to progress and innovation. These tools have been applied in all fields and brought comprehensive impacts on human life. Among them, the Internet of Things (IoT) can be seen as an effective tool to encourage smart growth and sustainable development. Thus, the IoT has become popular, and its applications cover many areas in recent years. Smart homes, environmental monitoring, energy management, information transmission, and smart city are known as the IoT applications in the construction industry. Currently, although many industries have already adopted and put it into practice for years, there are not many IoT users in the construction industry. The influence of the IoT in the construction industry may have triggered the practitioners' incentive to change the way to conduct business in the industry. The objective of the research is to figure out the impact factors that affect the practitioners' willingness to adopt the IoT in the Taiwan construction industry. The method used in the study is qualitative. The research hypothesis was developed using a literature review and the concept of the Unified Theory of Acceptance and Use of Technology (UTUAT). A comprehensive literature review develops the UTUAT framework and hypotheses including 5 main hypotheses, 6 aspects, and 33 stems. A pilot study, which is aimed at well-experienced practitioners in the industry, is conducted to adjust the stems before the full-scale survey. The adjusted questionnaire has 31 stems belonging to 7 aspects and is distributed to practitioners. There are 232 returns out of 280 in total, with an 82.8% effective sample recovery rate. In this study, 6 analyses combining descriptive statistics analysis, reliability analysis, validity analysis, t-test, one-way analysis of variance, and structural equation modeling are applied to explore the factors affecting the users' willingness to adopt the IoT. The result shows that the first three hypotheses in 5 hypotheses stand. There are 3 factors significantly influencing the user's willingness to IoT adoption in the construction industry including (1) anticipated benefits, (2) anticipated efforts, and (3) society expectation. All these 3 factors have positive effects on the user's behavioral intention of the IoT applications due to the adjustment of gender differences, age differences, experience differences, and voluntariness differences. The finding of the study may help the managers, practitioners, and users have a better understanding of IoT adoption in the construction industry and refer to making business decisions.

**Keywords:** construction industry, Internet of Things (IoT), structural equation modeling, user's willingness, UTUAT.



## **Development- leading to depleting resources and increasing adulteration**

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### **Abstract**

Sustainable development is widely known as development which aims at keeping a balance between the human need, creation, destruction, and depletion. It is of utmost importance to understand that we are striving towards maximum utilization with the available resources but are not pressing enough on the balance use of the resources available.

Development by merging with the advance and ever evolving technologies is considered to be an important aspect of developing Nations. There are various pillars on which the economy of a Nation depends on. Tourism is one such major pillar on which the economy depends there are many Nations which entirely depend upon tourism sector for living. This paper will discuss about such aspects of tourism sector leading to wastage, over-use and permanent depletion of the resources available.

The Nations, with a motive to increase tourism and improve their economy, put in various efforts to invite more tourists visiting their country every year. In this race of attraction the major role is played by the geographical factor and natural resources available with a Nation such as: Mountains, Sea, Plains, Plateaus, Volcanos etc. The chapters 2 and 3 of this research paper highlights and addresses the problems arising due to tourism in the high altitude areas such as Mountains and further aims to cover the major areas where the is harm being caused and suggests the measures to reduce it.

Direct aim of this research is to attract attention towards the NOT-NEEDED development in the high altitude areas, lying on the foot hills of fold mountains and various such other locations, just to attract tourism and increase revenue without actually worrying about its costs to the Resources. As this is creating alarming disturbance in temperature, is contributing in melting of glaciers and further is making ways for other issues such as waste management, improper communication in areas where the tourists are invited and putting the lives of many at stake by the risk involved in such tourism.

This research further focuses on various agricultural methods in practice and such practices adversely effecting human health. As when tourism increases, with tourism increases the need to cater the increasing population in the Nation, leading to various harmful ways of adulteration to speed up the process of agriculture. These forms of adulteration have also been part of this research. The harmful in-organic chemicals which are used to increase the productivity of crops are leading to diseases which are deadly and the research aims to throw light on this area. Chapter 4 of the research paper critically analyses the DNA mixing and the changes in DNA of edibles plants for maximizing the production leading to more harm than the good to the society and the resources available,

The driving force of this research paper is the fear of losing the beautiful geographical blessings which provides us with the most essential need for living and the deteriorating human health conditions which is reducing the life expectancy for current generation and survival of the future generation. These aspects combined together are the motivation behind this research work.

Following Are The Methods Used For This Research Paper

- 1) Dialectics
- 2) Collection of primary data
- 3) Secondary data analysis
- 4) Surveys

With the current development rate and increasing environmental issues it is of utmost importance to calculate the actual amount of development required and the area of substitute needs to be considered. With the development of Nation and depletion of Resources. Bacteria and viruses are getting more resistant to the medicines, making human genetics weaker. The mildest of fever are getting deadly. As well as there is huge increase in numbers of people getting affected with diseases. All of these cause are connected with the misuse and over-use of the resources available with us. This paper aims to press on these discussion and also aims to suggest alternatives for the same.

The figures and facts obtained during the research are disturbing as well as alarming for the current and future generation. There is need to change in policies and practices in various interconnected areas with calculating the need and availability of resources. The problem needs to checked at the root level and policies needs to be advanced for the proper executions of these required checks.

In the conclusion the paper critically analyses the issues of sustainable development, highlights the problem that are arising and will arise, if the situation is not looked after and also suggests ways to curb the issue and alternate that should be adopted by the Nations for a better and well developed future.

**Keywords:** Adulteration, Depletion of Resources, Economic Development, Natural Resources, Sustainable Development, Tourism Industries

## **Developing a sustainable healthcare system: Reflections of the Indian Health care system**

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### **Abstract**

India is a developing country having 1.37 billion populations plays a pivotal role in promoting the basic human right to health of people over a period of time since. Independence. Though the Constitution of India entrusts the Central and State Governments to take steps to provide a better standard of living and health care facilities, the Governmental measures prove to be insufficient to meet the challenges of the 21<sup>st</sup> Century. Increased disease burden coupled with lowest state expenditure paves way for catastrophic effect on health expenditure. Further, the consumerism and active participation of private and corporate players in this field make the health care services inaccessible to the common man. The poor regulatory structure and lethargic approach government further degrade the health demands of people. The Government initiatives like cost supporting mechanisms viz-a-viz introduction of insurance schemes proved to be unsatisfactory in most of the regions including India in regulating the pricing policy of medical services. In this context the State's responsibility towards ensuring right to health of people should be relooked to devise more effective measures in developing new models of healthcare. The Indian healthcare system largely is a mixture of different types of providers and systems of medicine. Out of which modern medicine developed its root in Indian soil only after the British invasion. The installation of Modern Medicine sworn the seeds of health care system based purely on medical care at the cost of other health-promoting and preventing mechanisms. Before that, India had a well developed Indian Medical system based on Ayurveda. Ayurveda is a system which is patient-centric whereas modern medicine is disease centric. The basic change in the approach has caused long term damage in the health care administration in India mainly because of poor understanding of the need and relevance of modern and Ayurvedic medicine and the state responsibility. Though the individuals have the fundamental right to get medical treatment from any system of medicine, the state approach and its gross negligence in developing a system for disease prevention and promotion compels the people to rely more on modern medicine and consequently the people have become the victims of many medical unethical behaviours and increased cost in medical sector. If the Governments continue its lethargic approach in understanding the state responsibility and their obligation under international documents, the healthcare system will be collapsed and the poor people including the middle class will suffer the most. For developing a sustainable health care system, the State has to implement its obligation to protect, respect and fulfil health care responsibilities under international conventions and reverse the trend in cost escalation and disease burden through more effective government policies and programmes to allocate the available resources efficiently. Otherwise the future generation will be the real victims of inflated cost and increased disease burden.

**Keywords:** Indian Health care, inequity, medical cost, sustainable health care system etc.

## **Regulated Use of Biological Resources and Traditional Knowledge for Sustainable Development: The Experience from India**

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### **Abstract**

Biodiversity is the base and source of most of the developmental activities. With the advent of modern biotechnology, the utilization of biological and genetic resources for various developmental ventures in medicine, health products, cosmetics, and industrial products increased manifold. Ever since the Convention on Biological Diversity rolled out a blueprint for conservation of biological diversity, sustainable use of its components and equitable sharing of benefits arising out of utilization of genetic resources and traditional knowledge, the Parties to the Convention recognized them as cardinal principles for sustainable development that depends on biological diversity. The Nagoya Protocol on Access and Benefit Sharing for Utilization of Genetic resources and Traditional Knowledge concretized the legal mandate for facilitated access to genetic resources and traditional knowledge for research and developmental purposes. The Protocol ensured equitable sharing of benefits to the indigenous and local communities that have shared traditional knowledge and contributed for the conservation of biological diversity. As a party to the Convention on Biological Diversity as well as the Nagoya Protocol, India has been implementing the Convention and the Protocol through the Biological Diversity Act, 2002.

The Biological Diversity Act, 2002 provides facilitated access to biological resources and associated knowledge based on prior approval and mutually agreed terms. Even though both the Convention on Biological Diversity and the Nagoya Protocol use the terms “genetic resources,” the Indian Biological Diversity Act regulates “biological resources.” This gives a broader scope to the regulation and benefit sharing. A three tier-mechanism has been created under the Act to regulate access to biological resources and associated knowledge and to ensure benefit sharing. The National Biodiversity Authority at the federal level provides prior approval to the non-Indian entities for research and commercial utilization of biological resources. This Authority also regulates transfer of research results and transfer of accessed biological resource to a third party. Any application for intellectual property protection for any product or process involving biological resources requires prior approval of the National Biodiversity Authority. The State Biodiversity Boards established in the States regulate access to biological resources by the Indian citizens at the state level. Both the National Biodiversity Authority and the State Biodiversity Boards determine benefit sharing at the time of granting approval. However, the State Biodiversity Boards do not have any clear mandate under the Act to accord approval and fix benefit sharing. This issue has been raised in the case of *Divya Pharmacy v. Union of India* (2018). The Biodiversity Management Committees established at the grassroots level in the local bodies have major duties of conservation and documentation of biodiversity and the associated knowledge available within its jurisdiction. These Committees also have the power to levy access fees from the persons accessing biological resources within its jurisdiction. The Biological Diversity Rules 2004, and the Access and Benefit Sharing Regulations 2014 aid the implementation of Biological Diversity Act.

Nevertheless, the implementation of the Biological Diversity Act has been entangled with multiple challenges due to convoluted procedures, different enforcement approaches of State Biodiversity Boards and lack of clarity in the law itself. Hesitation of industry stakeholders to comply with the law and lack of participation and awareness about the access and benefit sharing process on the part of the local communities add the complexity to the implementation of the law. All these issues not only pose threat to the implementation of biodiversity law, but also threat to conservation and sustainable development. This paper will critically analyze the importance of conservation of biological diversity and sustainable use of biological resources globally and in a developing country like India to further sustainable development. It will shed light on the difficulties in implementing the biodiversity law in India. This paper will also examine how access and benefit sharing regime in India impacts research and innovation for sustainable development and how it benefits biodiversity conservation and local communities with the help of case studies.

**Keywords:** Access and Benefit Sharing, Convention on Biological Diversity, Innovation, Nagoya Protocol, Sustainable development.

**Leadership for Promoting Sustainable Development: A Study of Nongovernmental Organization Leaders in Haiti**

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**Abstract**

Nongovernmental organizations (NGOs) have played an increasingly important role in global governance. Since the end of the Second World War, they have been involved in every aspect of social, economic, environmental, and institutional life in the whole world. The presence of NGOs has been seen as a necessity for the developing world, but much more so for low-income countries such as Haiti. The amount of scholarship dedicated to the post-2010 Haiti earthquake revitalization indicates that Haiti must heavily rely on the leadership of nongovernmental organizations so that the country can achieve its sustainable development goals by 2030. However, significant delays in progress to date makes one question NGO leaders' readiness for leading sustainable development initiatives. Since achievement of sustainable development requires certain characteristics and acumen among the NGO leaders, more must be known about the NGO leadership.

This research study examined the relationship between leaders' characteristics—leadership experience, knowledge of sustainable development, internalized moral perspective, balanced processing of information, and relational transparency—and the impact or location of their organizations. MANOVA results revealed significant group differences. The difference was that low impact NGO leaders reported higher levels of leadership experience and knowledge of sustainable than their medium and high impact counterparts. This study contributes to the NGO research literature by shedding light on some leader characteristics that should be emphasized in NGO leadership development programs in Haiti.

**Keywords:** Haiti, leadership, leader, nongovernmental organization, sustainable development

## **Human Settlements Development in Kenya. Prospects for tackling Risks associated with informal settlements**

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### **Abstract**

The perpetuation of informal settlements in cities such as Nairobi where more than 70% of urban dwellers live in informal settlements poses a challenge to socioeconomic development. This work attempts to unpack the risks that emanate from this state of affairs. The extent of the threats to the economy particularly the tourism sector is visited to proffer possible strategies and policies to counteract these. The risks associated with the informal settlements encapsulate health hazards, crime, instability and may stifle and undermine the efforts to boost tourism, which is a key contributor to the country's economy. In presenting the informal settlements risks the paper examines the socio-economic and political factors that have exacerbated the risks and undermined the efforts to address informality in an amicable and participatory manner. The deep urban poverty and migration have remained a challenge to many cities

Human settlements in most of the third world countries particularly in Africa have tended to be shaped and reshaped by massive urbanisation especially after attainment of majority rule. The resultant effect of this is huge proliferation of informal settlements especially in big cities and Kenya is no exception to this phenomenon. This paper unpacks the government's policy and strategy to tackle human settlements in Kenya. Using document analysis and key informants interviews the paper explores the adequacy of policy on Human Settlements in the country and the strategies put in place to ensure adequate human settlements. Furthermore, the paper examines the successes that have been achieved to date in terms of policy implementation and importantly the possible ways of enhancing better outcomes. The paper argues that some important efforts have been made to tackle human settlements challenges to date; however, there is more that needs to be done. It aims to contribute to practice and theory by highlighting prospects for better human settlements provision in the country and in the region in general.

**Keywords:** Informal settlements, urbanisation, co-production, land use, health hazards

### Analyzing Software Repositories over Time

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#### **Abstract**

This research developed a software tool to analyze the complexity of source code files in Git repositories over time. The quality of software is increasing more and more, so that different scales of software are developing rapidly to manage software quality. Software complexity metrics is one of the measures that utilizes some of the attributes of software to determine their impact on software quality. Software complexity measurement is one of the paramount components of software metrics and relates to the cost of software development and maintenance. In order to improve the quality of the software and the controllability of the project, it is necessary to control the complexity of the software by measuring the associated aspects. These software complexities must be calculated and monitored perpetually. One of the main goals of software metrics is that it applies to process and product metrics. It is clearly considered that a high level of complexity in a component is bad compared to a low level of complexity in a component. The research is proceeding by covering some of the more efficient software complexity metrics such as Cyclomatic complexity, Lines of code and Halstead complexity metric and their impact on the software quality. Also, empirically validated novel metric will also be used to calculate software quality.

**Keywords:** Software complexity ; software quality ; Cyclomatic ; Halstead ; LoC ; Comprehensibility

### **An Economic Analysis of Paddy stubble Management Technology in Amritsar District of Punjab**

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#### **Abstract**

The present study was undertaken to assess the economic evaluation of paddy stubble management technology in Amritsar district of Punjab. The study was based on the primary data collected for 2018-19 year from farmers selected through multistage random cum purposive sampling technique. The requisite primary as well as secondary data was collected to accomplish the objectives of study. The data was analyzed by using tabular analysis , chi-square and logit analysis. The study concluded that cost of paddy per acre increased with the adoption of paddy stubble management technology. With the use of paddy stubble management technology the cost of inputs per acre decreased and yield of crop increased. The decreased cost of inputs and increased yield of paddy per acre compensates the cost of paddy stubble management technology. It was found in the study that age, availability of machinery with the farmers , less use of inputs due to adoption of technology and land operated by the farmers were the main reasons for adoption of the technology. Opinion survey of the farmers revealed that high cost of paddy stubble management technology , non availability of stubble management technology with co-operatives were main constraints among non adopters of the technology. For maximum adoption of paddy stubble management technology it is suggested that more paddy stubble management machines should be made available at co-operatives and it less cost. There is an urge to create awareness among farming communities to incline them to understand importance of crop residues in conservation agriculture for sustainability and resilience of Indian agriculture. It was also suggested that farmers who adopt stubble management technology should be given incentives for its adoption.

**Keywords:** Adopters , burning, non adopters ,paddy, Stubble management



## **Inclusive Economic Growth within the context of Sustainable Development in India: A Cross State Analysis**

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### **Abstract**

The world economies have unified in striving to achieve the goals of sustainable development. Accordingly, development economics has witnessed several shifts, and the current shift is towards sustainable development coupled with inclusive growth. The struggle for economic growth and prosperity have created imbalances in the different regions of many developing economies. However, sustainable development is a term coined to ensure that development takes place in such a way that the resources of a country are preserved and passed on to the future generations unimpaired, and, at the same time, guaranteeing intra-generational and inter-regional equity. The current paper purports to assess the outcome of inclusive growth among 15 major Indian states. Inter-temporal aspects are studied using data pertaining to 2001 and 2011. The study has made use of secondary data sources, which are widely authentic. The sources are: (i) the different rounds of National Sample Survey Organization (NSSO), (ii) Planning Commission reports, (iii) Census-2001 and Census-2011 reports, (iv) Finance Accounts and State Budgets and (v) reports of other key departments of Government of India. The theoretical framework for modelling inclusive growth has been constructed by incorporating six different indicators of growth dynamics – basic economics, amenities, human development, gender equity, financial inclusion and governance. In focal terms, the analysis deals with construction of a Composite Index for Inclusive Growth based on the above indicators. The paper has also carried out an econometric analysis to test the significance of the chosen indicators in determining inclusive growth. The results show that the states of Kerala, Tamil Nadu, Punjab, and Maharashtra are better performing regions. On the other hand, states of Uttar Pradesh, Bihar, Odisha and Madhya Pradesh represent poorly performing regions. Further, the findings have corroborated that poverty, income inequality, employment and human development indicators of literacy and life expectancy are the dominant determinants of inclusive growth in the Indian context, as well. The above findings have validated the findings of some of the leading studies of Government of India and other research agencies. In theoretical sense, overall, the regional macro-economic characteristics are supported by findings. . The present comparative study of inclusive growth outcome of different Indian states suggest for more concerted policy regime by the central and state governments. However, it may be cited that the country has set firmer foot to overcome the inter-regional imbalances of growth and development through a wide range of instruments, concurrently.

**Keywords:** Composite Index of Inclusive Growth inclusive growth function indicators of growth dynamics, inter-state imbalances, Sustainable Development Goals (SDG),

## **Leverage Points Meets Sustainable Transformation: Speeding Up Sustainability Progress**

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### **Abstract**

As part of exploratory research for a Ph.D. on large societal changes, the author attended conferences in two academic fields highly related to this subject: Sustainability Transformations and Sustainability Transitions. These were: “Leverage Points for Sustainability Transformation” in February, 2019 at Leuphana University, Luneburg, Germany, the main focus of this presentation; and “The Annual International Sustainable Transitions,” at Carlton University, in Ottawa, Canada.” The latter is treated briefly, to compare to the former.

The first Conference focused on retrieving and inserting one of the classics of systems giant Donella Meadows into the European-centric Sustainable Transformations field. It explored whether the metaphor and some of the characteristics of Meadows’ original 12-level hierarchical framework could fit within this field, especially its enticing promise of increasing systems level impact in exchange for relatively low levels of effort. That ramped-up effect is what is needed in a young field facing the dilemma of sensing we’re running out of time, while nearly all the precedents it studies seems to show that big societal changes have to take decades—time we no longer have.

Besides conference attendance, results are based on observations from: active participation in the sessions; review of all students’ posters and discussions with students; sampling the range of communications modes offered, some of which were unconventional and apparently designed for different learning styles (e.g. extensive real-time cartooning and an Improv); two articles by the organizers; and comments by the author at the ending “Fishbowl” plenary session.

The conference was largely successful in re-discovering some of the potential of the leverage points framework, a major accomplishment. Their ideas, though, need to extend much further.

A major way would be to develop the second highest ranking of the 12 leverage points: identification of problematic mindsets, and then at least begin to suggest how to change some of these, consistent with the highest ranking one: challenging the paradigm/mindset.

The likely focus of the Ph.D. research asks why sustainability progress has been so difficult, and hypothesizes one reason are problematic mindsets, or mindset barriers. Further, while the existence of a few large mindset barriers are known (e.g. the common expectation that change must be slow and incremental, by its nature, makes it more difficult to conceive how to do it more quickly), a further hypothesis is that they are actually pervasive, making actual problem-solving even harder.

The common view of a “mindset” is extended, with several approximate synonyms; e.g., cognitive biases, blind spots, social facts, socially constructed assumptions and unstated beliefs. They are not usually suspected, get in the way of seeing, knowing, and therefore doing sustainability, and, inconveniently, cannot be blamed on enemies. They can even be shown by those working towards Transformation, such as at the conference itself. They can range from high level ideas to even personal decisions made during a conference, such as whom to approach to strike up a conversation, or how real in practice is my self-identified “open mind?”

Two examples of mindset barriers shown were despite the messages heard: “avoid radical certainty” and practice “radical listening,” little attention was paid to the threat to transformations, and actual set-backs, from now worldwide populism movements. It was as if these don’t exist, offer nothing positive worth listening to, or the (potentially minimizable) backlash which could come from them aren’t relevant. This is despite the systems perspective, a major tenet of Meadows’ work.

Another example was a strong critique of conventional science by some speakers, without also encouraging the need to maintain much of its strong foundation. Ironically, invoking populism again, other than the very different political

leanings, as it was clear the views expressed are from the left, the apparent position on science superficially resembles populists' distrust of "elitist" and "biased" science.

That is not the message the many student attendees should hear. Instead, students should be explicitly charged with co-evolving science to meet the challenges of sustainability, using the best of the old and the new, which is harder to do if they only hear the critique.

A hybrid approach to science would be more consistent with developing "a framework...[with] tremendous potential to help reveal key, hitherto undeveloped avenues to sustainability," which the conference organizers see as the potential of absorbing the leverage points framework into Transformations.

A contrast was found on some of these points at the Sustainable Transitions Conference. Even though the latter was one of the first conferences on Transitions in North America, just four months later, there was some progress in overcoming some mindset barriers. For instance, there was a session recognizing, but deconstructing and even re-thinking, the threats from populism.

The results of these observations might guide some early theory development as first-step academic literature searching did not find much existing work on mindset barriers and big societal change. This can be explored with the audience.

**Keywords:** Accelerating Barriers Change Leverage Mindsets

**The Global Political Economy: Principled and Shared Decision-making  
Policy Dynamics for Sustainable Development Action with SENSE.**  
Illustration- Plastics Sustainability Transition

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**Abstract**

Policy dynamics of the global political economy play the most significant role towards safeguarding our natural resources and effecting sustainable economies.

This paper aims for *systemic changes in action-oriented policy cycle for sustainability transitions* [Markard et al, 2012] as the way ahead for sustainable development and ever safe, secure, resilient and happy planet.

After the adoption of the transformational vision 2030 Agenda to achieve the 17 SDGs [Sustainable Development Goals, 2015] and their 169 integrated and indivisible targets - most governments have failed to turn them into real policies, even worse are moving in the opposite direction [Global Policy Forum, 2018]. Also, the sustainability efforts of SDG17.13-19 *Partnership for the Goals*- Policy and Institutional Coherence saw commitments to follow a holistic approach and broad target setting with non-collaboration and non-coordination thereafter, contributing to ineffective policies and action within and between nations.

To counter this operational-knowledge gap, the paper proposes *Policy-making and Action coherence for nations to drive "Sustainable Consumption and Production patterns"- SDG12*, a lever and ice-breaker that can positively impact other SDGs as a universal strategy/implementer with *Principled and shared Decision-making* in collaboration with *sustainability drivers or interdisciplinary knowledge support systems* - local and specific SDG focused global networks, think tank, intergovernmental bodies/secretariats, NGOs/NPOs entailing *citizen participation* for understanding the concerns and setting the *right policies* for sustainable development.

The proposed strategy is explained through SENSE (Systemic Enquiry, Norm for Sustainable Equity)- A *Systemic Decision-Centric Action Framework and Methodology* [Sai Dharani, ICSD Sept 24-25<sup>th</sup>, 2019, UNSDSN-Columbia University] to design, plan, monitor, evaluate and map the chosen solution/s for SDGs in conformity to the *Six Sustainability Dimensions with 5Ps* (People/Social, Planet/Ecology, Prosperity/Economic, Peace, Partnership/ Governance, Cultural/Ethical(time) [Waas et al, 2014], [Transforming our World, 2015]. Based on *Systems Thinking* [Aronson,96] SENSE allows to understand complex systems as a whole, reinforces and balances processes for *Sustainable Outset*.

The paper further illustrates – Plastics Sustainability Transition with SENSE as a step-by step process on how the sustainability collaborators, every country individually, mutually and coherently can work for sustainable outset, develop and implement robust policy cycle for *protection and enhancement of larger Good* (Planet species and resources).

In essence, this paper seeks to address the *global challenges for sustainable development* through the *principled-shared decision making strategy for sustainability transitions/SDG12 with SENSE* decision-making methodology as a *one-page action summary depiction for action-oriented Policy cycle coherence for nations to take informed decisions* and also *identify the roles of the whole-of-society* (individual, communities, corporations/institutions, governance) to implement sustainable actions so that issues could be solved holistically at the local, national and international level effecting on-ground positive change in a short time towards *Sustainable Equity*.

**Keywords:** Action-oriented policy cycle, Principled and Shared decision-making, SENSE, Six Sustainability Dimensions with 5Ps, Sustainability Transitions/SDG12.

## **Skill Development Programs in India- Emerging tool to address sustainable human development**

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### **Abstract**

India is among the youngest nations of the world having an average age of 29 years. This is a phase where the country is facing demographic dividend at the same time challenge to meet the aspirations of its growing youth population. On the economic front, markets are far more dynamic as they are changing with every fraction of second. Job markets are no more predictable as what is successful today is obsolete tomorrow. Hence, in order to address the need of changing times, Government of India has launched skill development initiative in a big way. Skill Development is one of the most important agenda for the Government of India at this point of time. The nation is well aware of the fact that for a sustainable human development, skilling the youth is the key. Therefore, a dedicated Ministry of Skill Development and Entrepreneurship has been setup in November 2014 which is now a full grown ministry. Not only this, there are other key Central Ministries which are contributing in skilling its youth in a significant way. There are departments which are addressing the skill development needs of different target audience such as rural youth, urban youth, underprivileged sections of the society, women etc.

Indian Government is playing a major role to skill, upskill and re-skill its young and middle age so as to prepare a nation which is future ready. It has emerged as a funding agency which has infused large amount of money so as to invest in the future of its young population. At the same time, it is attempting hard to regulate the quality aspect through setting up of regulatory machinery for skill development initiatives in the country. The implementation is being done in close watch of the Government so as to ensure that skill development becomes a major turning point of Indian youth in the coming times.

There is no two opinion that India being so diverse and big is facing a different set of challenges in meeting the skill development needs of its nation. At one place where diversity creates opportunities for number of skilling areas however, maintaining standardization becomes a problem. Therefore, India's flagship program of skill development is a case in itself which other countries can refer and learn. There are success stories as well as lessons from which fellow countries can re-define their initiatives to offer sustainable human development.

**Keywords:** Re-skill, Regulatory Machinery, Skill Development, Upskill

## **Development projects and public involvement: Assessing participation through the lens of the capability approach**

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### **Abstract**

The role of the public and the private sector in the development of infrastructure has evolved considerably over time. Initially, provision of amenities such as, transportation infrastructure, power, hospitals, telecommunications and so on, was regarded as public goods to be provided by public funds. Gradually, there was a reversal in this trend, from the 1980's, with the increased requirement for infrastructure development, growth of international financial markets and the increase in foreign investment to developing countries. At present, the investment needs of many developing countries remain enormous; yet, meeting these needs is essential to ensuring continued growth, especially in the area of infrastructure development. In most parts of the world, governments collaborate with the private sector to raise the requisite funds to execute large-scale development projects. Governments may rely on public or private funds from, including but not limited to, multilateral development banks (MDBs) and commercial banks, to provide funding and guarantees for projects. As developing countries have struggled to modernize and industrialize, their demand for large-scale development projects has grown at a staggering rate. For instance, it is estimated that Africa requires investments in the region of 93 billion US dollars per year to meet its extensive infrastructure deficit.

However, notwithstanding their positive contribution, owing to their scale and technical nature, implementation of development projects often carry adverse social, economic and environmental impacts. Execution of large projects may require resettlement, community alienation from traditional lands, or otherwise affect socio-cultural groups whose needs may not be adequately considered by project proponents. Having in mind the adverse impacts that may ensue as a result of implementing projects, this article seeks to promote the involvement of affected parties in the development decision-making process as a means of minimising these adverse impacts. Also important in this regard is the integration principle underlying the concept of sustainable development. The principle of integration provides a basis for balancing social, economic and environmental aspects in decision-making.

The article highlights the provisions of international consensus documents pointing to the importance of integration and participation, especially in jurisdictions where socio-economic and regulatory challenges impact on public involvement in development decision making. To provide a practical basis for the article, the article identifies gaps in the legal framework that ought to promote participation in development decision-making in Nigeria and builds on Sen's capability approach (CA) as a framework for promoting the participation of individuals.

Further, the article links the discussion on participation to Sen's CA by drawing on certain aspects of Sen's theoretical framework. The article employs the framework of Sen's CA to create a role for individuals in the development decision-making process. Sen's CA provides a broad framework that could be used to analyse the role of individuals in development decision-making. The article employs the CA as a basis for analysing individual action to promote engagement in decision making-processes, and by extension, sustainable development. Sen's approach supports a bottom-up analysis with individuals seen as the most important component in development analysis. Lastly, the article critiques the CA by focusing on challenges with operationalisation and agency.

The article charts a means for promoting participation in the development decision-making process by relying on Sen's CA. Looking through the lens of the CA, individual input and engagement in the development decision-making process could be enhanced. The article highlights the adverse impacts of development projects and links it with a discussion of the principle of integration and the concept of participation. Considering the adverse impact of development projects, the article proposes increased participation of individuals early in the project design phase and during the development decision-making process as a way of minimising these adverse impacts.

Relying on aspects of Sen's CA, the article projects a basis for involvement in the decision-making process to be promoted through operationalisation of the CA. The approach employed in this article is interdisciplinary as it draws a connection between development, participation, and aspects of Sen's CA. The paper highlights the gap in regulation and builds on the CA as a means to promoting citizen participation in decision-making and by extension this will contribute to development that is inclusive and sustainable.

**Keywords:** Capability Approach (CA), Environment, Environmental Impact Assessment (EIA), Development, and Participation.

## **Restoring River Ecology through Involvement of Women'**

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### **Abstract**

Ganges is believed to be one of the most sacred river of India with its valuable ecological and economic significance. The 2,525 km river rises in the western Himalayas in the Indian state of Uttarakhand, and flows south and east through the Gangetic Plain of North India. Due to greedy exploitation of river resource and increased population pressure and climate change phenomenon make Ganga to lose its pristineness. The majority of population lives in rural areas and their livelihood directly or indirectly depend on river water resource. Same time major cities in plains of Ganga e.g. Kanpur, Allahabad, Varanasi, Patna and Kolkata being located on bank of Ganga Municipal sewage of these cities including catchments water carrying chemical and microbial contamination directly or through its major tributary rivers like Yamuna, Gomti, Ghaghra, Ramganga and Saryu and other uncontrolled man-made waste disposal into river stream is one of the main reason of degradation of ecology of Ganges. Chemical farming practice along riverside is also harming river-life. Women have significant role in the society to raise their children and educate them about social and moral values to become a responsible citizen. This is how women can play lead role in behaviour change of masses to create a river-friendly society. And an aware community will act as 'Guard of Ganga'. This is to be given utmost importance to sensitize common people for positive behaviour change with respect to river and influence policy makers, administration to make and effectively implement the river friendly development initiatives. **Rivers are our lifeline and river resources are** important for economic development of the society and ecological balance in our natural environment. Ganges is home for variety of fresh water species native as well as migratory birds comes for breeding and feeding purpose during winters.

**Keywords:** Fresh water biodiversity, Gangetic dolphin, River ecology, Women and conservation

## Artificial Intelligence- Who is Liable?

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### Abstract

The world is changing very rapidly with the daily changing technology. Invention and Development of the Computers, then Robots and now artificial intelligence has changed the way the world functions. They are becoming an integral part of our society. Computers and Robots take the place of human beings and do all the work of the humans in seconds and with ease. With the growth in the technological world, new dimensions have been added to our society with the help of Robots and Artificial Intelligence. As Artificial Intelligence has the capacity to work with Machine Learning, so it can imitate intelligent behavior. Artificial Intelligence is at one end very beneficial for us but it may prove to be equally harmful too. Artificial Intelligence is not a novel belief, particularly to us who have seen lot of science fiction movies. But in the modern era, it is seemingly more science than fiction. Even though Artificial Intelligence technology is still in its emerging stages in India, there are abundance of opportunities for its development especially in private industries who are constantly participating in the Research and Development of this technology to earn profit from these products. Artificial Intelligence has happened to be an issue of immense concern. Artificial Intelligence entities have become a vital part of human life and can be seen in every field as the technological world is evolving. The major problem these days are the self-sufficient or autonomous systems of Artificial Intelligence that lead to self-reprogramming. These artificial intelligence entities or systems, generally after some time, do not follow or take the earlier program commands or directions. These systems can breakdown or malfunction too. But could they become dangerous? What if an artificially intelligent entity or product commits a crime or even an accident, then who should be held liable? What if a self-driving car killed a pedestrian? Who is to be held liable for this killing? The developer? the seller? the purchaser? or the authority who gave the permit? Can artificial intelligence be treated as a legal personality like corporations? If yes, can it be subject to law? The general objective of this study is to determine whether Liability of artificial intelligent entities could apply against it, and to whom it might apply, against the Company or against the developer or against the end user and under civil law whether the law of tort applies for claiming damages and from whom damages can be claimed. To achieve this objective, the study uses the descriptive research based on the empirical research the target group of which consists mainly of young people who use the technologies based on Artificial Intelligence. The paper also studies the dangers of Artificial Intelligence especially in cases when it is specifically programmed for control of weapons and heavy armory and also in cases where a slight bug can cause mass destruction.

**Keywords:** Artificial intelligence, Damages, Legal personality, Liability, Technology



**Impact of Post-harvest Loss Interventions on Post-Harvest Losses of Maize among Small Holder Farmers in Tanzania: A Difference in Difference (DID) Analysis**

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**Abstract**

We conducted a randomised controlled trial to test the impact of three simple and cost effective post-harvest loss prevention innovations suitable for smallholder farmers in low income economies. The interventions include, use of tarpaulins, use of hermetic bags and use of simple mechanised maize sellers. We use propensity score matching (PSM) and difference in difference (DID) method to empirically evaluate impact. Results show that combined use of the three innovations by smallholder households contribute to a reduction in postharvest losses amounting to about 273.6 Kilos of maize per household (About 3 bags per household). We conclude that simple cost effective postharvest loss mitigation innovations could go along a way in combating food security and increase household incomes.

**Keywords:** Difference in Difference, Post-harvest loss, Randomised control trial

## **Intergenerational Equity with regard to Dynamic Efficiency**

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### **Abstract**

The paper reviews the economic and environmental status of the world and the assets and the conditions our future generations will be exposed to. Our current idea of sustainability is mainly made up of weak sustainability (i.e. replacing natural capital with human capital); egalitarianism between two generations is missing. While looking upon the Dynamic Efficiency aspect, this study analyses the various policies adhered by many countries. Intergenerational Equity is conceptualized very vaguely by many people and this paper hopes to broaden the mindset of people.

In context to the topic, Intergenerational Equity is the idea of the fairness between two generations. It is a growing cause of concern due to the burdening of future generations with massive debt, climate change etc.

Dynamic efficiency is situation where it is impossible to make a generation better off with making the other worse off.

As the Global Debt level is increasing many “zombie firms” (a firm which cannot meet pay its debt without taking out even more debt or liquidating assets) are unable to cover the interest rates from their current earnings/profit. According to the I.I.F. Interest Coverage Ratio of many small firms in many countries is below 2 and sometimes even 1. The probability of a global recession is on the rise. According to the Bank Of England it is estimated that there is more than US\$2.2 Trillion outstanding worldwide in leveraged loans, which is more than what there was in the Great Recession of 2007. The student debt is over US\$1.5 trillion with as many as 44.7 million people in debt in the US as per the Federal Reserve Bank of New York. These and various other factors including federal deficit are a huge burden on the future generations. Economies have the potential to be successful if they include the idea of dynamic efficiency.

The issue of climate change is of a huge worry for us and the future generations. Constantly depleting resources, lack of fresh drinking water and clean air are a huge burden on us and the future generations as they are basic human necessities that the world slowly is slowly losing access to. World governments should impose strong policies that help in distinguishing between ethical and non-ethical practices and push forward the idea of better remediation, avoidance, efficiency, cost effectiveness, design, resource utilization, environmental quality, energy security, and sustainable development. Limiting the extraction of various resources to a reasonable amount such that it would be beneficial to both us and the future generations should be prioritized.

This paper aims to broaden the mindset of people and to encourage politicians to make the correct policies with regard to these topics.

**Keywords:** Dynamic Efficiency; Federal Deficit; Global Debt; Global Warming; Intergenerational Equity

## Free Speech and the Curious Case of the Sedition Law in India

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The recent spate in instances of invoking sedition laws against student activists, public intellectuals, journalists and human rights activists in India has been viewed with alarm and raised some important questions about the direction in which the world's largest democracy is moving towards, using a draconian law of the colonial times as an excuse. Section 124A of the Indian Penal Code makes "whoever, by words, either spoken or written, or by signs, or by visible representation, or otherwise, brings or attempts to bring into hatred or contempt, or excites or aims to excite disaffection towards the Government established by Indian law" eligible to be charged with sedition. Originally drafted by Thomas Macaulay, the inception of this law in India dates back to 1870 when the British introduced it to curb dissenting nationalist voices in the country. Targets of this law include renowned freedom fighters like Bal Gangadhar Tilak, Mahatma Gandhi and Annie Bessant.

"Take again Section 124-A of the Indian Penal Code. Now so far as I am concerned that particular Section is highly objectionable and obnoxious and it should have no place both for practical and historical reasons, if you like, in any body of laws that we might pass. The sooner we get rid of it the better", said Jawaharlal Nehru, the first Prime Minister of India, while discussing an amendment to the law in Parliament. It is ironic that this law has survived for over seven decades since India's independence and has come back only to haunt the safe-guarders of democracy in the country.

This paper deals with questions like how the sedition law coexists along with Article 19 of the Indian Constitution that guarantees freedom of speech and expression as a fundamental right to its citizens; aims to trace the changes in the sedition law over the years along with the latest interpretations of the Supreme Court; depicts how the law has been misused for decades in independent India to curb voices of dissent; and analyze how relevant it is in today's day and age.

The research method followed is mainly theoretical in nature.

The paper specifically discusses three cases in detail, namely (1) Shreya Singhal vs Union of India of 2012, where the Mumbai Police had arrested Shaheen Dhada and Rinu Srinivasan for posting allegedly offensive comments on social media about the propriety of shutting down the city of Mumbai after the death of political leader Bal Thackeray, the Shiv Sena big shot; (2) sedition charges laid against student activist and former President of Jawaharlal Nehru University Students' Union Kanhaiya Kumar in 2016 for allegedly raising anti-India slogans in favour of Afzal Guru, the 2001 Parliament attack convict, of which no conclusive evidence was found; and (3) the Dr Binayak Sen vs State of Chattisgarh case where civil rights activist Dr Binayak Sen was arrested in May 2007 on charges of sedition and sentenced to life imprisonment by the Raipur Sessions Court on grounds of passing three letters written by imprisoned political activist Narayan Sanyal to businessman Piyush Guha in Kolkata, accusing him of Naxalite links. However, the sedition charges against Dr Sen were dropped by the Supreme Court which also granted him bail and observed that no concrete evidence had been found against him to prove the allegations made by the state.

This paper also throws light on the repeated assaults on free speech through serial arrests or detention of activists like Jean Dreze, Varavara Rao, Sudha Bharadwaj, Arun Ferreira, etc. on flimsy grounds and explores the legal validity of the same along with comparing the cases with similar incidents abroad. A survey too has been conducted among students, lawyers and the civil society to find out what they feel about the sedition law to supplement this study.

The existence of something like the sedition law which presumes popular affection for the State as a natural condition and criminalizes 'disaffection' towards it, in the hands of the ruling class which more than often refuses to distinguish between the country and the government, is not just dangerous but also ends up questioning the fundamentals of democracy and free speech on the pillars of which this nation was built.

**Keywords:** dissent, free speech, India, sedition

## **Need of specific ageing care policies for rural ageing population and elderly women in India**

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### **Abstract**

Improved healthcare facilities including healthcare infrastructure and services have increased longevity in India, which has traditionally been demographically young. The percentage of the elderly in India has been increasing and the population over the age of 60 years is projected to increase from 8% (in 2015) to 19% (in 2050), which means about 1 out of every 5 people in India will be over 60 years by 2050 . This raises concerns about ageing care in terms of financial support, healthcare and social and emotional support to elderly, particularly if families have migrated, leaving elderly members alone in villages. According to the 2011 Census, 71% of the elderly population lives in rural India. The other segment of ageing population which needs attention is ageing women in urban and rural India. In terms of government support through policies for the elderly in India, there are four important policy pillars: a) The Maintenance Act of 2007; b) The Integrated Programme for Older Persons; c) the National Programme for the Health Care of the Elderly; and d) The National Social Assistance Programme. But the key challenges about these policies are a lack of effective implementation; the fact that some hardly cover the costs of basic care; and the fact they do not take into account gender or specific living contexts. The purpose of this paper is to bring government attention to the need for a specific programme for the rural elderly, elderly women (in both rural and urban context). I propose four key recommendations a) financial support -the central government ensure that existing pension must be increased up to INR 5000 (USD 75) for elderly population and ageing widow women; b) Food security- The central government in collaboration with state government must initiate scheme of cooked food for elderly poor in (on the similar model of mid-day meal in schools) initially in rural India and for elderly women; c) Health care: The central government must ensure that elderly women and elderly rural population to must receive specifically designed primary healthcare services for elderly with focus on mental health care too; d) Reduction of rural migration: Central government must look in to the adoption of social start-up Rozgar Dhaba ( employment café) model to provide local job opportunities for the younger rural population and restrict unsafe migration from villages. The program under the proposed recommendation could be funded with funds from the Corporate Social Responsibility (CSR) act (2013), which requires for-profit businesses in India to contribute 2% of their profits to different social development activities and contribution to any fund set-up by the central government ( as per schedule vii of CSR act 2013).

**Keywords:** Ageing, Gender, India, Public Policy, Sustainable Development,

**Assessing Environmental Causes and Impacts of Erosion in Agulu-Nanka Community**

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**Abstract**

The paper is aimed to encourage environmental and sustainability consideration into strategies decision making process, such as the formation of policies plan and programs in curbing the incident of gully erosion. Erosion, a surface sculpture of the earth landscape, an accelerating phenomenon which resulting from movement of soil by water, depositing such detaching soil else where which constitutes global environmental problem, gulping houses, hectares of land and aquatic life. Erosion constitutes major ecological problem in south eastern region of Nigeria and requires adequate scientific and proper technical competence, a progressive albatross, which some geologists attributing to the unsavory development to civil war activities, such as indiscriminately digging of trenches by soldiers as well as detonation of explosives and bombs in the region where war actively raged. Strategic environmental assessment, a tool in preventing, protecting and preserving the environment from gully erosion ogre which constitutes major ecological problem to Agulu-Nanka communities. Application of strategies environmental assessment, a scientific technology enhancing the control of gully erosion menace. Moreover, to access and determine the cause and effects of erosion in the study area for a sustainable development programme.

**Keywords:** Environment, Erosion, Prevention, Protection, strategy

## Post Occupancy Evaluation (POE) to Assess Multifamily Residential Building Energy Performance in India

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### Abstract

Post-Occupancy Evaluation (POE) is defined as the process of systematically comparing a building's actual performance measures with explicitly stated performance criteria. POE is widely recognised as being central to addressing the performance gap between design intentions and the actual outcomes of an occupied building. This performance gap is often arising from miscommunication and over-prediction of the building's performance targets in the design stage. This gap also arises due to incorrect methods, tools, and input data for modelling and simulation. Conventionally, the evaluation of housing performance consisted of either physical monitoring or user satisfaction surveys, except that these two do not provide a comprehensive picture. POE is a systematic process for collecting and analyzing occupant feedback. Past research has highlighted occupant's behaviour as a major issue i.e. how occupants operate equipment and how they adjust to the internal conditions that may vary from design assumptions.

The primary goal of this research is to evaluate the application of POE to assess an Indian Green Building Council's (IGBC) Green Homes Certified multifamily residential building in India. The building is in the city of Jaipur, a composite climate zone, and its performance gap was assessed one-year post-occupancy. The methodology comprised of performing energy simulation of three cases on eQuest: a Base-case model based on IGBC Green Homes base-case parameters, as-constructed case based on Green Homes Certification parameters, and as-occupied case based on POE data analysis. The annual energy consumption from the simulation of the three cases is compared to measure the performance gap. The findings indicate a very interesting departure from the general observation of the majority of literature which states a negative 'performance gap' or overutilization between base-case, and as-constructed and as-occupied buildings. In this study, a positive performance gap emerges, i.e. the as-occupied building performs better than the as-constructed. The positive performance gap mainly emerges due to variations in occupancy numbers, and occupancy schedules, equipment usage, equipment power density (EPD), and artificial lighting usage and schedules. These indicate a certain change in urban lifestyles. The concept of positive performance gap is an unexplored area of research in residential sector which indicates the significance of occupant feedback. This study provides a basis to further

**Keywords:** Annual energy consumption, Green Buildings, Green Homes Performance gap, Occupant feedback, Post-occupancy evaluation

**Life Cycle Analysis of Food Waste Generated on University Campuses: A case study of Montclair State University, New Jersey**

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**Abstract**

Food waste is a critical problem globally with the United States having the second highest food waste generation in the world. Research has shown that about 30 million tons of food is wasted on a yearly basis in the United States, which accounts for almost 40% of the total food produced. This translates to over \$160 billion dollars wasted annually in terms of cost. According to the Environmental Protection Agency (EPA), food waste is the highest contributor to municipal landfills. This waste type decomposes overtime to give off methane gas, which has a global warming potential that is 25 times more than carbon dioxide. A study by the National Resources Defense Council (NRDC) indicate that one in eight Americans find it difficult to feed adequately. Meanwhile, the United Nations have found that over 800 million people in the world cannot afford sufficient food. These indicate that there are other issues associated with food waste asides the actual waste issue, some of which include, food insecurity, greenhouse gas emissions, depletion of water, land and energy resources, and economic loss. Addressing the food waste issue on a national scale may be daunting, difficult to manage and ineffective. It is important to be strategic in dealing with the food waste problem in order maximize the productivity of solutions. One way to achieve this is to identify sectors that contribute the most to the nation's total food waste, in terms of volume per capita. Educational institutions can be considered as one of the densely populated places having a large number of people residing or commuting per time. Out of the total amount of food waste generated in the United States, college campuses are said to account for approximately 12%. An average college student discards about 140 pounds of food yearly, while campus dining halls account for 22 million pounds of food waste annually. There are various challenges in addressing food waste generated on university campuses, one of which is the identification of key areas within the food waste life cycle that have the highest impacts on human health and the environment. To properly examine these hotspots, a food waste life cycle analysis is imperative. The aim of this study was to assess the life cycle of food waste generated on University campuses using Montclair State University (MSU) as a case study. Data was obtained from the University Auxiliary services and the analysis was done using Recipe 2016 Mid-Point method in the Sima pro 9.0 LCA software. The results of the study indicated that waste obtained from meat and fish contributed the highest, with a range of 25% to 35% across all impact categories. Also, the life cycle of the food waste generated in MSU contribute mostly to human toxicity and aquatic ecotoxicity. Scenario analysis was also conducted to quantify the impacts of diverting some of the waste generated by composting at various percentages. Results show that composting 30% - 70% of the waste-to-landfill reduces life cycle impacts across all categories by 25% - 50%.

**Keywords:** Food Waste, Life Cycle Analysis, Universities

**Management of Common Property Land Resources (CPRS), Institutional Framework  
& Economic Development: A Study from India**

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**Abstract**

The purpose of this paper is to evaluate the common property (CP) institutions and their management systems in the context of rural land and water resources. In this study an attempt is made to examine the traditional institutional arrangements and the role of village community to manage local CPRs and the possible alternatives that result in user-group collective action in protecting the communal resources and their maintenance over the years. To appraise the present institutional use-systems, the common property (CP) institutions and customary practices that existed in the past and their present forms are also reviewed. Besides the work attempts to redress the balance between two extreme forms of privatization or state regulation by inviting resource managers and development experts to integrate local level management in the CPRs overall management framework.

Accordingly the paper is divided into three parts. The first part is an assessment of some of the approaches to the management of CPRs with particular attention to certain specificities of the conceptual aspects of the CPRs in the context of the Indian village economies. The second part provides the changing profile of traditional CP institutions and village communities in a historical perspective. The third part gives an assessment of the evolving common property (CP) institutional arrangements and village communities during the post-independence period in the study region. In this part an attempt is made to understand CP institutional mechanisms and customary practices across two different contrasting resource-use organizations, namely, agrarian and tribal village communities, in the Northern Telangana region of Andhra Pradesh, India.

Unlike the previous micro-level studies, in this study an effort is made to assess the extent of dependence of households in terms of employment and income in both the agrarian and tribal social communities. Besides, the focus is on the class structure across both land and caste hierarchy as well as the nature and extent of CPR dependence.

**Keywords:** Collective Action, Common Property, Economic Development, Government Control, Private Property



## **Criminalizing Marital Rape in India: A Step towards Sustainable Development**

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### **Abstract**

The United Nations in the year 2015 adopted certain Sustainable Development Goals with an aim to reduce discrimination of all forms including violence against women. Thus, Gender equality was adopted as the fifth goal for achieving Sustainable development. For any society to progress and prosper, it is imperative that it accords respect to women and provides an environment free from abuse, violence and discrimination. In an attempt to protect the rights of women various laws have been enacted from time to time to criminalize the different types of violence and abuse against women. However, from time immemorial, it has been thought that violence especially sexual assault including rape can only be perpetrated by strangers or outsiders. Within a marriage, a husband could never be thought to have committed the act of rape against his wife as her consent was presumed to be given by the fact of marriage itself. Marital rape is a part of the larger offence of sexual violence perpetrated by a husband against his wife. The term generally implies forced sexual intercourse by a husband with his wife without her consent. In the present scenario it could also include any kind of sexual abuse of the wife by the husband. Marital rape has also been classified as one where force only is used, a battering rape or a sadistic rape. The main concern of the researcher in the present paper is that the act of marital rape is not seen as a criminal offence by the Indian legal regime except in few circumstances. The reason for this is the notion that a wife gives her implied consent to marital intercourse at the time of entering the marital relation. The origin of this marital rape exemption can be traced to a statement by Lord Mathew Hale, a seventeenth century English jurist who enunciated the presumption of “matrimonial consent” which cannot be retracted. The patriarchal Indian society imposes an obligation and duty upon the wife to perform the marital obligation to her husband. Thus a dutiful wife, bound by the concept of sacramental marriage must always obey the command of her husband. Despite the repeated suggestions from international community as well as various committees in India, the government has failed to recognize marital rape as a criminal wrong. Thus reinforcing the age old notion that wife must consent to sexual intercourse in a marriage. In this paper, the researcher aims to present a brief historical perspective of the concept of marital rape, study the definition of marital rape, the impact it has on the victims and to critically analyze the existing legal provisions in India. A brief reference shall be made to the laws prevailing in other countries with regard to this subject. The present paper proposes the criminalization of marital rape in India and suggests that penalizing the same will help in preserving and regaining the lost dignity of a woman in marriage and would pave the way for Sustainable Development of future generations.

**Keywords:** Discrimination, Gender equality, Marital rape, Sustainable Development, violence.

## **The Effect of Digital Financial Inclusion Policy on the Sustainability of Indonesian Rural Banks**

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### **Abstract**

**Introduction:** The Government of Indonesia through the Financial Services Authority (OJK) issued several policies to encourage financial inclusion in Indonesia. Some of these policies include digital financial services and Branchless banking. This service will certainly have an impact on the sustainability of the Rural Banks (BPR) in Indonesia which has been providing “conservative” financial services. This study aims to analyze the Impact of Digital Financial Inclusion Services Policy on BPR sustainability in terms of public perception.

**Material and Methodology:** The research is carried out through an interview to 550 BPR Nusumma Group customers spread across in 11 branches in Java, Indonesia. The data are subjected to analysis via Structural Equation Modeling (SEM) using AMOS 6.

**Result:** The results provide empirical evidences the public sees the existence of BPR is still needed that will drive its sustainability. The Role of BPR has positive influence with its sustainability. The study also concluded that the availability of digital financial will drive the BPR sustainability. The financial services provided through digital financial inclusion services will also drive BPR sustainability

**Discussion:** The respondents are those who are already BPR customers. So that further research is also needed to study the community who are not BPR customers. BPR sustainability will also have an impact on social issues related to employment, so it needs to be ensured that BPRs can continue to adapt to the phenomenon of digital financial services that is happening.

**Conclusion:** A study of BPR sustainability as a result of the existence of digital financial services has never been conducted in Indonesia. The results of this study will be useful for BPR Management, OJK, Fintech providers, Practitioners and Academics to observe what is needed by BPR to support its sustainability from the customer’s point of view. So that strategic steps can be taken as needed.

**Keywords:** Customer Perception, Digital Financial Inclusion, Microfinance, Rural Bank (BPR), Sustainability

## **Special Type Lighting Protection System for Farmer Safe Zone & Thunderstorm Alarming Awareness**

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### **Abstract**

Bangladesh is witnessing increasing numbers of casualties from lightning, a natural disaster. For the last 20 years, mainly because of the rise in temperature that is leading to formation of upper air circulation in the geographical region, experts say. The thundercloud formation occurs due to excessive heat generation over all Bangladesh resulting in thunderbolts and lightning, particularly in the regions where water bodies are high, such as haor areas. One of the records of the Department of Disaster Management shows that from 2015 to 2019 about 1584 people are killed in natural disaster like thunderstorms. About 253 people died in lightning in the Sunamganj haor area. According to the record of the last five years in the haor regions of Sunamganj, Hobiganj, Kishorganj, Netrokona, the number of thunderbolt related death is greater than that of other areas. . In Bangladesh, since 2016, the Ministry of Disaster Management and relief has detected the thunderbolts as a national calamity. In the last 10 years mortality rate study, it is seen that 97.48 percent of the village farmers, workers, day labourers, housewife, students and professionals. At the same time, the death rate of people in the city is less than 2.52 percent. Actual observation can be seen in most of the people died in rural and village area. On the other hand in urban areas the death rate is almost zero by thunderbolts. At this time, another observation can be found in agricultural sectors that people who work in harvesting rice, sowing seeds, planting seedlings 74 percent of people died by thunderbolts.

Department of Disaster Management (DDM) reports put the number of annual deaths from lightning at over 350, but the actual death as per newspaper and media reports 500-1,000. According to statistics compiled by newspaper and media, the death from lightning was 179 in 2011, 319 in 2012, 285 in 2013, 210 in 2014, 274 in 2015, 387 in 2016, 372 in 2017 and 449 in 2018. Thunderbolt has a connection with the increasing temperature of the world So, we developed a system for lightning and thunder protection. This system can save peoples life and wealth.

**Keywords:** Farmer Safe Zone, Thunderstorm Alarming Awareness, Smart Agriculture, Farmer's Safety, Lightning Production

## Group based micro-finance – Beginning of the end?

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### Abstract

Microfinance institutions (MFIs) cater to the financial needs of the people at the bottom of the economic pyramid (BOP); who are deprived of services from formal banking structures, because of lack of collateral or credit records. MFIs provide financial services to customers, majority being women, be it capital to start an enterprise, or to enhance the business that is stunted for want of capital. In a country like India where 60 per cent population lives in villages and half the population depends on agriculture, micro finance has played a vital role in providing financial services to the low income individuals and bring women in the workforce. The group based lending model that MFIs built, helped develop repayment habits and financial discipline among the rural women as also educated them about finance related aspects. However the group based lending model is about to be extinct soon. While there is no empirical data, the trends in the industry point to this. This paper attempts to gauge the reasons for the likely demise of group lending and possible course of action.

The group based lending model with an initial year-long loan of about US \$ 150-200 with weekly or fortnightly or monthly repayment determines that borrowers meet on a predetermined day and time to repay to the MFI officer. The loan amount increases with every cycle and repayment period goes to 2 years. MFIs also offer short term loans to enable borrowers to meet needs such as school fees, buying raw material before a peak season. Mature customers are offered products such as health/micro insurance, loans for energy saving devices, bicycles etc. Academics and practitioners rave about the success of micro finance as panacea for poverty alleviation. Despite reservations in certain quarters MFIs give impoverished populace an opportunity to be self-reliant. The poor woman judiciously use and sustainably deploy funds, enhance income of family and gain recognition in the society as also better say in family matters. A few years as MFI customers establish their individual financial records that makes them creditworthy for banks, and get access to other products and services which MFIs do not offer. With the increasing demand for rural finance, and the inadequacies of formal sources, the MFIs claim that they have immense opportunities in the developing countries. Today the MFIs want the government to empower them for mobilising savings and other liability products.

However, despite the stupendous success, the group based micro finance lending is set to die in near future. The reasons are manifold. Some of these: Market dynamics and ability to covert from sole operator to competitors, Operational logistics and need to scale up products and services, Decreasing borrower connect leading to reduced customer loyalty, Increasing reach of banks thereby creating competition, Higher cost of funds and ability of mature borrowers to get cheaper loans from banks, Change in group and socio economic dynamics. , Need for higher ticket size of loans resulting in longer tenure and proper appraisal of loan applications, for which MFIs don't have expertise

Regulatory and governance aspects where MFIs can not lend beyond a certain amount thereby losing their better and mature customers to banks The microfinance practitioners witness that in more mature markets, the group size is reducing; sometimes it is as low as three. The MFI borrower connect too is going down as the frequency of repayment meeting goes from weekly to monthly. The borrowers feel a meeting fatigue as they borrow from multiple lenders and have to attend multiple meetings where they do not get any new skills and treat meeting as waste of time. On institutional side, in more mature economies, the higher reach of banks and higher loan amount demand has resulted in banks replacing micro financé. While in other cases the banks use traditional micro finance businesses as their extended arms as business correspondents or agents. This helps banks to deal with individual borrowers effectively but MFIs lose out

This paper will therefore will attempt to gauge the efficacy of group based model, basis current practice and opinion of MFI leaders, data in more developed markets, expected role of microfinance institutions in coming years, and evaluate the likely way ahead for MFI model with specific reference to South Asia.

**Keywords:** BOP financing, Customer connect, Group lending, Micro finance, Sustainability

## **Consequences of Urbanization on Wildlife Survival in India and USA - Relevance of adoption of Legislations**

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### **Abstract**

Urbanization has always been an indication of development, but it has indeed created its own set of issues, concerns and challenges that need to be addressed. One such issue of concern is invading into the natural habitat of wildlife in the form of deforestation leading to the choking and killing of wildlife. The quest to be urbanized gradually turned into an individual preference wherein people are yearning for more luxury, be it in the form of posh farmhouses, luxury cars, or automated gadgets - all leading to pollution and disturbance of wildlife survival.

This phenomenon is global with India and USA being no exception. India is the second most populous nation on the planet and one of the biggest developing economies with increasing rates of urban advancement. Whereas, USA falls under the ambit of a developed nation. At this juncture, two noteworthy points to ponder upon are urbanization and the natural life. Urban advancement and natural life stand out amongst the most questionable issues demanding legal intervention into protection and sustainability of wildlife.

On a cynical note, both the countries are welfare nations, but is this welfare extended to the wildlife too? India has accomplished extraordinary rate of urbanization and USA already follows to be an urban country, yet a dunking event rate in the untamed wildlife forms a serious legal issue on both the nations. India has adopted various legislation such as The Wildlife Protection Act, 1972 and Endangered Species Act of USA and these legislations had been formulated in the nation state with regards to urbanization and ecological law while both the nations are parties to the UN Convention on International Trade in Endangered Species. The purpose was to build up the nation in terms of economy, prompting urbanization and sub-blending the untamed wildlife regime. By comparing both the countries, the paper will jointly present a reformation that needs to be considered under one legislation by bridging the gap between the developing nations and developed nations. The empirical method of research will be adopted to compare both the legislations.

### **In light of the aforementioned scenario, this paper by way of a doctrinal search attempts to endeavour into the following:**

1. Relationship between the ascending population, the principal of ecology, shift towards urbanization and the establishment of law regarding wildlife in India and USA.
2. Analysis of urbanization and requirements of wildlife law on a global aspect.
3. Recommend sustainable improvement of urbanization along with biodiversity and the solutions for insurance of natural life.

### **Keywords:** (Five words in alphabetical order)

India, Sustainable Development, Urbanization, USA, Wildlife

## **Perceived Impact of External Quality Assurance on Public and Private Higher Education Institutions in Namibia**

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### **Abstract**

The increasing demand for higher education in Namibia has led to the setting up of mechanisms to provide public assurances about the quality of higher education. Government and Higher Education Institutions (GHEIs) make significant investments to implement quality assurance mechanisms be these internal or external to the Public and Private Higher Education Institutions (PPHEIs).

The majority of the stakeholders agree that External Quality Assurance (EQA) enhances acceptability of quality statements, but there seems to be no empirical evidence to this effect. There is, therefore, a need to assess the usefulness and benefits of EQA on private HEIs in Namibia. The aim of this study will therefore be to assess the impact of EQA on public and private higher education institutions (PPHEIs) in Namibia.

External Quality Assurance (EQA) is becoming an important aspect of Higher Education Institutions(HEIs) in both developed and developing countries as reflected in the development of policies, structures, and systems at national and HEIs levels(NQA 2011:12).This descriptive case study investigated the impact of External Quality Assurance in the Public and private Higher Education Institutions (PPHEIs) in Namibia. To accomplish the stated objectives above, the inputs, process, and output model was used as the basis of this study and the mixed methods approach was adopted for the collection of the data. The researcher adopted a concurrent mixed methods research design to collect both qualitative and quantitative data at the same time. Seven out of ten fully accredited public and private Higher Education Institutions (PPHEIs) participated in this study. Twenty questionnaires that consisted of both open-ended and closed items were distributed among the ten PPHEIs. Fourteen questionnaires from seven PPHEIs representing a response rate of 70% were completed and returned to the researcher. The literature review focused on the impact of quality assurance in PPHEIS.

On the whole, the PPHEIs were aware of the concept of NQA external quality assurance with regards to the processes and role as well as its strengths. The EQA also had more than moderate impacts on PPHEIs' governance, strategic planning, teaching and learning as well as administrative and support services.

The findings of NQA external quality Assurance on the PPHEIs in Namibia were mixed due to the fact that this was the first EQA carried out on PPHEIs where each institution was held accountable to maintain a high standard of institutional quality.

In sum, the PPHEIs have acquired the essence of quality requirements as each PPHEI subjected itself to the EQA conducted by NQA. Similarly, the EQA had made moderate impact on the PPHEIs' governance and strategic planning, teaching and learning as well as physical development of infrastructures and administrative support systems.

The focus of EQA must be more on continuous improvement as well as compliance. All accredited PPHEIs should complete quality improvement plan after the receipt of the EQA report and should submit an annual conformity to the quality report body each year.

**Keywords:** Accreditation, Assessment, Effectiveness, External Quality Assurance, Quality Assurance policy

**The Internationalization of Higher Education Institutions: The Case of the Polytechnic of Namibia  
(Now Namibia University of Science and Technology)**

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**Abstract**

This is an exploratory and descriptive study that investigated faculty members' perspectives on internationalisation in higher education at the Polytechnic of Namibia. (Now Namibia University of Science and Technology) The main objective was to understand the factors that triggered specific departments to embrace internationalization. The study unpacks the reasons why the intensity and level of international engagement have not been consistent across all Schools.

To achieve the objective of the study, a mixed –method research approach was adopted. Both quantitative and qualitative methods were used concurrently. The secondary data was collected from institutional annual reports, strategic plans and policies in internationalisation in higher education. Similarly, primary data were obtained through self-administered questionnaire and interview schedule guide. Fifty- nine faculty members participated in the quantitative phase of the study while six Deans of Schools and one Vice- Rector participated in the key informant interviews. The interviews of the Deans and Vice- Rector were transcribed and their contents analysed manually in order to generate emerging themes upon which conclusions were made. Similarly, the data from structured questionnaire was analysed using the Statistical package for Social Science (SPSS).

The findings of this study seem to suggest that some departments (such as HP-GSB, Engineering, etc.) were more proactive and adopted internationalisation policies to internationalise their departments. Nonetheless, most departments were unable to deal with internationalisation to the same extent as HP-GSB and Engineering focussed on addressing their own departmental local challenges. Furthermore, the findings revealed that most faculty members were either not aware of the institutional internationalisation strategy plan or the budget at the office of PIR for the implementation of internationalisation. Additionally, the faculty members perceived factors such as: lack of policy or strategy to facilitate the process, lack of financial support, administrative inertia or difficulties, lack of coordination of internationalization activities, and insufficient trained or qualified faculty to guide the process in the department as factors limiting faculty members' engagement in internalisation in higher education at the Polytechnic of Namibia.

The study therefore recommends that the Polytechnic of Namibia (Namibia University of Science and Technology (NUST) should adopt Knight (1994) model on implementation of internationalisation strategy. Knight contends that internationalisation strategies should go through six clear stages of development before they can be truly integrated with an organisation in order to ensure that an international strategy is understood by stakeholders (faculty member, institutional staff etc.). These six stages include: raising awareness, generating commitment, detailed planning, operationalising, through the organisation, systematic review and demonstrating top level commitment (Warwick & Moogan, 2011).

**Keywords:** Governance, Globalization, Impact of Internationalization, Institutional Characteristics

**The Italian model of the legality rating for enterprises between reputational investment and sustainable development.**

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***A statement of theoretical concern.***

The relation between corporate reputation and ethical behavior is easily understandable. Nevertheless, this simple statement hides a complex underlying problem: the critical connection between ethical rules and the assumption of responsibility.

It almost seems a *contradictio in terminis*, to the extent that acting ethically does not always mean acting according to legally binding norms.

This study analyses the important attempt observed in the Italian legal system to connect ethical behaviors to the assumption of responsibility with the introduction of the “legality rating for enterprises”. The Italian Antitrust Authority is competent for the issuance, monitoring and revocation of the rating on the basis of various information about the ethical behavior of companies.

***A short summary locating the concern within a wider literature.***

International literature has been dealing with reputational issues since the ‘60s. Stigler associated reputation with the «persistence of quality», arguing that it «commands a price or exacts a penalty because it economizes on search» (Stigler 1961). Later Shapiro affirmed that «a firm which has a good reputation owns a valuable asset» (Shapiro 1983).

The topic is intrinsically linked to the debate on CSR. In particular, by proposing a pyramidal construction of CSR (including economic, legal, ethical and philanthropic responsibilities), Carroll observed that many business executives encompassed philanthropic programs in their firms’ range of activities. This appeared to the Author as ground for evidence that business has no significant problem embracing the role of corporate citizenship «under the rubric of enlightened self interest» (Carroll 1991).

A recent research (Gianguialano & Solimene, 2019) witnessed how an interest for sustainable investments is now noticeable also in the world of finance (in particular after the subscription of the 17 Sustainable Development goals by 193 UN Member States). This tendency has been confirmed also at European level with the Action Plan of 2018 “Financing Sustainable Growth” (Vessia 2019). Given that investing in sustainability provides for a reputational return, such business choices do not imply lower economic returns for the investors in the medium/long term.

The legality rating for enterprises has been contextualized in the reputational debate by eminent Italian literature (Giannelli 2019) as an instrument to prevent a nowadays unaffordable (and not just for big firms) reputational risk and increase the shareholder value.

***The main arguments of the paper and an indication of the supporting evidence.***

In this study it is believed that the legality rating for enterprises contributes to fill the gap between ethical precepts and the assumption of responsibility, connecting practical consequences to the non-compliance with certain rules, many of which of ethical origin.

Yet the efficiency of the instrument under exam does not lie in the imposition of legal obligations, but in the use of incentivizing techniques (and here lies its peculiarity).

As a matter of fact, it connects the voluntary conformity with ethical rules to important economic benefits – as well as the lack of conformity with the same rules to the loss of the achieved benefits.

From this perspective the legality rating appears to “objectify” the reputational investment (and here lies its interest).



***Methodological approach.***

The analysis of the described issues has been conducted from a legal perspective throughout the interpretation of Italian and international legislation, literature review and the factual evidences provided by the Italian Antitrust Authority (AGCM).

***Main conclusions and their relevance to an international audience.***

Businesses are the engine for a change towards sustainable development. The legality rating is a tool capable of integrating sustainability into business choices, creating shared value while improving economic performances.

The legality rating in itself has no costs for companies, though it is necessary to admit that only non-small companies could be able to afford the significant investments at the organizational level necessary to increase the rating score (like the adoption of protocols with consumer associations, the adoption of international and national CSR programs and sustainability indexes, the adoption of anti-corruption protocols, etc.).

Nevertheless, while the use of the instrument is remarkably increasing, a lot of work is dedicated to its improvement. Since October 21st 2019, the Antitrust Authority has also made available a web platform for the compilation and submission of applications and for the communications on the subject, which allows companies to upload all the necessary data to obtain the rating (as well as eventual changes) in a simpler and faster way, increasing transparency and mutual collaboration.

For all these reasons and, in particular, for the innovative approach used to connect ethical behavior and responsibility and to “objectify” the reputational investment, it is overall believed that this model of reputational investment presents relevant profiles of interests for an international audience.

**Keywords:** CSR; legality rating; reputational investment; shareholder value; sustainable development.

## Curriculum and Community – the 2Cs for Community Based Academic Learning with Research, Action and Service (CBALwRAS): a case study from India

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### Abstract

Education provides knowledge, but it is also expected to contribute to action, social change and practical lessons for life. Goal 17 of the SDGs propagate problem-solving at the national and transnational level to build capacity and empower communities and individuals to achieve the well-being they aspire through a shared vision, integrated and increased access to technology, knowledge and finance. The role of the community including corporates, state and non-state or civil society actors at the local, national and international level are expected to bring together multiple competencies to build capacity and better living conditions in all human and environmental sectors.

While government policies and action is focused towards solving global and national issues through macro planning, the paper suggests an additional support strategy to formally bring in existing Higher Education Institutions (HEI) to participate in creating greater access to information on local problems and needs of the community. The interventions at the local level can be facilitated through partnerships developed by HEI with civil society, government support and student participation to achieve sustainable long-term workable solutions. Putting the above model to practice, the case study presents the course of action and results of the model being applied to the local community for need based intervention. Active community participation at every level, from identifying the problem to execution of solutions enhances the outcome and success with a multiplier effect. The results testify to recent trends in development economics which suggests narrow questions and small interventions as the way forward for effective and sustainable development in terms of poverty alleviation.

The case-study presents a comprehensive approach of Community Based Academic Learning with Research, Action and Service (CBALwRAS) through an integrated curriculum, facilitating community engagement at two levels. The institutional macro-curriculum mandates hundred percent student participation through internships and community outreach; while discipline specific courses at the micro-level encourage community research, need-analysis, suggested interventions and active engagement with the beneficiary community partner. A five-year longitudinal partnership has witnessed the successful completion of two need-based initiatives, namely English as a Second Language (ESL) and Computer-Skills for children between the ages of 8-16.

The proposed strategy promotes CBALwRAS as a compulsory and mandatory component of the curriculum at HEIs. The successful pilot of CBALwRAS as a pedagogy in two courses at the Liberal Arts institution offered support to the local under-privileged locality within a five-kilometre radius of the institution. The ongoing project is an example of a strategy for development that incorporates class-room theory-based teaching and learning process with field and applicable real-life education, leading to the institution providing a support mechanism to the community. The focus is not just community service and charity work, but a well-structured course component with graded credits and learning on field through primary and secondary research, short term and long-term longitudinal interaction with the local community. The purpose is to identify local needs through participatory action-based research with the community and provide support for long-term sustainable solutions through interdisciplinary or specific discipline centric lenses and partnerships This may translate into an Institutional Social Responsibility (ISR) project as per government-policy suggestions, which need not be financial in nature, but through research and action. It offers the possibility to employ education systems as a resource and tool for action at all levels for transformation, especially for change at local levels.

The '2 Cs', where 'curriculum' and 'community' form the core indices within HEIs across disciplines - professional or vocational, along with partnerships with the local, civil, administrative and corporate community ensures sustainable initiatives in creating civic minded critically conscious global citizens.

In terms of international relevance, this model can be globally replicated as it provides a 2-pronged strategy both for the individual and the community. For the individual or the student, there is acquisition of transferable holistic domain and experiential knowledge, that can be applied and translated into action. It empowers the population through the efforts of the HEIs in terms of the curriculum and action oriented participation with the community, for sustainable problem oriented solutions towards increased well-being. This will lead to a more equitable and just society in keeping with the goals of the SDGs.

**Keywords:** Community Based Academic Learning, Community Partnerships, Curriculum, Higher Education, Sustainable Development

## Reasons for Students' Absenteeism from Lectures in Selected Tertiary Institutions from Delta State and Edo States of Nigeria: The Students' Views

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### Abstract

Students' absenteeism from lectures in tertiary institutions is increasingly becoming a universal phenomenon which apparently transcends beyond countries, institutions and course disciplines. It has also attracted a wide range of studies in which stakeholders have sought to explain the challenging trend by describing the factors responsible for it and possible solutions to it. The primary factors are shown to relate to the students', lectures, the learning environment and the society at large. This study explored the students' views on the reasons for the absenteeism from lectures, either from personal experience or from that of their colleagues. The study adopted a mixed methodology in a survey research design in which a qualitative approach was used in a first stage by obtaining data in the words of students while the record stage used the qualitative data to explore the students' views in a qualitative approach. The target population consisted of students of students from Colleges of Education, Polytechnic and Universities from Delta State and Edo state. A purposive sample of 156 students which was based on their availability and willingness to participate in this study was used. 20 item questionnaires were constructed, validated and used to collect data. The responses of the students were analyzed using descriptive statistics (e.g. mean – ratings and standard deviation), t – test for independent groups and anova statistics, using SPSS computer packages. The results showed the following, as strong reasons for absenteeism from lectures.

- Laziness and lack of self – motivation X = 3.13.
- Frustrations and emotional trauma X = 3.13.
- Dependence of examination mal – practice and bribery for success in examinations – X = 3.12.
- Sickness and weaknesses X = 3.09.
- Lectures' boring, uninteresting and discouraging teaching method X = 3.04.
- Peer groups, distracting influences X = 3.03.
- Banning late comers from lectures by lecturers X = 3.03.

Other compelling reasons are as follows:

- Giving undue priority to students' politics, associations, clubs and parties X = 2.96.
- Unfriendliness, harassments and intimidation by lecturers X = 2.95.
- Apathy due to difficult courses X = 2.89.
- Lack of interest in studying X = 2.87.
- Hunger and lack of food X = 2.80.

Other reasons which are significant, are as follows:

- ❖ Discouragement due to past performance in examinations X = 2.74.
- ❖ Lack of money for transport from far away residences X = 2.69.
- ❖ Distractions from part – time/ full-time works to raise money for studies X = 2.67.
- ❖ Lack of encouragement from parents/guardians X = 2.64.
- ❖ Availability of the course materials in the library, internet or other sources X = 2.64.

These reasons which are the students' views clearly shows what distracts them from lectures to include socioeconomic factors, students' attitudinal factors, lecturers' variables, examination, malpractice and corruption in the system. The results further showed that gender and age – range of students did not make significant difference in these views of the reasons for absenteeism. These results are discussed in this paper with the aim of drawing the attention of all stake – holders to join forces together to proffer lasting and effective solutions to eliminate or at least minimize this malady. Recommendations are based on the ideas that can be used to tackle this multi-faceted problem in a comprehensive way, inputting our own experience of some effective strategies we have used as lecturers. Strategies should be technical, employ digital technology while being humanistic, in addition, as discussed and recommended in this paper.

**Keywords:** Absenteeism from Lectures, Tertiary Institutions

**Economic Resiliency Model for Disaster Mitigation In Floating Barangays of Malolos City, Bulacan, Philippines**

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**Abstract**

Small islands face many vulnerabilities brought about by natural and anthropogenic causes. These exposures pose potential community losses triggered by disruption in their economic activities. Island system economies are always affected by natural disasters that gives an adverse impact to the community. Mitigating the risk and shocks by disasters means stabilizing and implementing the proper disaster risk reduction management. It entails thorough understanding about the susceptibility and exposure of households to various natural and man-made disasters. Philippines is one of the countries that has many small island communities that are enormously exposed to the shocks of climate change and disaster hazards. This study aims to create an economic resiliency model that can potentially lessen the impact of disaster-related problems in the Philippines particularly in the island communities. Using the islands in Malolos, Bulacan, Philippines as a case in point, the study determined the variables that upkeep economic resiliency during disastrous events. Anchored on the variables used by Orencio & Fujii (2013), adapted from the model of Twigg (2007), this research established the variables that strengthen floating community resiliency.

The study used the quantitative approach using the logistic regression modeling and using descriptive-causal design to determine community and economic resilience of the community. The results were derived using descriptive statistics (such as mean, percentages and cross tabulation) and followed by regression analysis. This study attempted to quantify the factors, which likely influence the resiliency of a certain community, through logistic regression. Results show Infrastructure, Social Protection, Local Government Invention, Education and Training on Disaster Risk Reduction Activities as significant factors in ensuring economic resiliency of island communities to mitigate the adverse impact of disastrous events. Island system economies are always affected by natural disasters that gives an adverse impact to the community. Mitigating the risk and shocks by disasters means stabilizing and implementing the proper disaster risk reduction management. It entails thorough understanding about the susceptibility and exposure of households to various natural and man-made disasters. In conclusion, the ISLET Model for economic resiliency of floating communities was constructed. The study recommends the **ISLET model** that would support economic resiliency for island communities during disastrous events. ISLET stands for **Infrastructure, Social protection, LGU intervention, Education and Training on Disaster Risk Reduction (DRR) Activities**. It is vital to adopt the **ISLET model** in order to mitigate food insecurity, contingent deficiency, inability shift to another livelihood source, lack of proper technology and separation from mainland that limits their interface with government agencies and other parties that would harness the economy of the population.

**Keywords:** community resiliency, disaster prone areas, economic model, floating community, Malolos City Islands

**Exclusion of Kenyan Street children in the letter and practice of Social Policy  
and its implications on development**

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**Abstract**

The phenomenon of street children cut across both the global South and global North albeit more prevalent in the global south. The number of street children are disproportionately high in Africa, Caribbean and the Pacific countries. Scholars (UNICEF 2016, AFCIC, 2011) have estimated the number of street children in the world to be about 100 million although this figure is contested. However, Africa takes a disproportionate share of this figure with about 20% of the global figure of street children in African streets. Studies indicate that the children are driven to the streets by a number of factors including dysfunctional families, poverty, child abuse and neglect among others. In the streets, the children suffer innumerable problems including physical, sexual abuse and exploitation, drug abuse and vulnerability to diseases. Social policies are often developed and implemented by states and non-state actors to address these kinds of problems that street children face. Indeed, there are global, regional and national policies frameworks that have been developed to address social problems in the society including those that affect street children. However, children continue to run to the streets and those in the street continue to suffer numerous problems including being socially excluded from societal activities. This study sought to examine social policy gaps that have led to exclusion of street children from benefiting from the policy interventions and their implications on development. The study utilized qualitative approach to identify social policy frameworks that have led to exclusion of street children, the nature of social policy exclusionist criteria and the exclusionist practices in the implementation of social policy that have contributed to the suffering of street children. The study used Key Informant Interviews targeting policy makers and implementers and content analysis to be able to answer the objectives. The findings show that the development of social policy is largely a top bottom endeavor that lacks the input of the very beneficiaries that it targets consequently is an “expert” policy that does not take cognizance of the peculiarities of street children.

The study identified Kenya National Social Protection Policy (2011), Social Assistance Act 2013, Kenya Education Policy, Health Policy, National Action Plan for children in Kenya 2015-2022 and the County Integrated Development Plans that have excluded street children in the letter. Further, the study shows that the social policies lack congruence on how to provide services to the beneficiaries, with each of them making difference provisions for children. In addition, the study shows that the criteria set out for one to benefit automatically excludes street children. The requirements such as birth certificates and that a child must be in a home or family set up lead to exclusion of some street children. The findings also show that the non-state actors who would have bridged this gap in policy either lack the technical know-how or will to tackle the phenomena of street children. The continued exclusion of street children from the letter and the practice of social policy has negative implications on urban community development. The study established that social policy exclusion of street children compromises their ability for individual growth and lacking competitiveness required for the job market, consequently hinder them from participating in national development. The social policy exclusion of the street children further undermines national development through the insecurity they pose by being in the streets and their involvement in crime, drug and substance abuse. The study recommends a review of existing social policies to accommodate the peculiarities of street children and or a development of targeted social policy framework that would address the plight of the street children. This can be achieved through a consultative process that takes care of the input of the target beneficiaries. In addition, the study recommends adequate resources allocation for the implementation of the social policies. The social policy review must also provide for safeguards that ensure implementations of the policy provisions consequently contribute to the realization of Kenya’s Vision 2030, AU Agenda 2063 aspiration number 6 and UNs Sustainable Development Goal 10.

**Keywords:** Development, Exclusion, Policy, Social, Street

## **The Adoption of Environmental Consciousness and Environmental Leadership as driver of Competitive Advantage**

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### **Abstract**

The objective of this research was first to find out the impact of environmental consciousness and environmental leadership on competitive advantage. Second, this study also need to prove green intellectual capital as an intervening variable. Third, which variable have most get influenced strongly or partially from Green intellectual capital as mediating for the relationship between environmental consciousness or environmental leadership on competitive advantage.

A set of questionnaires survey was distributed to a minimum senior staffs, managers, assistant managers using Google forms as online survey. And hard-copy. We go through linked in at managers community. The total number of respondents can be used were 123 samples collected were analyzed by partial least square structural equation modeling approach (PLS SEM) using Smart-PLS 3 program.

The results show that Environmental Consciousness has direct relationship to competitive advantage, but no relationship between Environmental Leadership to competitive advantage. Therefore green intellectual capital is not a mediator of the relationship between environmental consciousness and competitive advantage. But, green intellectual capital is a full mediator of the relationship between environmental leadership and competitive advantage. Since all the dimensions of green intellectual capital have positive effect to competitive advantage.

The limitation of this research was Environmental consciousness instrument in this research only consider Environmental policy as external dimension Environmental policy and regulation are important to force people to follow the regulation. Instead there is another internal dimension of Environmental consciousness that should be used for further research.

The practical implication for Environmental consciousness is not only considers policy and regulation, but there is a need to concern with knowledge, attitudes and behavior as internal dimension of Environmental Consciousness. In addition, Coordination between Government, professional bodies and business organization is very important to set strategy in increasing the environmental consciousness to keep up with the sustainable development for the future. Next, considers adding dimension of Green Intellectual Capital with innovation and technology process.

The social implication is that government and higher education need to join together to educate society to change their insight for considering the environment. Business organization will also helping in funding this education program.

The Originality of this research was the separation between external and internal dimension of environmental consciousness. Environmental Leadership is also as a novelty variable should be introduced as a driver for increasing Environmental consciousness for future research.

**Keywords** : Environmental Consciousness, Environmental Leadership, Green Intellectual Capital, Competitive Advantage

## “Smart City Project in Dumka: Implication and Impact on Sustainable Tribal Development”

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### **Abstract**

According to the census 2011, India has around 104 million tribals i.e. approximately 8.6% of the nations' total population. The area in which they reside is known as the Scheduled Tribe (ST) areas. The constitution of India has given provisions to control and administer ST areas under article 244(1) and <sup>fifth & sixth</sup> Schedule. Provisions of Panchayat Extension to Scheduled Areas (P-PESA) Act has given extensive power to Gram Sabha (village council) to protect, preserve and promote culture, social and customary laws of the tribes and to take decisions on the implementation of the plans, programs and governmental project/schemes for the socio-economic development of the village. Therefore, before the implementation of any governmental plan, projects or programs in the ST areas, free prior informed consent (FPIC) from the Gram Sabha (GS) is mandatory.

The Provisions of the Panchayats (Extension to the Scheduled Areas) Act (P-PESA), 1996 enactment was a step taken by the GOI to provide for the extension of the provisions of the Part-IX of the Constitution relating to the Panchayats to the Fifth Schedule Areas with certain modifications as provided under Article 243M(4)(b) of the Constitution. This legislation has not only extended the development, planning and audit functions to the GS in the Fifth Schedule Areas but has also endowed it with the management and control of natural resources and adjudication of justice in accordance with traditions and customs. The Ministry of Panchayati Raj (MoPR) was established primarily to oversee the implementation of Part IX of the Constitution, the PESA Act and Article 243ZD of Part IX-A relating to the District Planning Committees. Although the Panchayats have historically been an integral part of rural life in India, these Acts have institutionalized the PRIs at the village, intermediate, and district levels as the third tier of government. MoPR has aimed to combine social justice with effective local governance, with an emphasis on the reservation of 5 seats for the deprived classes of the population, including the leadership positions. Tribal areas generally mean, areas having a preponderance of the tribal population.

Effective implementation of PESA will not only bring development but will also deepen democracy in Fifth Schedule Areas. There are many benefits of PESA. It will enhance people's participation in decision making. PESA will reduce alienation in tribal areas as they will have better control over the utilization of public resources. PESA will reduce poverty and out-migration among the tribal population as they will have control and management of natural resources and will improve their livelihoods and incomes. PESA will minimize exploitation of tribal population as they will be able to control and manage money lending, consumption and sale of liquor and also village markets. Effective implementation of PESA will check illegal land alienation and also restore unlawfully alienated tribal land. Moreover, most importantly, PESA will promote cultural heritage through the preservation of traditions, customs and cultural identity of tribal population.

In India, Jharkhand is a tribal-dominated state, and out of 24 districts 13 districts are declared as the ST areas, which means that majority of the population in these areas are tribal or Scheduled Tribes (ST). Dumka district is one amongst them. Government of Jharkhand has come up with a project known as '**Smart City Project**' in which it will restructure and renovate the whole city into a smart area with all technological advancement. Dumka district has been approved for this project. This step has given threat to many tribals who are settled in Dumka. With this project, many lives, livelihoods, livestock, etc. will get affected. Many tribals will be displaced or will be forced-displaced. In the name of development, the sustainability of tribals, their culture, territory, environment, economy and identity are in threat. The constitutional provisions are to safeguard and promote the tribal identity and empower the tribal masses by allowing them to practice and strengthen their self-governance pattern. The master plan fails to address that how the newly developed city will allow the tribals of Dumka to practice and enjoy the special powers that have been laid down by the constitution to ensure that the tribals can promote their self-governance system. The constitutional framework is somehow overlooked and violated by the developers of the plan. Additionally, the plan also does not show how these provisions will get space or compensated in the new proposed city.

This research paper is to assess the would-be impact of the *Smart City Project in Dumka* on the sustainable development of tribals.

**Keywords:** Constitution, Development, Gram Sabha, Institution, Sustainability, and Tribals

**The MDGs and SDGs in Nigeria and the Cameroons 2000-2019: Some Lessons from Africa**

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**Abstract**

The quest for good governance and sustainable development in Nigeria and the Cameroons started in the 1970s when it became clear that the nationalist politicians had failed to formulate sustainable development policies which could have helped to reduce poverty, unemployment, diseases, illiteracy, and inequality. The rhetorics of rising expectations during anti colonial rallies, became that of depressing frustration and the end product was the introduction of heuristic palliatives by the United Nations (UN) and the International Monetary Fund (IMF) like the: Structural Adjustment Program (SAP), Highly Indebted Poor Countries Initiative (HIPCI), Millennium Development Goals (MDGs) and now the Sustainable Development Goals (SDGs). The paper which used the ethical paradox conceptual framework and content analysis to gather information, observed that since the SAP with her twelve draconian conditionalities, the humiliating HIPCI experiment and the eight points of the MDGs could not address one quarter of both nation's development challenges from the year 2000 to 2019, the seventeen points agenda of the SDGs will also fail in the two countries, if Scholars and all Stakeholders cannot among other issues mentioned in the paper, develop an accepted operational definition of SD, commission an International Monitoring and Evaluation Team, clear all byzantine complexities and "contradictions" involved in the implementation of the SDGs, identify what should be "sustained" and get the grassroots people to be involved in the drafting and implementation of the goals. The essay also suggested what the two countries should do to guarantee SD for their populace and opined that if the suggestions are not digested and implemented in our life-time, the dream of providing good governance and a better standard of living for Nigerians and Cameroonians via the SDGs will remain a veritable mirage.

**Keywords:** Development, Evaluation, Governance, Monitoring, Sustainable.



## **The Tragedy of Floodplains: Why Floodplains are Underutilized and What Can be Done About it?**

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### **Abstract**

Common pool resources (CPRs), widely referred to as common resources or commons, are resources which are hard to exclude from free-riders and one person's consumption reduces the availability of the resource to others. Hardin argued that due to the nature of CPRs, these resources will be overused and hence lead to a 'tragedy'. However, not all CPRs are over-exploited. Some CPRs, such as floodplains, suffer from the problem of underutilization. Floodplains are a special kind of CPR, which are seasonal water-bodies formed due to flooding of privately-owned lands during monsoons. Within the CPR governance literature, floodplains have received little attention. But floodplains are becoming increasingly important due to the formation of an increasing number of seasonal floodplains as a result of climate change and increased flooding, especially in low lying countries such as Bangladesh. We construct a theoretical model using Ostrom's Social-ecological system (SES) variables to explain the higher likelihood of underutilization of the floodplains. We argue that most of the floodplains remain underutilized and ungoverned due to high transaction costs for coordination, limited information and the capacity gap in the relevant community. We also elaborate how the unique 'community enterprise' model can help communities sustainably utilize floodplains and helps towards achieving several Sustainable Development Goals (SDGs).

**Keywords:** Common pool resource, Community Enterprise Approach, Floodplains, SDGs, Climate Change

## Peace as a Strategy to Realize Water Security

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### Abstract

Freshwater is a common resource facing unprecedented stressors across the globe. Expanding water security to an interdisciplinary and holistic framework is one means to address these challenges. An investigation of peace in the context of water security for states and transboundary water systems remains a relatively under-investigated dimension. This synthesis derives from the UN Water's Water Security conceptual framework (2013) that specifically highlights the significance of peace and political stability in realizing sustainable water management and effective water governance. The water security thinking reflects on the multifaceted nexus between drinking water needs, ecosystems, climate change impacts, economic development and enables this framework to examine tenants of transboundary water cooperation within the notion of peace. Water can both espouse beneficial or detrimental outcomes and the plasticity of transboundary water systems is usually mounted on this notion. Noting that >40% of the global population resides in 270 shared rivers basins and some nations receive >75% of their freshwater from upstream riparian states, the transboundary context in global water governance remains pertinent. The chronicles of 'water wars' and the 'global water crises' often linked with structural and institutional challenges of water governance faced by communities and populations in varied socio-cultural and socio-political settings. This paper aims to outline multiple narratives that reinforce water as an instrument for peacebuilding and gaining political stability by building on the knowledge and information centered around the concept of 'Hydro-Diplomacy' and 'Water Security'.

A content analysis is the methodological approach employed in the study wherein up-to-date synthesis articles, UN reports, and commentary of International Non-Governmental Organizations (INGO) on merits and challenges of transboundary water cooperation were analyzed in the context of peace and political stability. It was observed that this aspect is embedded in global water management practices and policies resulting in either negative, neutral, or positive outcomes. Cooperation and conflict in transboundary water relations is an erroneous linear continuum where both purported extremes can have positive and/or negative impacts on hydro relations across states and territories. In addition, limiting the practice of transboundary water cooperation to state actors delegitimizes actors such as INGOs [for instance, the Global Water Partnership (GWP)] and river basin organizations (RBO) to be active partners. Water security conceptualized outlines provided for a multi-level and intersectoral framework that permits *bona fide* cooperation to achieve the various interests of numerous stakeholders. The Organization for Economic Cooperation and Development (OECD) estimates a 3-fold increase in spending is required to meet the Sustainable Development Goals (SGD) for water supply and sanitation -- towards this goal focus on shared water projects can up the benefit- and risk-sharing capacities. Qualitative empirical studies around water substantively prove that water is a co-factor in promoting stability or violence. Oregon State University's synthesis on cooperative and conflictive water interactions (1949 to 1999) reveal that the number of cooperative transboundary water interactions is double the account of conflictive interactions. A positive correlation between state relations and the level of water cooperation along with the links to peacebuilding is established by many recent studies. Good governance that accounts for gender mainstreaming and a human rights-based approach (HRBA) is another key enabler in facilitating water as an instrument of peace. Water management devoid of good governance practices is neither value-neutral nor devoid of political consequences. It is for this reason why good governance practices are essentially in facilitating good outcomes. Intersectoral collaborations assist in determining good water outcomes and how they can be evaluated. In this context, devolution of power in the decision-making process is projected as a dimension that assists to create meaningful participation and sustainable outcomes, such as SDG 6 (clean water and sanitation) and SDG 16 (peace, justice and strong institution).

**Keywords:** Hydro-diplomacy, transboundary water cooperation, water governance, water management, and water security

**Sustainable Development Goals (SDGs) in Bangladesh: Current status, Achievements and challenges particular reference to SDGs 1 and 5**

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**Abstract**

Sustainable Development Goals (SDGs) is an international development agenda. Currently, each country in the world strictly follows this development agenda in its development policy, planning and program. Bangladesh is no exceptional. This paper attempts to critically review the nature and processes of the current status, achievements, and challenges of the Sustainable Development Goals (SDGs) in Bangladesh particular reference to the SDGs 1 and 5. The main objective of this paper is to examine the poverty and inequality from diverse angles including region, income, gender, education, land ownership and social opportunities. Results found that Bangladesh achieved many targets of these two SDGs, but there are many cross-cutting issues within these two goals that need to readdress to overcome the challenges. Some of the challenges are also related with political agenda, some are related with the poor socioeconomic conditions of the country and many of these are related with climate change and disaster vulnerabilities. This paper would be important guideline to the policy makers, development practitioners and concern ministries.

**Keywords:** Bangladesh; Poverty; Rural-urban disparity; Social inequality; Social policy

## Determinants of Effective Collective Marketing Action and Profitability of Smallholder Farmers in Uganda

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### Abstract

Governments and development partners in the world's poorest and developing countries have invested considerable effort and resources to eradicate poverty through the integration of smallholder farmers into agro-commodity markets and global food systems. Collective marketing which is a cooperative approach promoted among smallholder farmers is being used to build viable institutional structures through which smallholder farmers can transform from subsistence agriculture to market oriented farming and competitively participate in global agro-commodity markets. This investment is based on a global consensus that trade is a sustainable strategy to eliminate poverty among poor people in the farming communities practicing subsistence farming in the world's poorest countries. In spite of nearly three decades of investment in most African countries, collective marketing has not achieved the trade effect envisioned and smallholder farmers who are still practicing subsistence farming continue to remain in the periphery of the agro-commodity markets. This situation is an indicator of a conceptual gap among development workers to understanding the determinants of effective collective marketing action, and what influences the profitability of small farm enterprise under the collective marketing models.

This study was conducted among oilseeds (sunflower, soybean and sesame) farmers in Uganda. Oilseeds are major agro-commodities traded in the country for industry production of vegetable oil and a major export commodity. A qualitative approach using Grounded Theory was used. Interviews were conducted to explore the perspectives of farmers and various actors participating in collective marketing and export programs. The concept of theoretical saturation was used to guide the determination of sample size and sampling adequacy. The qualitative data was analyzed manually by reading and re-reading the text several times to generate open codes; axial coding, cross case comparison and selective coding were done.

The findings show that building a shared vision, good governance structures and access to business development services (BDS) are important elements in building collective marketing organizational capabilities. Secondly the availability of a ready market and the competitiveness of smallholder farm business enterprise are vital factors for sustainable access to markets. Farmers in collective marketing organizations that exhibit the required capabilities and are able to access the targeted markets, are more inclined to effectively participate in collective marketing because of a strong perception of accruing benefits from collective marketing. Organizational capabilities and Market access are strong determinants of smallholder farmer participation and commitment to collective marketing leading to greater integration into agro-commodity trading systems and better profitability. These findings provided insights that led to the development of a conceptual framework for building effective collective marketing models. The findings also provide a theoretical underpinning for policy makers and promoters of collective marketing to address the contextual challenges in design support actions to promote collective marketing among different farmer communities. From the findings a "Theory of Collective marketing" has been postulated. The study calls for further inquiry to validate the proposed theory of collective marketing through systematic review of previous studies to build a body of supporting evidence and qualitative studies in different in other jurisdictions. There is also need to conduct quantitative studies to test the underlying hypothesis in the theory. Once fully validated across different jurisdiction the theory will provide a broader framework that can be used to explain and influence the performance of collective marketing interventions and activities of smallholder farmer organizations to increase participation in markets and earn premium profits.

It is anticipated that the findings from this study will inform national debate at both policy, programming and community levels regarding the promotion and functionality of collective marketing actions within practical settings. This new knowledge has the scope to enhance the transition and experiences of farmers, promoters of collective marketing and policy makers in such a way so as to enhance the effectiveness and profitability of collective marketing actions of smallholder farmers. Besides policy and program design, the findings have provided constructs which will act as building blocks for a Theory of Collective marketing.

**Keywords:** Collective Marketing, Smallholder Farmers, Market integration of Smallholder farmer, Market oriented farming

## **Climate Apartheid: The Implications in the Global South of China's Green Revolution in Africa and the USA's exit from the Paris Agreement**

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### **Abstract**

Since its inception in 1948, the United Nations has faced accusations of imposing a 'Western' definition of human rights on nations considered to be the Global South when offering humanitarian aid and development finance. All of the human rights instruments used to promote and inform development policy can trace their origins to more economically developed countries. None of this is truer than in the adoption of the Paris Climate Agreement. The Global North has emphasized the relationship between human rights and sustainable development, often adopting policies requiring recipient states to be held accountable for utilising this assistance in a manner that promotes human rights.

Recognising that two UN Permanent Security Council Members (China and the USA) are not only the largest global emitters of carbon emissions, but also the largest two individual providers of development aid and overseas development assistance; the Paris Agreement aspires to direct and balance the distribution of UN Climate Finance between increasing adaptation and mitigation and provision of support to UN Member States most vulnerable to the effects of climate change, *including* Least Developed Countries and Small Island Developing States.

Sub-Saharan Africa is the largest recipient of development aid as well as climate finance including from both of China and the USA. Whilst traditional humanitarian assistance presupposes an adherence by recipients to human rights; the current climate crisis across the globe has highlighted a steep gap in the enforcement of these requirements creating a 'climate apartheid'. Weak governance and a lack of accountability as it pertains to observance of human rights are unfortunately still one of the largest hindrances to long-term stability and sustainable development in Africa.

And since the USA has left the Paris Agreement and given that China does not have an enforcement mechanism; it is yet to be seen whether richer nations will continue to emphasize human rights when tackling the effects of climate change, or whether their individual political priorities will dominate their policy agendas.

The ill-effects of a 'climate apartheid' will affect the Global North just as much as that region's carbon emissions are exacerbating catastrophes in the Global South. Whilst rich nations may be able to pay for reconstruction, mitigation of floods, subsidise agricultural sectors affected by drought or close their borders to immigrants fleeing the climate crisis for example; the long-term effects of a 'climate apartheid' - where poor nations are not obliged to adhere to human rights provision as part of their climate adaptation and sustainable development strategy - will not exclude rich nations. All of the political priorities such as reducing violent extremism, reducing armed conflict and displacement and access to natural resources, will not be effectively achieved if climate finance and humanitarian aid to mitigate its effects does not emphasize the inclusion of human rights.

This paper poses the question of whether human rights should be central to climate finance, and if so, what implication - on poorer nations - non-commitment to the Paris Agreement by richer nations will have on long-term sustainable development. Drawing from wider literature in the humanitarian sphere as well as by reviewing the UN human rights legislature, the paper will put forward a premise that the creation of a 'climate apartheid' poses a greater human rights crisis than has previously been anticipated.

It will draw from case studies and also analyse US-Sino relations in terms of climate policy and development in Africa. The paper will further review the current national priorities of the USA and China, in particular their foreign policy in Africa, sharing quantitative evidence of climate change in both of the Global North and the Global South. By pointing out the stark difference between Chinese human rights records in Africa and US ones, the paper will conclude by demonstrating that political priorities without due inclusion of human rights will result in limited efficacy in sustainable development in Africa, and render the Paris Agreement ineffective and unenforceable in the long-term.

**Keywords:** Africa, China, Governance, Paris Climate Agreement, USA

## **Courtyard a Passive Design Model for Sustainable Housing Development in the United States**

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### **Abstract**

The environmental issues such as global warming, climate change, environmental pollutions, as well as consumption of fossil energy are defining challenges for the 21<sup>st</sup> century. This research highlights the passive design strategy that comprises a set of principles and methods to reduce or eliminate the need for auxiliary heating or cooling, to attain a quantifiable and rigorous level of energy efficiency within a specific quantifiable comfort level for occupants. It specifically focuses on the passive housing design in the United States as the second largest energy consumer in the world (after China), where 48% of all produced energy is consumed by the building sector, while about half of that is used for heating and cooling purposes. The main attention is paid to the concept of courtyard that is anecdotally known for its distinctive bioclimatic efficiency, particularly in hot climates. Unfortunately, this building typology is not always preferred in modern housing design and construction. Today, courtyard houses are designing all around the United States in different cultures and climates.

Although, only a few designers look beyond the aesthetic values of courtyard as a landscape element, to address the environmental impact of this significant building's component (as a heating/cooling passive system) to enhance energy efficiency for a sustainable housing development. This research attempts to explore which design factors of a courtyard would be more beneficial to provide maximum thermal comfort level for occupants as well as reducing costs and consumption for passive housing in a tropical and subtropical desert climate (Bwh) in the United States (particularly in small and medium dense American cities). To that end, a parametric design optimization was performed to propose an optimized design model for courtyard in this specific zone, and a three-dimensional numerical model was developed, using Rhino/Grasshopper software, the environmental plugins Ladybug, and Honeybee, to simulate a courtyard house to achieve the most optimized design model. Additionally, the impact of three main design variables including orientation, geometrical properties, and materials on indoor thermal comfort were studied. As conclusion, a set of equations were derived to be used in designing courtyard houses in Tropical and Subtropical Desert Climate (Bwh) that can aid designers to design most-efficient low-energy passive courtyard houses in this region. A cost analysis was also conducted using the proposed design equation and the average annual energy cost reduction was compared with that of conventional design. The results show the optimized proposed design model can significantly reduce the annual building energy cost related to cooling and heating in this climate.

**Keywords:** Courtyard as a Passive Design Strategy; Sustainable Energy-efficient Housing; Numerical Simulation; Thermal Comfort; Tropical and Subtropical Desert Climate (Bwh).

**Inward bound to outward bound: Innovative sustainability driven water initiatives by Govardhan Ecovillage**

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**Abstract**

Most of the Rural villages in India suffers from the problem of water scarcity and water contamination. Govardhan Eco Village (GEV) located on the Western Ghats in India was one of those villages suffering from this acute problem. GEV realized it very early where water shortage and groundwater contamination by sewage simultaneously affected it. An integrated effort became necessary to come out of this vicious cycle by water harvesting combined with soil biotechnology plant for 100% sewage treatment, outcome being 1 crore litre water pond backed by 3 lac litre water recharges and another 1 crore litre of water recycled. Outward bound water initiatives of GEV were taken up with a natural desire to share lessons learnt with 50 tribal villages surrounding this community. Participatory action initiatives were launched continuing for over 8 years helping achieve access to safe water through well repairs and deepening, improving water lifting resources, home water purification education programmes and drip irrigation for sustainable agriculture supporting over 3071 families. GEV is now taking these efforts to next level of sustainability by helping water harvesting in villages by replicating Water ponds at GEV. All these initiatives were planned and implemented with 100% community participation of tribal villages in neighborhood of GEV with initiatives from GEV. GEV took the initiative of identifying problems and then partnered with several organizations in different phases of implementation of project, ensuring expert advice was duly utilized. Multiple stakeholder discussions with Water experts, Geological experts, Environmentalists, Engineers and community members including youth, farmers and self-help groups, and panchayat and other local governmental authorities was lifeline for successful project implementation. Besides the direct impact, all the above initiatives in the villages have led to the community empowerment and unity amongst the local people. The integrated Rural development model with Sustainability focused WRD initiatives backed by principle of acting in harmony with nature are easily replicable in India and other countries too. The example of GEV showcases that if the leadership is focused on living based on principles which protect mother nature then it is possible to make suitable interventions to develop a sustainable community

**Keywords:** Climate Change Adaptation, Rainwater Harvesting, Sustainability, Water Conservation, Water Recycling

## Impact of Green Financing for the Sustainability of the Banking Industry

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### Abstract

The term sustainability does not limit to environmental sustainability, it also is about economic sustainability as well. The banking industry has a significant role in sustainable economics. However, there are rear instances where the banking industry, which is the backbone of the financial flow of the economy, concern about the environment. Green finance is the latest concept which is discussed among many sustainable development discussions. This concept of green finance is the latest concept in the financial industry which merges environment sustainability with economic sustainability.

The banking industry is the backbone of the financial flow of the economy. Therefore the banking governance is highly regarded and considered important for the value maximization. The study discusses how the latest concept of green financing contributes to corporate governance in the banking industry. This study is a systematic literature review by analyzing 69 quality journal articles written about green finance, banking industry corporate governance and the impact of applicability of green finance on the corporate governance in the banking industry. The literature screened six valid journal articles and studied in-depth to prove the objectives of the research. Many scholars and researches have discussed and debated on the effectiveness and impacts of environmental action. Further, many studies proved that environmental practices are able to generate a positive effect on the organization by reducing environmental footprints. It was proved that the reduction of environmental footprints causes reduction of cost and increase in organization performance. Hence the study ultimately proves the applicability of green financing is a reduction of environmental footprints and implementation of sustainable value framework. Throughout the study, the research deeply discuss the concept of green financing and how it is being practiced in the banking industry to add value for the banking industry.

Harming the environment through economic activities has become a common issue in the world. Therefore it was understood that many issues such as an increase in carbon emission, global warming, acid rains and many negative environmental impacts have occurred. The banking industry is the backbone of the economic sector can contribute immensely to sustainability. Hence, The research was mainly done to understand the concept of green finance in-depth and its applicability to the banking industry. Further to understand the impact of green finance concept to the corporate governance in the banking industry. Focusing attention on the balance between economy and environment adds value to the banking industry as well as it is a contribution to sustainable development as well. Hence, it is clear that the banking industry contributed immensely for the achievement of sustainable development goals with the implementation of green finance concept.

The research revealed that the concept of green finance directly supports sustainable development goals. Green financing is the banking industry supports finance in retail banking, corporate/ investment finance, assets management and insurance. Therefore this shows that this concept moulds the entire green supply chain in the economic sector. Therefore the implementation of green financing is a development for the banking industry by adding stakeholder value for the banking sector. On the other hand, this is a development concept of sustainability of the economy and the environment. Further, the study revealed that the financial services industry, add value to the entire economy by initiating applicability of the green concept.

Hence the implementation of green finance in the banking industry has a great impact on banking governance. The study revealed that the applicability of green finance, not only improve the sustainable economy but also it has a great impact on banking governance as well. Hence this study contributes to the development of the banking industry as well as contributes to sustainable development as well. Hence this research paper can be taken as a guideline for the implementation of economic and environmental sustainability to the entire banking industry and ultimately the entire sustainability concept protected.

**Keywords:** Banking Governance, Development Banking, Development Finance, Green Finance, Sustainable Development,



## **Is It Fair Now? 2030 Sustainable Development Goals and Gender Equality in the Middle East and North Africa**

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### **Abstract**

*Statement:* One of the main goals of the 2030 Sustainable Development Agenda is achieving gender equality and empowering women and girls. Achieving this goal might not be an easy task in the Middle East and North Africa due to legal, social, and economic constraints. Actions shall be taken to achieve the said goal within the MENA countries.

*Summary:* Gender equality is essential for international development. Achieving gender equality in the MENA countries is one of the challenges facing the 2030 Sustainable Development Agenda. Women in this region do not enjoy equal rights to their peers in the West. Many reasons stand behind the inequality including legislative gaps, absence of rule of law, lack of societal support, and mixing religions with the process of making laws. Understanding and analyzing these reasons would help increasing the chances for achieving goal five on gender equality of the SDGs in the region. Recommendations might include access to information and international sources to women in the MENA. This might also include international societal support as well as taking appropriate measures to guarantee the application of the rule of law in this region.

*Methodology:* The research methodology will be qualitative legal analysis approach. The paper will examine the current situation in connection with gender equality in the MENA region with a deep analysis of the existing challenges. The paper will then analyze the possible tactics to achieve the 2030 SDGs focusing on gender equality.

*Main Arguments:* On the one hand, the UN General Assembly's Resolution on Sustainable Development Goals, as adopted 25 September 2015, lists Goal Five to be "Achieve gender equality and empower all women and girls." This includes ending all forms of discrimination against women, eliminating all forms of violence and harmful practices, recognizing unpaid care, and others.

On the other hand, the MENA countries rank low in gender equity compared to other countries worldwide. For instance, though most countries in the region have adopted the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAWO), the majority have reservations to many of its clauses. Almost all countries have a general reservation on the none conflict with Islamic law or *Shari'a* rules. According to various scholars and gender practitioners, such reservations have rendered the Convention devoid of meaning or unenforceable in the region.

Meanwhile, though most constitutions in the region make specific reference to "gender equality" or at least provide for the general rule of "equality among citizens before the law", existing laws do not provide for equality. Examples include Egypt where women are deprived from the right to join some jobs such as the judiciary. In addition, many countries do not allow passing nationality through women whether to children or spouses. In the same context, many countries have domestic violence laws or penalize domestic violence in their penal codes, nevertheless, according to the UN Women, 37% of Arab women have experienced some form of violence in their lifetime. For instance, in Egypt, 92% of women and girls between 15 and 49 years of age have experienced FGM. Meanwhile, 14% of Arab girls marry under the age of 18. Similarly, the majority of countries reduce punishment for a man who kills his wife caught in committing adultery but not the opposite. Examples include Yemen, Libya, Syria, Bahrain, Qatar, Morocco, and Algeria.

This paper tries to answer the question of the practicability of achieving goal five of the 2030 SDGs, on gender quality, in the MENA countries. An examination of the reasons behind gender inequality in the MENA region comes first in an attempt to understand the current situation. The main reasons explained in the paper include the none application of the rule of law and domination of powerful social norms. Also, lack of community support renders the existing legal framework devoid of meaning or at least undermines its efficiency. Most importantly, the

misconception of Islamic law or *Shari'a* rules as the main source of legislation particularly when it comes to women rights is a huge dilemma before creating a safe legal environment for Middle Eastern women. Finally, legislative gaps or flawed laws is an important reason that should not be ignored

Having a clear understanding of the reasons behind gender inequality in the region, the paper then evaluates the possibility of achieving all or part of the 2030 SDGs, Goal Five on gender equality in the MENA region.

*Conclusions and Their Relevance to the International Audience:* In addition to being an essential human rights requirement, per se, the achievement of most of the SDGs depend on the achievement of gender equality goal. Meanwhile, the MENA is one of the central regions connecting both, the East and the West. All international entities invest time, money, and efforts in gender equality activities and studies in the MENA region including the UNDP, UN Women, UNFPA, ESCWA, and others. Gender equality in the MENA is central to the ILO for example, since it has the world's lowest rate of female economic participation.

**Keywords:** 2030 SDGs, Gender and Development, Gender Equality, MENA region, Women Rights

## The Role of Regulation in Microfinance Institution Governance

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### Abstract

This research uses a unique hand-collected interview sample from 86 regulated and 63 unregulated non-profit organisation (Microfinance Institution - MFI) executives in Bangladesh to analyze the relationships between the regulatory status of the institutions and their voluntarily adopted governance mechanisms. This research focuses on whether the Bangladesh *Micro Credit Regulatory Authority Act, 2006*, which created a regulatory and supervisory body for monitoring of the microfinance industry is associated with superior voluntary governance practices. Discretionary governance practices (such as the election of a council of directors, high attendance at board meetings, voting rights for MFI board committees, internal and external audits, independent and diversified board members, board members' evaluation, etc.) by MFIs. Empirical analysis reveals a positive association between these superior non-mandatory discretionary governance practices by MFIs and the MFI's regulatory status. That is, regulated MFIs exhibit superior non-mandatory governance practices compared with unregulated MFIs.

**Keywords:** Microfinance, Regulation, Bangladesh, Governance

## **Social outcomes of Saving Groups: seeing beyond social capital**

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### **Abstract**

Within the context of development work, facilitating access to financial services has been proved to strengthen people's abilities to improve their living standards and reduce poverty. Microfinance has been praised for supporting micro-entrepreneurship, assisting people to deal with shocks, and improve households' capacities to accumulate assets. Many development organizations (or NGOs) are promoting the establishment of saving groups, or VSLAs: Village Savings and Loans Associations, as a local solution which enables members to save and take flexible credit, using local resources. Instead of depending on external microfinance suppliers, communities are able to base on their own assets to save and take credit.

In the exploration of the social impact of such schemes, academic investigation has focused on the narrow concept of social capital. Most of the published research has examined the impact of VSLAs on the social bonding or networking of group members. However, this narrow perspective of social relations overlooks VSLA's impact on the wider community. Specifically in rural areas, many development organizations request beneficiaries to join VSLAs in order to participate in other, non-financial services provided by these organizations, and membership in VSLAs becomes a requirement. Published literature has not examined the impact of such widely employed interventions in the developing world. This paper aims to fill this void by examining the wide social impact of VSLAs. Specifically it examines how the establishment and mushrooming of VSLAs affect social relations among community members, the role of traditional leadership, and social norms and taboos.

This paper is based on qualitative research conducted in Uganda and Rwanda in 2016. In-depth interviews based on questionnaires were conducted with VSLA members, community leaders, NGO workers and community members who are not VSLA members. Overall, over 200 respondents connected to five NGOs operating VSLAs in both rural and urban settings were interviewed. Data was analyzed through content analysis methods.

The findings show that VSLAs create new social institutions upon their establishment. These institutions support the internal strength of the VSLA, strengthen trust and interdependence among members and ensure their sustainability. These institutions, including new governing bodies, rules and regulations, as well as various functions which the groups provide to societies, alter existing social relations in the community. The findings presented in this paper support existing literature which identifies the strengthening of social capital among VSLA members. The innovation presented in this paper is the examination of the wider community and social impact. Findings show that the increasing interdependence among VSLA members turn these groups into new communities, and social ties between VSLA members and non-members loosen over time. Social trust gradually becomes depended on one's economic history and capacity. Moreover, findings present a growing prejudice against non-members, with even non-members identifying others who are not VSLA members as having negative social behavior. This prejudice might create negative social implications to those who do not join groups, and in some cases outcast those who are already economic and socially weak. Finally, the social institutions constructed by VSLA affect traditional leadership and their role in the community.

In conclusion, this paper presents the wide social implications of VSLAs, a widely-used financial intervention in the field of Development. It demonstrates that VSLAs as a development intervention have significant social outcomes to the relationships between community members and the role of community leaders. These social outcomes should be taken into consideration when designing such interventions.

**Keywords:** Microfinance, social capital, social institutions, trust, VSLA

**How Social Research Methodology Determines Results and Social Policy  
An Example: Counting Homeless People**

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**Abstract**

In this presentation, we compare results obtained using two different methods when enumerating homeless persons. The dominant method—Point-in-Time or PiT counts—underestimates, from 30% to 90%, the number of people living with homelessness when compared to results using a Period Prevalence Count or PPC. Substantial numbers of homeless people are under-represented or largely absent in current data about homelessness as it has been generated using PiT counts. Moreover, many people living with homelessness are invisible in the sense that their status as homeless people is not recognized as a form of homelessness in PiT counts. It is important to understand the various forms of homelessness, to recognize the methods required to include various subgroups of this population in enumeration studies and to utilize sound methods to guide research and policy-making. This presentation describes “Period Prevalence Counts” (PPC) used to study homelessness in rural and northern Ontario. The PPC method has been described in a manual prepared for the Government of Ontario, Canada (Kauppi, 2017) and was used in 15 communities in the spring of 2018. In Sudbury and Timmins (Ontario, Canada), the PiT method was used, followed by a PPC to allow for comparison of results. Analysis shows that the PiT method identified only 10 to 30 percent of the number of people in the PPC studies. This presentation contrasts the results for Indigenous and non-Indigenous participants and sheds light on the magnitude of Indigenous homelessness when using the PiT and PPC methods. These results can inform discussions about the appropriate methods for enumerating homelessness and about framing social policy to address the true extent of the problem.

Keywords: Homelessness, PPC method, PiT counts,

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