



**JOURNAL OF
HUMAN KINETICS
AND SPORTS SCIENCE
(JOHKASS)**

**VOLUME 01, NUMBER 01,
JUNE, 2016**

**The Official Journal of the
Department of Human Kinetics and Sports Science
University of Benin, Benin City, Nigeria**



JOURNAL OF HUMAN KINETICS AND SPORTS SCIENCE (JOHKASS)

Volume 01, Number 1, June, 2016

The Official Journal of the
Department of Human Kinetics and Sports Science
University of Benin, Benin City, Nigeria

JOURNAL OF HUMAN KINETICS AND SPORTS SCIENCE (JOHKASS)

EDITORIAL TEAM

Editor-in-Chief

Professor Elias Okey Agwubike (Ph.D)

Department of Human Kinetics and Sports Science

University of Benin, +234(0)8033574717

Email: ellydike@gmail.com

Editor

Professor Samuel O. Aibueku

Department of Human Kinetics and Sports Science

University of Benin, +234(0)8068940914

Managing Editor

Dr. Elvis I. Agbonlahor

Department of Human Kinetics and Sports Science

University of Benin, +234(0)8056752200

Email: elvisagbon@yahoo.com

Associate Editors

Professor Anthony O. Okunbor

Department of Human Kinetics and Sports Science

University of Benin, +234(0)8020882535

Dr. Samuel M. Adodo

Department of Human Kinetics and Sports Science

University of Benin, 234(0)80346414996

Dr (Mrs) Agharese Efe-Aighovo
Department of Human Kinetics and Sports Science
University of Benin, +234(0)8033663132

Consulting Editors

Professor O. G. Oshodin
University of Benin

Professor E. O. Ojeme
University of Benin

Professor V. C. Igbanugo
University of Port-Harcourt

Professor V. I. Iyawe
University of Benin

Professor J. O. Okafor
Nnamdi Azikiwe University, Akwa

Professor Grace Otinwa
University of Lagos

Professor Larson Emiola
University of Ilorin

Professor G. O. Umecasiogbu
Nnamdi Azikiwe University, Akwa

Professor I. Owie
University of Benin

Professor J. F. Babalola
University of Ibadan

Professor M. O. Mgbor
University of Benin

Professor Yakasiah Musa
Bayero University, Kano

JOURNAL OF HUMAN KINETICS AND SPORTS SCIENCE (JOHKASS)

Table of Contents

THE INFLUENCE OF SOCIO-ECONOMIC STATUS ON HEALTH RELATED QUALITY OF LIFE AMONG ADULTS WITH LOW BACK PAIN IN KANO NORTHWEST, NIGERIA.	1
<i>¹Adebisi I. Hammed, M.Sc., ²Akindele O. Mukadas, Ph D., ³Lawal U. Isa, Ph. D. & ⁴Elias O. Agwubike, Ph. D.</i>	
MANAGEMENT STRATEGIES ON THE SUCCESSFUL IMPLEMENTATION OF SCHOOL FEEDING PROGRAMME IN AYEDAADE LOCAL GOVERNMENT AREA, OSUN STATE.	11
<i>¹Akorede, Seun Nurudeen ²Sheu, Adaramaja Adebayo ³Adetoro, Adesola Racheal</i>	
EXERCISE-RELATED INTERVENTION ON PRIMITIVE AND POSTURAL REFLEXES AMONG INFANTS DIAGNOSED WITH CEREBRAL PALSY IN A TERTIARY HEALTH INSTITUTION IN NIGERIA.	24
<i>¹Obaseki, C.O; ²Agwubike, E.O.</i>	
NURSES' KNOWLEDGE, ATTITUDE AND UTILIZATION OF NURSING PROCESS IN TERTIARY HEALTH INSTITUTION IN BENIN CITY -	37
<i>¹Fidelis Uchendi Okafor, PhD ²Chimodo Onyinye Lois</i>	
ENVIRONMENTAL HEALTH STUDENTS' PERCEIVED SOCIOLOGICAL AND PSYCHOLOGICAL BARRIERS TO EFFECTIVE ENVIRONMENTAL SANITATION IN BENIN METROPOLIS.	49
<i>¹Osayande, Eric Iyobo, Ph.D ²Aideyan, Osarenmwanta Daniel, M.Sc (Ed.)</i>	
KNOWLEDGE AND PRACTICE OF CERVICAL CANCER SCREENING AMONG FEMALE STUDENT NURSES IN UNIVERSITY OF BENIN, NIGERIA.	57
<i>¹Haddy Tunkara -Bah ²Prof. E.O Agwubike, ³Jainaba Sey-Sawo, ⁴Omar Manjang, ⁵Dr. Fidelis Uchendi Okafor, ⁶Opeyemi Ojo</i>	

APPRAISAL OF INSECURITY ON TOURISM DESTINATION IN EDO STATE	71
<i>Mary .O. Emenike (Mrs) M.SC</i>	
AN ASSESSMENT OF THE LEVELS OF EXERCISE THERAPY/FITNESS OUTFITS IN THE SOUTH-SOUTH GEOPOLITICAL ZONE OF NIGERIA	88
¹ <i>Oluwaseun S. Kubeyinje, M.Sc (Ed)</i> ² <i>Elias O. Agwubike, Ph.D</i>	
PROMOTING FITNESS AND WELLNESS THROUGH SPORTS AND RECREATION	97
¹ <i>Mong, E. U; Ph.D; EP.</i> ² <i>Ngwakwe, P. C; Ph.D</i>	
STUDENT NURSES AND HEALTH EDUCATORS' ACCESS AND UTILIZATION OF REPRODUCTIVE HEALTH INFORMATION AND SERVICES IN THE UNIVERSITY OF BENIN, NIGERIA	108
¹ <i>Jainaba Sey-Sawo,</i> ² <i>Elias O. Agwubike,</i> ³ <i>Fidelis Okafor,</i> ⁴ <i>Haddy Tunkara-Bah</i> ⁵ <i>Omar Manjang</i>	
REVIVING SOME TRADITIONAL GAMES ON THE BRINK: A CASE FOR 'OKWE'* AND 'AJUM, AJUM'*	120
<i>Dr Elizabeth O. Ben-Iheanacho</i>	
ROLE OF HOME ECONOMICS EDUCATION IN DETERMINING ENVIRONMENTAL INFLUENCE IN CHILD DEVELOPMENT	135
<i>Nwabah NkeirukaI. (Ph.D.) & Lucky Ediruke Oshio (Ph.D.)</i>	
OUTCOMES AND PREVENTION OF SCHOOL BULLYING: IMPLICATIONS FOR HUMAN KINETICS	144
<i>R.O. Ekoko, Ph.D</i>	
SECONDARY SCHOOL STUDENTS' KNOWLEDGE, ATTITUDE AND PRACTICE OF TEENAGE PREGNANCY AND ITS ATTENDANT PROBLEMS	159
¹ <i>Timbiri Elizabeth. B. (MPH)</i> ² <i>Igbudu, Ujiro (Ph.D).</i>	
PERCEIVED INFLUENCE OF SOLAR POWER HARNESSING ON THE ENVIRONMENT AND PRODUCTION OF LOCAL PRODUCTS AMONG THE PEOPLE OF ILORIN SOUTH LOCAL GOVERNMENT AREA--	171
¹ <i>Abdulrasaq, Qazeem Onaolapo</i> ² <i>Jidda, Kafayah Adeola</i> ³ <i>Shagaya, Muktar</i>	

PERCEIVED INFLUENCE OF SOLAR POWER HARNESSING ON THE ENVIRONMENT AND PRODUCTION OF LOCAL PRODUCTS AMONG THE PEOPLE OF ILORIN SOUTH LOCAL GOVERNMENT AREA

¹Abdulrasaq, Qazeem Onaolapo

*Department of Health Promotion and Environmental Health Education
Faculty of Education, University of Ilorin
kc_brass@yahoo.com +2347034541382*

²Jidda, Kafayah Adeola

*Department of Health Promotion and Environmental Health Education
Faculty of Education, University of Ilorin
kafayahjidda@yahoo.com +2348055610450*

³Shagaya, Muktar

*University of Manchester
Institute of Development Policy and Management
shagaya_muktar@hotmail.com +2348168058330*

Abstract

The study examined perceived influence of solar power harnessing on the environment and production of local products among the people of Ilorin South Local Government Area. It examined the influence of solar power harnessing on air pollution, noise pollution and the production of local products. Descriptive research design was employed for the study. The population of the study comprise of all the people of Ilorin South Local Government Area of Kwara State. A sample of 380 respondents were selected using multistage sampling techniques of stratified, systematic, cluster and purposive sampling techniques were used for the study. A researcher developed questionnaire was used to elicit information from the respondents. The questionnaire was validated by experts in the related field. The reliability of the questionnaire was ascertained using Spearman Brown Rank Order which yielded a correlation coefficient of 0.76r. Three hypotheses were tested at 0.05 alpha level of significance. Inferential statistics of chi-square was used to test the data collected for the study. The findings of the study revealed that: solar power harnessing will not significantly influence air pollution (cal. χ^2 value 427.01 > crit. value 16.92); noise pollution (cal. χ^2 value 342.14 > crit. value 16.92); and the production of local products in Ilorin South Local

Government Area (cal. χ^2 value 410.51 > crit. value 16.92). It was concluded that the generation of electricity from solar power will not influence air and noise pollution; and it will influence the production of local products as perceived by the people of Ilorin South Local Government Area. It was therefore recommended that solar power harnessing should be encouraged to reduce the menace of air and noise pollution; and to encourage production of locally made products.

Keywords: Solar Power, Air Pollution, Noise Pollution, and Electricity

Introduction

Power generation and distribution in Nigeria is no longer what it used to be. Gone are the days when one can confidently say there has not been power outage for thirty minutes. Electricity is pivotal to the development of nations and its use is directly correlated with healthy economic growth (Kaseke & Hosking, 2013). Nigeria is one of the most populated countries in Africa but only about forty percent of the people are connected to the energy grid (Kaseke & Hosking, 2013). The people who actually have power experience difficulties around sixty percent of the time (Aliyu, Ramli & Saleh, 2013). Nigeria's energy grid is arguably in crisis due to lack of development. The key to making a more reliable energy sector is to find and use a renewable energy resources, rather than simply relying on the country's non-renewable resources.

The power system is the effective and indispensable machinery for the rapid industrial and economic growth of any nation. But electricity supply in Nigeria is characterized by frequent power failures and load shedding. The problems range from corruption, poor maintenance, inadequate funding and lack of energy remix. The appalling levels of Nigeria's infrastructure, namely power supply, water, telecommunication and even petroleum products supply are all indications of an economy that is unhealthy as a result of inability to meet electricity demand. Ibikunle (2014) asserted that power infrastructure has been a major challenge facing Nigeria's economy and the privatization of the power sector is yet to yield the desired result to resolve perennial electricity shortage in the country.

Ibikunle (2014) further reiterated that the greatest challenge, especially for the industrial sector, is power crisis, which is why local manufacturers cannot compete with their foreign counterparts. For instance, a company can run its plant 16 hours a day on generator. In fact, Nigerians should be able to challenge the electricity distribution companies for poor services. Nigeria has been grappling with crippling power supply crisis for two decades without an end in sight despite the multi-billion dollar investment in the sector. Successive administrations had come beating their chests with declaration of emergency in the sector and promising to give Nigerians 'light' in a short time.

The world is advanced to a stage where power generation is available from different sources but the most common sources of power generation in Nigeria are from hydroelectricity and generators. Due to the fact that electricity distribution is not reliable, hardly will one go to a house in Nigeria without finding a small generating set and this alternative to power generation constantly pollutes the air. Nigeria is blessed with abundant sunshine throughout the year which makes it an advantage for the country to harness the solar power in generating electricity. Solar power is produced by harnessing or collecting sunlight and converting it into electricity. This is done by using solar panels which are large flat panels made of many individual solar cells. Although there are those who make use of solar power in the country which is easily noticeable on rooftops and it supplements hydroelectricity and consequently reduces the rate at which generators are used thereby reducing the rate of pollution.

McIntire-Strasburg (2016) opined that solar power does not generate any form of noise in the home and neither does it release any form of gas into the environment unlike the traditional power plants or generators that make a lot of noise and releases dangerous gases into the atmosphere. Okoro (2004) asserted that due to the fact that sources or conventional means of energy generation are finite and fast depleting therefore most industrialized countries have started research on solar energy as a renewable source of energy which does not produce any form of noise in the environment.

Oyedepo (2012) stressed that Nigeria is blessed with a large amount of renewable natural resources which when fully developed and utilized, will lead to poverty reduction and sustainable development. He further explained that because renewable energies are constantly being replenished from natural resources, they have security of supply, unlike fossil fuels, which are negotiated on the international market and subject to international competition, sometimes even resulting in wars and shortages. Oyedepo (2012) highlighted the advantages of solar power which includes: their rate of use does not affect their availability in the future; thus, they are inexhaustible; the resources are generally well distributed all over the world, even though wide spatial and temporal variations occur, thus, all regions of the world have reasonable access to one or more forms of renewable energy supply; they are clean and pollution-free and are therefore a sustainable natural form of energy; they can be cheaply and continuously harvested and are therefore a sustainable source of energy; unlike the nuclear and fossil fuels plants which belong to big companies, governments, or state-owned enterprises, renewable energy can be set up in small units and is therefore suitable for community management and ownership, in this way, the returns from renewable energy projects can be kept in the community. Oyedepo (2012) conclusively emphasized that in Nigeria, renewable energy such as solar power has particular relevance since the electricity grid does not extend to remote areas,

and it is prohibitively expensive to do so, therefore, this presents a unique opportunity to construct power plants closer to where they are actually needed. In this way, much needed income, skill transfer, and manufacturing opportunities for small businesses would be injected into rural communities.

The Guardian (2015) opined that inadequate and unreliable electricity undermines investment thereby discouraging manufacturers of local products from venturing into production due to the heavy cost of using generators in production. Sub-Saharan Africa has some of the world's most abundant and least exploited renewable energy sources, especially solar power. With the price of solar panels plunging, there are opportunities for firms and governments to connect millions of poor households to affordable small-scale, off-grid systems (The Guardian, 2015).

Sharma (2009) identified the advantages of solar power which includes; zero creation of pollution in the process of generating electricity; zero requirement for any fuel; zero release of any form of gas unlike the generators; does not contribute to global warming; there is no ongoing cost for its power generation; there is flexibility in its applicability; it reduces the rate at which people rely on other forms of power generation; it generates power where it is needed; it operates independently; the use of solar energy indirectly reduces health cost; it operates silently; more panels can be added in future to increase the power generation and it supports local job and wealth creation.

Statement of the Problem

The researchers have observed that power generation from the conventional power source is not reliable which has made a significant percentage of the residents of Ilorin South Local Government Area to purchase a generating set as an alternative to power generation. This decision is accompanied by the menace of noise pollution and the pollution of the air in the environment which has a negative effect on health. The researchers have also observed that virtually every little things that are needed are imported from one country or the other. An investigation into the reason why it is so revealed that small scale manufacturers who produce locally are discouraged due to the huge cost of fueling the generator for the production of their goods to meet up the demand of their customers. It is in light of this that the researchers have deem it fit to carry out this study.

Research Hypotheses

1. Solar power harnessing will not significantly influence noise pollution in the environment
2. Solar power harnessing will not significantly influence air pollution in the environment
3. solar power harnessing will not significantly influence the rate of production of local products

METHOD

Research Design

The research design adopted for the study was a descriptive research design of survey type. The population of the study comprise of all the people of Ilorin South Local Government Area. According to the National Population Commission Census (2006), the population of Ilorin South Local Government Area is 209,251. According to the Research Advisor (2006), for a population of 10,000 and above a sample of 380 is sufficient enough to represent the entire population at a level of confidence of 95% and a margin of error of 5%. Therefore, a sample of 380 respondents was selected for the study.

Instrumentation

Multistage sampling technique of stratified, systematic, cluster and systematic sampling techniques were used for the study. At the first stage, stratified sampling technique was used to separate the Local Government Area (Ilorin South) into wards. The second stage was the use of systematic sampling technique to select four wards from the eleven wards in Ilorin South Local Government Area, this was done by arranging the wards in alphabetically i.e Akanbi I, Akanbi II, Akanbi III, Akanbi IV, Akanbi V, Balogun Fulani I, Balogun Fulani II, Balogun Fulani III, Okaka I, Okaka II and Oke Ogun and selecting four wards at regular intervals. The third stage was the use of cluster sampling technique to divide the wards into households. The wards were clustered into households to save the cost of travelling to far distances since the same aim could be achieved through this means. The fourth stage was the use of systematic sampling technique to select the number of households that was used in the study. The last stage was the use of systematic sampling technique to select the heads of households who were the final respondents used for this study.

A validated questionnaire from related experts was used to collect data from the respondents. The instrument was subjected to a reliability test using Spearman Brown Rank Order which yielded a correlation coefficient of 0.76r. The completed questionnaires were collected, sorted, coded and analyzed using the inferential statistics of chi-square (χ^2) at 0.05 alpha level.

RESULTS AND DISCUSSION

Results

H₀₁: solar power harnessing will not significantly influence noise pollution in the environment

Table 1:

Chi-square analysis investigating the influence of solar power harnessing on noise pollution

S/N	SOLAR POWER HARNESSING AND NOISE POLLUTION	SA	A	D	SD	Df	Cal. χ^2 Value	Critical Value	Decision
1.	Generation of electricity from solar power does not cause any form of noise	102	272	4	2				
2.	The rate at which solar power produce electricity will reduce the rate at which people make use of generators hence preventing noise from generating sets	306	61	10	3	9	427.01	16.92	Rejected
3.	Harnessing power from the sun will reduce the nuisance of noise pollution in the environment	247	97	22	14				
4.	Hardly will you know the solar power is working because it will not make any sound unlike the generators	311	63	2	4				

It can be observed from the table above that the calculated chi-square value of 427.01 is greater than the critical value of 16.92 with a degree of freedom of 9 at 0.05 alpha level of significance. Therefore the null hypothesis that says that solar power harnessing will not significantly influence noise pollution in the environment was rejected. This implies that the generation of electricity from solar power will reduce the rate of noise pollution constituted by other forms of electricity generation as perceived by the people of Ilorin South Local Government Area.

H₀₂: solar power harnessing will not significantly influence air pollution in the environment

Table 2:

Chi-square analysis investigating the influence of solar power harnessing on air pollution

S/N	SOLAR POWER HARNESSING AND AIR POLLUTION	SA	A	D	SD	df	Cal. χ^2 Value	Critical Value	Decision
1.	Electricity generation from solar power does not generate any form of air pollution	210	163	2	5				
2.	Air pollution caused by generators will be reduced with the use of solar power in the environment	285	92	3	0	9	342.14	16.92	Rejected
3.	The havoc of air pollution caused by generating sets will be reduced in the environment with the use solar power	280	86	11	3				
4.	Solar power does not contribute to global warming because it does not emit any form of gas	252	122	5	1				

It can be observed from table 2 that the calculated chi-square value of 342.14 is greater than the critical value of 16.92 with a degree of freedom of 9 at 0.05 alpha level of significance. Therefore the null hypothesis that says that solar power harnessing will not significantly influence air pollution in the environment was rejected. This implies that the generation of electricity from solar power will lead to the reduction of air pollution constituted by other forms of electricity generation as perceived by the people of Ilorin South Local Government Area.

H₀₃: solar power harnessing will not significantly influence the rate of production of local products

Table 3:

Chi-square analysis investigating the influence of solar power harnessing on the rate of production of local products

S/N	SOLAR POWER HARNESSING AND THE RATE OF PRODUCTION OF LOCAL PRODUCTS	SA	A	D	SD	df	Cal. χ^2 Value	Critical Value	Decision
1.	Solar power will make it easier for local manufacturers to thrive and sustain their businesses	326	46	2	6				
2.	Solar power will encourage more people to want to start their personal local production	247	130	3	0				
3.	Solar power will discourage the huge expenses that local manufacturers would need to run their generators as an alternative to inadequate electricity supply	170	97	6	7	9	410.51	16.92	Rejected
4.	Local products will be able to compete with imported products on their price scale as a result of the use of solar power in the running of their production	273	86	9	12				

It can be observed from the table above that the calculated chi-square value of 410.51 is greater than the critical value of 16.92 with a degree of freedom of 9 at 0.05 alpha level of significance. Therefore the null hypothesis that says that solar power harnessing will not significantly influence the rate of production of local products was rejected. This implies that the generation of electricity from solar power will encourage producers of local products in their production and help in competing with the price of imported product as perceived by the people of Ilorin South Local Government Area.

Discussion of Findings

Hypothesis one which stated that solar power harnessing will not significantly influence noise pollution in the environment as perceived by the people of Ilorin South Local Government Area was rejected because the calculated chi-square value is greater than the critical value. This implies that the generation of electricity from solar power will reduce the rate of noise pollution constituted by other forms of electricity generation as perceived by the people of Ilorin South Local Government Area. This finding is in line with the findings of McIntire-Strasburg (2016) who opined that solar power does not generate any form of noise in the home or environment. It is also in line with the findings of Okoro (2004) who asserted that due to the fact that sources or conventional means of energy generation are finite and fast depleting therefore most industrialized countries have started research on solar energy as a renewable source of energy which does not produce any form of noise in the environment.

Hypothesis two which stated that solar power harnessing will not significantly influence air pollution in the environment as perceived by the people of Ilorin South Local Government Area was rejected because the calculated chi-square value is greater than the critical value. This implies that the generation of electricity from solar power will lead to the reduction of air pollution constituted by other forms of electricity generation as perceived by the people of Ilorin South Local Government Area. The finding of Sharma (2009) which identified one of the advantages of solar power as the zero creation of pollution in the process of generating electricity corroborates this finding. This finding is also in line with the finding of McIntire-Strasburg (2016) who opined that solar power does not release any form of gas into the environment unlike the traditional power plants or generators that make releases dangerous gases into the atmosphere.

Hypothesis three which stated that solar power harnessing will not significantly influence the rate of production of local products as perceived by the people of Ilorin South Local Government Area was rejected because the calculated chi-square value is greater than the critical value. This implies that the generation of electricity from solar power will encourage producers of local products in their production and help in competing with the price of imported product as perceived by the people of Ilorin South Local Government Area. This finding is corroborated by the finding of The Guardian (2015) which opined that inadequate and unreliable electricity undermines investment thereby discouraging manufacturers of local products from venturing into production due to the heavy cost of using generators in production. This is also in line with the findings of Oyedepo (2012) who emphasized that in Nigeria, renewable energy such as solar power has particular relevance since the electricity grid does not extend to remote areas, and it is prohibitively expensive to do so, therefore, this presents a unique opportunity to construct power plants closer to where they are actually needed in

creating opportunities for small businesses. The finding is also in line with the finding of Ibikunle (2014) who asserted that the greatest challenge, especially for the industrial sector, is power crisis, which is why local manufacturers cannot compete with their foreign counterparts.

Conclusions

Based on the findings of the study, it was concluded that:

1. Solar power harnessing will not influence noise pollution in the environment as perceived by the people of Ilorin South Local Government Area?
2. Solar power harnessing will not influence air pollution in the environment as perceived by the people of Ilorin South Local Government Area?
3. Solar power harnessing will influence the rate of production of local products in Ilorin South Local Government Area?

Recommendations

Based on the findings of this study the following recommendations were made:

1. Solar power harnessing should be encouraged among the residents of Ilorin South Local Government Area in order to diminish the menace of noise pollution constituted by the use of generators in the environment.
2. Solar power harnessing should be encouraged among the residents of Ilorin South Local Government in order to avoid the dangers of exposure to dangerous off-gassing from generators.
3. Solar power harnessing should be encouraged among the residents of Ilorin South Local Government Area in order to encourage manufacturers of local products so that they be able to compete with imported goods and reduce the level of poverty or search for white collar jobs.

References

- Abah, J. A. (2015). Tackling the Mirage of Power Supply. Retrieved from <http://dailypost.ng/2015/11/30/abah-john-abah-tackling-the-mirage-of-power-supply/> on 06/03/2016
- Aliyu, A. Ramli, A. & Saleh, M. (2013). Nigerian Electricity Crisis: Power Generation Capacity *Expansion and Environmental Ramifications*. *Energy*, 61(8), 354-367. Doi:10.1016/j.energy.2013.09.011
- Ibikunle, S. (2014). Problems Crippling Manufacturing in Nigeria. Retrieved from <http://www.vanguardngr.com/2014/10/problems-crippling-manufacturing-nigeria-ibikunle-ipwa-ple-md/> on 06/03/2016
- Kascke, N. & Hosking, S. (2013). Sub-Saharan Africa Electricity Supply Inadequacy: Implications. *Eastern Africa Social Science Research Review* 29(2), 113-132.

- McIntire-Strasburg J. (2016). Home Solar Is Your Local Clean Power Plant. Retrieved from <http://solarlove.org/home-solar-is-your-local-clean-power-plant/> on 19/03/2016
- Nathan, D. & Abioye, A. O. (2013). Solar Power System: A Viable Renewable Energy Source For Nigeria. *Journal of Electronics and Communication Engineering Research* 1(1), 10-19 ISSN(Online) :2321-5941 www.questjournals.org
- Okoro, I. O. & Madueme, T. C. (2004). Solar Energy: A Necessary Investment in a Developing Economy. *Nigerian Journal of Technology*, 23(1), 23-31
- Oyedepo, S. O. (2012). Energy and sustainable development in Nigeria: the way forward. *Energy, Sustainability and Society* 2(15), 1-17
- Sharma, P. D. (2009). Solar power – Sustainable green energy to protect our economy and environment. Retrieved from <https://saferenvironment.wordpress.com/2009/02/02/solar-power-sustainable-green-energy-to-protect-our-economy-and-environment/> on 06/03/2016
- The guardian (2015). Solar power to the people: how the sun can ease Africa's electricity crisis. Retrieved from <http://www.theguardian.com/business/economics-blog/2015/jun/05/solar-power-africa-sun-electricity-crisis> on 19/03/2016