



Academic Research as Nexus for National Development and Global Competitiveness: University of Calabar Experience

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Abstract

Four purposes were pursued in this study, basically to assess how research outcomes from the University of Calabar contribute to inform policy formulation for national development and global competitiveness. Expost facto and survey inferential research designs were adopted for this study. Using the multi-stage random sampling techniques, a sample of 600 academic staffs were selected from about one thousand, five hundred and ninety eight (1,598) staffs from ten faculties, institutes and centers in the University of Calabar (Unical). Two instruments were used for data collection, the web of science harvesters with bibliographic indicators and a structured questionnaire. The harvesting of academic staff research papers published online was carried out between January, 2010 - June, 2017 from 6 databases. Result of the web of science harvester showed that a total of 2449 publications came out from the ten faculties, institutes and centers, out of which only 217 representing 8.9% were cited by scholars and are found in the citation index for Unical. The Pearson Product Moment Correlation analysis shows there is a significant relationship between research outcomes from Unical and national development, but unfortunately, most researches from Unical are not visible to the global academic communities for other researches to inform policy formulation for national development. 79% of the papers published in Unical, are published in local journals which are neither online nor indexed in any databases, hence, their visibility were impaired. The regression analysis on factors influencing research activities in Unical also shows only four factors to be significant, while the other ten were statistically not significant. Based on these results, the authors concluded that researches from Unical can influence policy formulation for national development, but their invisibility to the global academic community is a major crux that most research outcomes are hardly used for national development. The authors further concluded that despite all these shortcomings, the few visible publications online are used in other countries to influence policy formulation for national development. It was therefore recommended among others that research grants should be provided to research universities to enable scholars carryout ground breaking researches for their outcome to be used for policy formulation in order to achieve national development, while guaranteeing global competitiveness.

Keywords: *University research outcomes, research publication visibility, research grants, policy formulation, national development and global competitiveness.*

Introduction

Globally, the development of every country is tied to the country's research outcomes and the ingenuity of the country's academic prowess. Research has been variously defined by scholars as a systematic process of searching and re-searching to find meaningful and functional solution to society's problem, be it technological, educational, social, economic or political development. Development on the other hand according to the Dictionary of Contemporary English is "the process of gradually becoming bigger, better, stronger or more advanced from a specific stand point", it is an attempt to improve the condition of human existence in all sphere ranging from the provision of health care, food security, education, physical and social security, housing, transportation, communication, and all other essential services needed for human existence.

Studies have shown that the major preoccupation of every country's educational institution is for research and development; countries of the world have used the research products of their universities and other research institutes to design policies and develop their economies. For example North Korea's economy thrives on nuclear warfare production, Japan's economy is tied mainly on their technological prowess, China is the second world market today because of their technological development from the product of their academic researches, America, Russia, Israel, the Great Britain, United Arab Emirate (UEA) etc all became developed countries by using the research outcome of their research centers. The role of universities and other research institutes in the research process have become too pronounced in recent times, so much so that it has become an indispensable criterion for the promotion of every academic staff in the university system (Anonson, 2008; Arong and Ogbadu, 2010, Ochuba, 2010).

In the study conducted by Girasoli & Hannafin, (2008) on using asynchronous audio-visual communication tools to increase academic self-efficacy of young researchers in teaching and learning outcomes, the authors observed that modern day development or advancement of every nation is not just the extent of natural

resources endowed within that country, but the extent to which their need are solved in a systematic process of research innovations and outcomes using modern day technological appliances and gadgets. Currently, Nigeria is faced with a plethora of development challenges. These challenges include insecurity of lives and properties, fallen standard of education and brain drain, poor governance and underdevelopment occasioned by corrupt leadership, poor road networks, and disjointed and dysfunctional communication systems. These social menaces also include poor power supply, failed healthcare delivery system with corrupt government officials spending billions of dollars annually for trips oversea for their health services.

Others are, hunger, political restiveness/violence and assassination, kidnapping and ritual killings, as a result of unemployment and poverty, human rights abuses, etc. The Nigerian government is at a lost as to providing solutions to these plethora of development challenges (Al-Ansari, 2006; Bhattacharya & Sharma, 2007; Girasoli & Hannafin, 2008; Fister & McCarthy, 2008).

At this critical point in the history of Nigeria, researchers are faced with the challenges of providing practicable solutions to these plethoras of problems besieging Nigeria. Studies have however shown that most research outcomes by both post graduate students and academic staff from most Nigerian universities are either seldom used for any policy formulation or contribute in any way to national development (Gough and Scott, 2006, Anonson, 2008, Ochuba, 2010, Pidlisnyuk, 2010 and Mimiko, 2012). What could be the reasons for the low patronage of research outcome to help in policy formulation or contribute to national development seems to be too numerous. These reasons ranges from the poor quality of graduates from Nigerian universities, the quality of research outcome, the non availability of functional facilities for carrying out such researches, non availability of research grants and the most important factor which is the recycling of researches by university staff to meet the compulsory promotion requirement of ‘publish or perish’ syndrome.

Phelps, Maddison, Skamp & Braithwaite, (2008) found that while universities are expected to play very specific roles in promoting sustainable development through their traditional functions of teaching, research and knowledge dissemination and community services, there is a growing consensus that our current paradigms are inadequate for addressing the long term needs of a sustainable future. As such, it is then necessary for universities to fill the gaps by updating strategies and procedures to accommodate the resilience required to progressively adapt to changing physical, historical and social conditions in order to play very active role in shaping a more sustainable future for Nigeria. To do so, universities should encourage new thinking within the educational system (Popoola, 2008) and introduce new, creative and innovative solutions to problems of sustainability. Okebukola, (2008) further found out that global ranking of world universities shows that Nigerian universities rank among the lowest in the world, ranking of global universities were done using the quality of research output and citation index from researches from universities, the number of doctoral candidates produced from universities, their extent of collaboration and linkages with other universities, the research outputs from such universities and the universities contribution to technological development and the economy of their country.

Taking further critical look at the Nigerian universities, Imhonopi & Urim, (2009) listed the following as the critical problems facing Nigerian educational system:

- (i) Inadequate Funding: Inadequate or limited funding has been the biggest bane of the university in Nigeria. This has resulted largely from dwindling budgetary allocations from government as well as the university’s inability to improve internally generated revenue (IGR) due to some environmental factors.
- (ii) Weak infrastructure: The universities also suffer gross inadequacy of vital infrastructure for teaching and research. It is reported in various media that all resources required for the education production process are in short supply. According to Ochuba (2010), lecture halls, laboratories, Student’s hostels, library space, books and journals and office spaces are all seriously inadequate. The World Bank (1994) equally observed that the equipment for teaching, research and learning are either lacking or very inadequate and in a bad shape to permit universities the freedom to carry out basic functions of academics.
- (iii) Inadequate Faculty members: The universities also experiences gross shortage of academic staff who are expected to carry out the roles of the universities in sustainable development as identified above. In the Needs

assessment Report just released by the Federal Ministry of Education,(2014), it was shown, for instance, that there were 37,504 academics in the country's 124 universities (less than half of what is required) with only about 45 per cent of them possessing the PhD which is the basic requirement for teaching in the university. Also, student-teacher ratio is reported to be as high as 1:122 in some universities. With this gross shortage of academic staff, carrying on the additional responsibility of introducing new courses in sustainable development will add to the burden of the university and whittle down the quality of its programs generally.

(iv) Low Management Support: For the university today, in the face of all the challenges identified above, survival has become the name of the game. Most times, the university management may not see the direct benefit of playing the roles suggested above and so may be reluctant to provide financial and infrastructural support for such roles.

(v) Brain Drain: The phenomenon of 'brain drain' has drained the universities in Nigeria of its best and most academic staff who have left for greener pastures in other countries, including African countries. Unfortunately, the largely uncompetitive nature of the Nigerian university particularly within the context of infrastructural facilities makes attracting academics, including Nigerian in the diaspora, from other climes difficult. The poor remuneration, the poor condition of service and poor staff welfare and near lack of motivation from both government and university administrators, are compelling impediments that hinders academic staff commitment to optimum productivity.

(vi) Low Level of Awareness of Sustainable Development Issues: There is a very low level of awareness among Nigerians of issues relating to sustainable development. In this regard, 'patronage' of sustainable development activities and programs of the university is likely to be low, except there is a sustained publicity stunt at all levels to create the level of awareness among the citizens about the importance of sustainable development.

(vii) Rigid Institutional Structures: Traditional institutional set-up and structures in the university are too vertically segmented and compartmentalized. These are not suitable for the cross-cutting and holistic nature of sustainable development issues which require inter-departmental and inter-institutional collaboration (Phelps, Maddison, Skamp & Braithwaite, 2008; Imhonopi & Urim, 2009).

The position of Phelps, Maddison, Skamp & Braithwaite, (2008) has been further confirmed by Imhonopi & Urim (2009) and further substantiated by Arong and Ogbadu, (2010) who found out in their study that the major causes of declining quality of education in Nigeria from administrative perspective include examination malpractice, teacher's quality, students preparedness to learn, parents factors, home front and the schools inability to meet their statutory responsibilities and lack of conducive learning environment provided by the school for the willful learning of the students. Staff welfare, condition of services and lack of motivation had conspicuously been mentioned as one major issue confronting Nigerian academics in the university system. However Anonson, (2008) was of the view that the purpose and importance attached to education by the prospective graduate determines what the child does in school. Informed by this declaration, Asiyai, (2013) reinforced the position of Fafunwa, (1978) and went further to state that in most universities and other tertiary institutions in Nigeria, there hardly exist functional laboratories and workshops for students to learn science or engineering, or for the special need students to compete favorably well with their colleagues. The author further posited that most university lecturers got their job not based on best performance, but through who they or their parents know in government or authority.

Globally, universities are seen and referred to as research universities because this is where technology innovations are conceived, designed, developed and publicized for public consumptions. The Silicon Valley in the US is the home of technology where computers and other softwares used for aeronautics, health, meteorology, agriculture etc are developed by scientists in the classrooms and then taken for proper synchronization and development. Most technologies practiced and produced in government are incubated in the university before they are then transferred to the technology centers. In China, the universities are the feeders to the 'Silver valley where they produce prototypes for their technologies. The breakthrough today

where China is seen as the father of rice and poverty reduction, China Agricultural University is the breeding grounds where their researches in the College of Humanities and Development studies (COHDS) and College of Agriculture and Biotechnology (COABS) produced the research outcome that informed policy decisions and formulation to break the Chinese poverty, and the works of cross breeding and hybridization brought about breakthrough in Chinese rice production, unfortunately, it is difficult to state what exactly professors and senior scholars from Nigerian universities have contributed to knowledge in this age (Ferreira, Ryan & Tilbury, 2006; Green & Hannon, 2007; Morse & Foster, 2014).

Bamiro, (2012) in his research on the importance of university research to national development found that Nigerian universities research environment are hardly conducive for lecturers, their working condition is one of the worst in the world, and their take home pay leaves more to be desired, hardly do universities have current textbooks in their libraries, not to talk of e-libraries that subscription must be done annually. Research grants are nonexistent, tertiary institution staff hardly get any grant to enable them carry out productive research, if they have to carry out any research, it is to satisfy the dictum of publish or perish because they have to fund such researches with their meager salaries. The learning condition is horrible with over a hundred students taught by one lecturer in a classroom with sitting capacity for only 30 students. Reagents are never seen in the laboratory, machines are not functional, instructional materials are nonexistent. Salaries are just aberration of what is obtainable (MCEETYA ICT in Schools Taskforce, 2005; March, 2007).

Ochuba, (2010) however found out in a research that most university graduates only passed through the university without the university passing through them, most of them just wish to satisfy all righteousness of going to school just to acquire a certificate for the purpose of getting a white collar job, the case is even exacerbated by roles of most wealthy parent who wish their children to study a particular course, just to satisfy the name. The end result is that most students are forced to study courses they are grossly inadequate to study. Considering the university's dictum of 'publish or perish', they are compelled to publish, and what do you think the quality of their publication will be? It was Fafunwa, (1978) that once said 'the standard of any nation's education cannot rise above the quality of its teachers' and further collaboration of this dictum said 'you cannot give out what you don't have', this compelled Okebukola, (2008) to conclude that this is the problem with our educational system (Meehan & Thomas, 2006; Miles, Harrison & Cutter-Mackenzie, 2006; NSW Council on Environmental Education (CEE), 2006; March, 2007).

Fadokun, (2009) observed that the key duty of any university's mandate is to research, because research must be recognized as central to any university's mission for three main reasons: research is needed to add current facts to teaching; else teaching becomes an old fashioned, monotonous and a static affair without researching. Teaching requires constant injection of simulation of new ideas in the students. Secondly the university should provide special services to its immediate environment derived from the results of research outcomes carried out within such an institution. This can be used for the transformation of the residents of such communities. Finally, it is only through research conducted by universities that make important contribution to growth and development of any nation.

In this study, Fadokun, (2009) observed that the universities produced graduates with new ideas and innovation whereby they make positive contributions towards creating innovations for growth and development of industries and government business, thereby promoting wealth and development and can then compete favorably with their peers and colleagues in other climes.

It is however observed by most scholars that one of the indicators for measuring research output was the number and quality of published works authored by Nigerians and co-authored academics in international journals, through the world distribution of active serial titles emanating from the universities which contribute to generation, dissemination and application of scientific knowledge for development in Nigeria and beyond (Asiyai, 2013). This author concluded that tertiary institutions support knowledge driven economic growth strategies and poverty reduction by generating new knowledge, building the capacities to access existing stores of global knowledge and adapt that knowledge to local use. It is further observed that technological innovations and their diffusion leads to

higher productivity, and most of these innovations are products of basic and applied researches undertaken in universities (Stevenson, 2007).

In a study to investigate university research capacity in Nigerian and the challenges of national development in a knowledge based economy by Fadokun, (2009), using secondary data from National University's Commission (NUC, 2005) and Academic Staff Union of Nigerian Universities and the Federal Government of Nigerian (ASUU-FGN, Agreement , 2001,2009, Bamiro, 2012), the author found that NUC ranked universities according to the quality of research outcome (articles) from Nigerian universities published in international high classed journals which made significant contribution to global and national development. In addition to this, their content were abstracted in scholarly indexes and data bases and physically sighted by the NUC teams. While this is the criteria for ranking quality journals in the country from universities, the global criteria for ranking journals research outcomes according to Morse and Foster, (2014) include: Global research reputation 12.5%, Regional research reputation 12.5%, Publications 12.5 %, Normalized citation impacts 10%, Total citation 10%, Numbers of publications among the best 10% most cited articles 12.5%, International collaboration 10 %, Numbers of PhD awarded 5% and Number of PhD awarded per academic staff members in the university 5% (Stevenson, 2007; Association of American Universities AAU/HEIFI, 2013; Morse and Foster, 2014).

From the foregoing, this is also the criteria for ranking world universities, the Global and Regional Research Reputation uses the Thomas Reuters Academic Reputation Survey with bibliometric indicators from the Web of Science 2008-2012. Publications are scored on the overall research productivity of a university based on the total numbers of scholarly papers (reviews, articles and notes) with affiliations to a particular university, normalized citation impacts is the total number of citations per paper of a university researcher published per year and per publication type. This is scored based on the number of papers that are scored and cited among the best 10%. The Thomas Reuters InCites™ used by research evaluators globally, looks at research outputs, performance, trends, content and citation indicators in the web of science from a particular university. Total citation is scored based on how influential is the university in the global research community. Studies have shown that based on this ranking, most Nigerian universities are among the least in the world, 2008, 12,354th position, 2010, 12689th, 2012 10968th position, 2013, 8900th position and 2014, 3900th positions among the world best 15000 universities (Kors, 2008, Bamiro, 2012; CHET, 2011 in Adebakin, Ajadi and Subair, 2015). In the National University Commission (NUC) ranking, (2017), the University of Calabar is ranked 41st among the 124 universities in the country, while University of Lagos, Ibadan, Benin and Nsukka came 1st, 2nd, 3rd and 4th respectively.

In another study to evaluate research quality from universities in Nigeria, Bamiro (2012) observed that research universities are characterized by the quality, breadth and depth of their research commitment to research. The universities are centers of creativity to develop new technologies and new ways of doing things. Research university centers are strategically located to develop new ideas and discoveries to better human societies. Research universities drive innovation, help respond to major national and global challenges and provide narratives that make it possible to understand a rapidly changing and increasing volatile world (Atkinson and Blanpied, 2008; Pidlisnyuk, 2010). Okebukola, (2008) however regretted that most university research outcomes are hardly used, why these research outcomes are hardly used has been investigated, it is believed that the research outcomes are either not accessible or are not published in reputable journals where access to such journals are rather difficult (Cholin, 2005; Al-Ansari, 2006; Chandra & Patkar, 2007; Cross & Adam, 2007).

In their study to assess factors affecting scholarly research output in Nigeria with focus on the perception of academics in south-western universities, Imhonopi and Urim, (2009), purposefully selected a sample of 944 respondents from two universities each from federal, state and private universities within the geopolitical zone. Questionnaire was administered to the selected academic staffs, data generated were analyzed. The result shows that there were positive and negative factors that affected research output in the studied population included: desire for promotion, contribution to knowledge, and access to local and international research grants. Negative factors that hinder university research outcomes include: fear of

rejection of articles for publication, lack of funds, and unfavorable university policies and guidelines on promotion. The study therefore concluded that these factors have contributed to impede university research outputs, therefore there is every need to mentor young faculty members and provide unified university promotion policies (Cholin, 2005; Al-Ansari, 2006; Chandra & Patkar, 2007; Cross & Adam, 2007).

According to the Global University Ranking as reported by Morse and Foster, (2014), Nigerian universities ranked among the 10950th positions in the world. According to the reporters, criteria used for the ranking included: quality of research outcomes, citation of publication from such universities, innovative research, numbers of researchers from such universities going for exchange programs, contribution of research outcomes from such universities to solving society's pressing problems, numbers of PhD graduates produced from such universities and the quality of research staff and facilities among others (Cholin, 2005; Cross & Adam, 2007; Chandra & Patkar, 2007). In 2014, the same Global University Ranking as observed by Thomas Reuters InCitesTM reported that in the whole world, the United States of America and Africa have the highest numbers of publications annually and that almost all research publications from the USA contribute to solving their economic and development problems. The authors further narrowed down the annual research publication from Africa to South Africa and Nigeria, and further posited that 99% of South African publication contribute to knowledge and solve the country's problem, but publications from Nigerian universities are worst off since they neither contribute to solve society's problem nor are seldom used for policy formulation by Nigerian government. Worried by this trend of global accusation and porosity of research outcomes from Nigerian universities, the researchers are compelled to ask: to what extent have researches from Nigerian universities contributed meaningfully to solving Nigerian development challenges?.

Worried by the spate of these proliferations of developmental problems in the country without commensurate solutions to them, the researchers are poised to investigate the extent and quality of research outcome and how these could be used to contribute to national development for global competitiveness. It is therefore the researchers' believe that, at the end of this research, the outcome of this research should be able to strategically reposition research outcomes from Nigerian universities to meet the yearning challenges of development in the country. It is the researchers' earnest desire to assess the quality of research outcome from the University of Calabar, their contribution to national development.

Research Design and Methodology

The study adopted two research designs; the first research design is survey inferential, while the second research design is the ex-post-facto design. The choice of using these designs is because the phenomenon has already occurred and the researchers have no control over the situation. The study is located within the University of Calabar, Nigeria. Calabar is the capital of Cross River State, Nigeria, located at the South-South geopolitical zone. The University of Calabar lies between Latitude 4⁰97'38'' N of the Equator and Longitude 8⁰.34° E of the Greenwich Meridian, with a landmass of about 2.6 Km². The University of Calabar (Unical) is one of the second generation federal universities established in 1975. This study is principally targeted only at academic staff within the University of Calabar. The multistage random sampling techniques were used for the selection of a sample of six hundred (600) academic staff from Lecturer II to Professors. Fifteen academic staffs were selected from each of the forty sampled departments (40 Departments) in the University of Calabar. The population of study comprised all lecturers in the University of Calabar from Lecturer II and above with a PhD.

The total numbers of academic staffs still serving in the University of Calabar are one thousand, five hundred and ninety eight (1598) persons (List of Academic staff obtained from Senior Establishment Division, Unical, 2010-2016). The first instruments for data collection was the Web of Science Harvester were publications from the various departments were used to assess the quality and capacity of research outcomes using six data bases commonly used for assessing research publication for academic staff promotion in the University of Calabar, (Google scholar, Research gate, Thompson Reuters, Francis and Taylor, EBSCO, Agricola and African Journal Online (AJOL) data bases and impact factored journals. The researchers also used the

Thomas Reuters Academic Reputation Survey with bibliometric indicators from the Web of Science 2008-2012 to sort published papers from the University of Calabar. Using the international standard criteria for rating research outcomes and quality from universities as presented by Morse and Foster, (2014), all research publications from 2010-2016 from the University of Calabar were sorted and assessed online. This was followed by the collection of published works from respective departments from the Senior Establishment Division where staffs bind and submit all their publication for assessment and promotion. The criteria for quality publication was also downloaded from the net and then used for scoring every research paper published from Unical within the period under study.

The second instrument is a structured questionnaire with items to elicit response from respondents on relationship between Unical academic staff's research outcomes and its contribution to national development for global competitiveness and factors influencing research activities in Unical. The simple percentage, Pearson Product Moment Correlation and regression analysis were then used to analyze the data generated. The choice of regression analysis was to identify how each of these factors influences university research activities using their beta weight as predictors in this regards.

Results and discussion

The researchers after administering the instruments and harvesting research publications from staff of the University of Calabar from six databases, data was analyzed using simple percentage and regression analysis. Table 1 shows result of publications from academic staffs from the University of Calabar and the databases where they are indexed and their percentage citations. These publications were published in the University of Calabar between January, 2010 and June, 2017 and harvested using the Web of Science Harvester with bibliographic indicators.

The result shows that between January, 2010 and June, 2017, Faculty of agriculture published a total of 299 articles. Out of the number of publications, 198 are indexed in Google scholar, 35 in Research gates, 15 in Thompson Reuters, 5 in EBSCO, 7 in Francis and Taylor, 29 in AJOL, 10 in Agricola. While in terms of citation index, 29 citations representing only 9.7% of the total publication from that faculty was recorded within this study period. From the Faculty of Arts, a total of 294 publications were recorded. Out of these numbers, 210 were indexed in Google scholar, 46 in Research gates, 2 in Thompson Reuters, 4 in Francis and Taylor, 39 in AJOL. Out of these publications, 24 publications representing 8.2% of the total publications were cited by other researchers. Faculty of Dentistry, though a new faculty was separated out from an existing faculty before that time, so we dealt with it as such. From Faculty of Dentistry, 141 papers were published, out of which 68 are indexed in Google scholar, 34 are in Research gates, 3 in Thompson Reuters, 3 in EBSCO, 11 in Francis and Taylor and 22 in AJOL. Out of the total number of publications from that faculty, only 19 citations representing 13.5% of the entire publications were recorded.

The Faculty of Education has the highest numbers of publication from the University, with 517 publications indexed in various databases. 314 publications from that faculty within the period under study were indexed in Google Scholar, 64 in Research gates, 5 in Thompson Reuters, 10 in EBSCO, 17 in Francis and Taylor, 88 in AJOL, 19 in Agricola. Out of these publications, only 68 articles representing 13.2% were cited from publication in that faculty. In the Institute of Education, a total of 122 papers were published in that institute, out of which 59 papers were indexed in Google Scholar, 31 in Research Gates, 5 in Francis and Taylor, 25 in AJOL and 2 in Agricola. Publication from the Institute of Education has only 3 citation indexing, representing 2.4% of the total publication count from the institute. From the Faculty of Law, a total of 182 publications were recorded, out of which 78 were indexed in Google Scholar, 45 in Research gates, 4 Francis and Taylor and 55 AJOL.

Table 1: Unical Academic Staff Publications from 6 databases using the Web of Science Harvesters, (According to Morse and Foster, 2014)

Published articles in Journals indexed in reputable data bases from January, 2010- June, 2017									Total articles	Citation counts	%
S/NO	Faculty	Google scholar	Research gate	Thompson Reuters	EBSCO	Francis and Taylor	AJOL	Agricola	Total Articles	Citation	% cited
1	Agriculture	198	35	15	5	7	29	10	299	29	9.7
2	Arts	210	46	2	-	4	32	-	294	24	8.2
3	Dentistry	68	34	3	3	11	22	-	141	19	13.5
4	Education	314	64	5	1	17	88	19	517	68	13.2
5	Institute Of Education	59	31	-	-	5	25	2	122	3	2.4
6	Law	78	45	-	-	4	55	-	182	15	8.2
7	Management Science	97	57	5	1	3	44	-	207	13	6.3
8	Medicine	99	48	3	2	19	55	-	226	11	4.9
9	Oceanography	43	32	1	1	5	24	-	106	14	13.2
10	Social Sciences	221	53	2	4	4	66	5	355	21	5.9
Total	10 faculties	1387	445	36	2	79	440	36	2449	217	8.9

Citation index count shows that 15 articles were cited representing 8.2% from the total publications from the Faculty of Law. Publication count from the Management Sciences shows that a total of 207 papers were published from the faculty. Indexing for the journals indicated that 97 publications are in Google Scholar, 57 in Research Gates, 5 in Thompson Reuters, 1 in EBSCO, 3 in Francis and Taylor and 44 in AJOL. Citation index shows that 13 publication representing 6.3% of the total publications from the faculty were cited by other researchers. From the Faculty of Medicine, between the periods under study, a total of 226 papers were published. From data bases available and used during this study, 99 publications appear in Google Scholar, 48 in Research Gates, 3 in Thompson Reuters, 2 in Francis and Taylor, 19 in EBSCO and 55 in AJOL.

In all, 11 papers were cited by other researchers representing only 6.3% of the total publication from the Faculty of Medicine. From the Institute of Oceanography, a total of 106 publications were recorded, 43 publications are indexed in Google Scholar, 32 cited in Research Gates, 1 in Thompson Reuters, 1 in Francis and Taylor, 5 in EBSCO and 24 in AJOL. From a total of 106 publications in this institute, only 14 citations representing 13.2% of the publications were cited by scholars in their own work. Faculty of Social Sciences has a total of 355 publications. Out of this number, 221 publications are indexed in Goggle Scholar, 53 are indexed in Research Gates, 2 in Thompson Reuters, 4 in Francis and Taylor, 4 in EBSCO, 66 in AJOL, 5 in Agricola. Citation indexed shows that 21 publication representing 5.9 % of the total publication were recorded from the faculty.

To assess the extent to which publication windows available to University of Calabar academic staffs influence their research quality and outcome, respondent's opinion based on the simple percentage analysis suggested that 115 respondent, representing 19.2% strongly agreed that their publication are in journals which are indexed in reputable databases with high impact factors, 85 respondents (14.2%) agreed that their papers are published in indexed journals with high impact factors. However, 190 respondents representing 31.7% disagreed that their articles are published in journals that are mostly local and cheap which are hardly on net, not to talk of indexing and impact factor. Some agreed that their articles may be published in journals that are online, indexed, but not impact factored. 210 respondents (35%) strongly agreed that their articles are mostly published in local journals with few journals online; most of these journals are not indexed in reputable databases, while most are not impact factored. Further analysis shows that 200 respondents representing 33.3% disagreed with the statement indicating that most of the papers they publish are published in indexed journals

with good impact factors, these group also observed that the University of Calabar stressed that academic staffs should publish papers in indexed journals, except where the journals are local and not online.

While 400 respondents representing 66.7% agreed that they publish their papers in any journal accepted and recognized by the university, they hardly stress publications in indexed and impact factored journals. From the result of this analysis, it is clear that most scholars in the University of Calabar publish articles in journals that are cheap and local but are acceptable by the University of Calabar, while some publish in journals that are online and indexed in databases, but very few publish articles in impact factored journals. In fact, most response concerning impact factor were seen to be very strange and new to more than 95% of academics within the university. The question now arises, how do academic staffs in the University of Calabar compete with their counterparts in other climes? To ascertain how university research outcomes can contribute to sustainable national development through informing policy formulation for development, data generated from the second set of instrument was further subjected to Pearson Product Moment Correlation analysis, the result of the analysis is shown on table 2.

Table 2: Pearson Product Moment Correlation Analysis of the relationship between University researches outcome and sustainable national development in (N=600)

Variables		$\sum X$	$\sum X^2$	$\sum XY$	r-val
			$\sum Y^2$		
University research outcomes		10199	12879	56453	0.78
Sustainable development	national	8689	10155		

Significant 0.05 level, critical $r=0.178$, $df=598$.

The result on Table 2 shows that the calculated r-value of 0.78 is higher than the critical r-value of 0.178 at 05 levels of significance and 598 degree of freedom. From this result, there is a significant relationship between research outcomes from the University of Calabar and sustainable national development. The implication of this result is that research outcomes from the University of Calabar can significantly influence development policy formulation. But how much of these research outcomes from the University of Calabar have so far been used to influence national policy formulation is unknown. Fourteen factors were advanced as probable hindrances to effective research activities and outcome in the University of Calabar. To establish whether these factors influence or constraint research activities in the University of Calabar, a regression analysis was carried out. Table 3 shows the result of regression analysis of factors/constraints to research activities and the quality of research outcomes in the University of Calabar. Table 3 shows a yielded coefficient of regression (R) of 0.351 and a multiple regression R-square (R^2) of 0.123, and adjusted R^2 of 0.109, at 0.01 level of significance, the result is significant, the result also shows that an analysis of variance (ANOVA) of the multiple regressions produced an F-ratio of 8.817, while the f-critical value is 1.91 (2-tailed), since the calculated F-value of 8.817 is greater than the critical F-value of 1.91, at 0.05 significant level, (2-tailed), the result is also significant at 0.05 level.

To establish the relative contribution of each factor/constraints to research activities in the University of Calabar, a test of regression weight was carried out. The result shows that the standardized regression beta weight ranged from -0.021 to -3.980, the beta weight of four factors (Research grant and cost of publication, -3.980, Research equipments, -2.056, Conducive classrooms and office spaces for academic staffs and students, -3.111 and Publication in visible journal and accelerated promotion, -2.618) were significant at 0.05 level of significance, while the other ten factors (add my name syndrome, .422, NUC Ranking, .395, poor electricity, 1.052, poor internet connectivity, -0.123, duplication of researches, -0.021, lack of data bases for publication from Unical academic staffs, -0.660) and staff condition of service and welfare, .442 were not significant at 0.05 level of significance.

The implication of this result is that these four factors account for about 33% of the problems influencing research activities in the University of Calabar, namely: research grant and cost of publication, research equipments, Conducive classrooms and office spaces for academic staffs and Publication in visible journal and accelerated promotion, significantly influence research activities in the University of Calabar. The result shows that add my name, NUC Ranking, poor electricity, internet connectivity, duplication of researches, lack of data bases for publication from Unical academic staffs and staff condition of service and welfare, were factors that could not constrain as well as influence research activities in the University of Calabar. The result further shows that grant and cost of publication, research equipments, Conducive classrooms and office spaces for academic staffs and Publication in visible journal and accelerated promotion has the highest significant contribution to effective research activities in the University of Calabar. It is however understood that these factors if taken individually, only four thus affect academic activities, but when taken collectively, they all influence research activities and the quality of research outcomes from the University of Calabar.

Table 3: Regression Analysis of the Factors/ Constraints to effective research activities in the University of Calabar (N=600)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
	R Square Change	F Change	df1	df2	Sig. F Change	Square Change	F Change	df1	df2
1	.351(a)	.123	.109	.76604	.123	8.817	10	627	.000
Model	Sum of Squares		Df	Mean Square	F	Sig.			
1	Regression	51.742	10	5.174	8.817	.000(a)			
	Residual	367.933	587	.587					
	Total	419.676	597						

a Dependent Variable: Factors influencing Research activities in the University of Calabar.

Discussion of findings

Arising from the result gotten from the Web of Science Harvester of staff academic reputation and citation index, it was established that most research outcomes from the University of Calabar are hardly found on line, this being the case, what could be responsible for this near absence of research publication from the University of Calabar? Further analysis shows that most publications are done in local journals that are not hoisted on nets, while very many are published in these classes of journals because of the cost of publication. It is on the strength of this assertion that Phelps, et al, (2008) posited that for academic to pursue their research activities and be visible, the platform where these research outcomes are to be published must be accessible to all and should be made such that it can be seen from anywhere in the world. This finding is in line with the earlier finding of Girasoli & Hannafin, (2008) who advocated the use of “asynchronous audio-visual (AV) communication tools to increase academic self-efficacy” and visibility in the academic world. Platform for quality research publications should be such that global communities can easily access such publication for reference and review to boast their own researches. In one of their recommendations, the authors suggested that scholars should publish their papers in open access journals for visibility and citations. By so doing, scholars within Nigerian universities can have access to compete globally with their peers in the academic frontiers. But when researches are not found in the global academic community, it becomes difficult for visibility, citation and competitions (Grigore, Candidatu & Blideanu, 2009; Isah, 2010; Aniedi & Effiom, 2011).

This finding is in line with the finding of Arong and Ogbadu, (2010) who found that basically the problem of the declining quality of education is due to lack or near absence of proper funding of Nigerian education system, where there is gross brain drain to other countries where their academic system is properly funded and researches from such universities are ground breaking and contribute greatly to policy formulation and national development. This position

is further supported by the works of Adepoju & Fadokun, 2009; Adebakin, 2014). This result is also in conformity with the finding of Bamiro, (2012) who found that Nigerian university system and their challenges for relevance is making them grapple with air to survive, while most Nigerian universities are perpetually on a life support system in terms of funding, staffing and remuneration, staff welfare and condition of service poor classrooms conditions, lack of research grants, near absence of equipments and facilities, poor staff training and development and the general lackadaisical administration of these educational institutions. This author further found that most Nigerian universities are the way they are because of the ineptitudes of the government, where they place very little importance to the universities and their research outcomes. This situation is further exacerbated by the product of the university system. The author recommended that the products of Nigerian educational system, must rise above board since most of these students pursue the craze for paper qualification without making commensurate effort towards the acquisition of knowledge and practical skills and values that can catapult Nigerian to the economic and technological development that they desire (Kors, 2008; Imhonopi and Urim, 2009; Adepoju & Fadokun, 2009; Mimiko, 2012; Adebakin, 2014).

Publication window is another serious problems confronting academics in most universities, reputable publication windows exists and most university staffs are aware of these opportunities, but the cost of publishing in such journals are outrageous and most staffs cannot afford such luxuries considering the amount they take home as their salaries, with the school and government not providing for academic staff's research activities and publication for such researches. It has been established that due to the cost and delay in publication in reputable journals, most academic staff prefer to publish their papers in journals that are cheap, affordable and fast. This is further compounded by the 'publish or perish' dictum guiding the academic world. Since promotion and upgrading are dependent on the number of publication an academic staff must produce, and not necessarily the quality, anything goes. How then can quality be guaranteed? Hence academic staff must meet this requirements to enable them grow on the job, (Kors, 2008; Imhonopi and Urim, 2009; Ochuba, 2010; Morse and Foster, 2014). But this is not the global best practices and this cannot guarantee global competitiveness among University of Calabar academic staffs and those of other climes and countries. It is worthy of mention that despite this seeming inequality in research publications between University of Calabar, Nigerian universities and universities from other countries, University of Calabar graduates and staff compete favorably well outside the confines of the university.

Taking an in-depth look at how university research outcomes can inform policy formulation for sustainable national development, most scholars have shown a link between university research outcomes and the contribution it does to national development, Okebukola, (2008) found a link between university research outcome and national policy formulation, especially in technological development from university research outcomes, Ochuba, (2010) found a relationship between university research and sustainable national development where the result of university researches have been used to formulate policies and designed programs which had contributed greatly to program design and implementation. Bamiro, (2012) found a perfect positive correlation between university research products and national development. All these relationship found were in line with that of this study which found a positive correlation between research outcomes from the University of Calabar and national policy formulation for national development in terms of economic, social, technological and scientific development of the country. The finding of this study is also a corroboration of the earlier result of Mimiko, (2012) who found that if quality researches are carried out, their outcome can contribute greatly to national development. This researcher listed China, USA, Great Britain, Russia, Korea, Isreal, United Arab Emirate (UAE) etc as benefiting and developing astronomically because of the product of their scientific researches carried out in their respective universities.

Unfortunately, the case of University of Calabar is not the same, even though their research outcomes can contribute greatly to policy formulation and national development. What could be the reasons for this complete neglect of the use of research outcomes from the University of Calabar for national development? Many factors have been adduced and tested during the research using regression analysis. Factors listed include: lack or near absence of research grants to staff, poor and epileptic supply of electricity for staff research activities, poor internet connectivity for staff academic research, lack of staff motivation through accelerated promotion, lack of databases for Unical staff research publications, most publications by Unical academic staffs are in local journals and not visible to the global

academic communities. Other factors also listed are that Unical academic staff publications are marred by duplication, no payment of cost of publication of research outcome of academic staff by Unical administration. Some scholars do not carry out their own research, they are ‘‘add my name’’ scholars, poor academic staff offices hamper researches and teaching. Others include poor classrooms and lecture theater which also affects teaching and research, lack of reagents, chemicals and equipments for carrying out experiments in sciences and technology, poor condition of service and staff welfare and NUC 2017 ranking as a true reflection of Unical productivity.

Based on this understanding, the regression beta weight of four factors were significant and contributes about 33% to the problems of research activities not being able to contribute to national development. The four factors that were significant are: no research grant and cost of publication for academic researches, research equipments, facilities and reagents, no conducive classrooms and office spaces for academic staffs and poor academic staff publication of research papers in visible journal and accelerated promotion. While the other ten factors were not statistically significant, therefore, there do not inhibiting academic research activities in the University of Calabar. This takes us back to publication windows and opportunities and the web of science harvester’s position. This is in a corroboration of the position of the findings of Green and Hannon (2007); Phelps, Maddison, Skamp & Braithwaite, (2008); Girasoli & Hannafin, (2008) and Pidlisnyuk, (2010).

This is also a confirmation of the data generated from the Web of Sciences Harvester with the bibliographic indicators as posited by Morse and Foster, (2014). Both results therefore shows that most Unical publications are not on line, while most that are on line are not in very professional journals, and those that are indexed and data based in highly reputable journals are hardly accessed and cited, hence the poor percentage of citation index from the University of Calabar. The major problems identified further were that most publications are in local journals which are not even visible to other academic staffs within the University of Calabar. Based on the afore mentioned problems and the near invisibility of research outcomes coupled with the poor funding which the government is aware that it has not been able to meet its obligation in the funding of the education sector, they are not convinced about the quality of the research outcomes, hence they hardly make reference to research outcomes from any Nigerian university. This is why research outcomes cannot be used by the current crops of government officials we have in the country (Mimiko, 2012; Pitan & Adedeji, 2012).

Secondly, studies have shown that because of the publish or perish syndrome in most Nigerian universities without commensurate funding to enable academic staff carryout such researches, they prefer to take a shortcut to meet the obligation of publishing in order to get the next promotion, hence they publish even student assignments that are not even properly done. Finally, it has been discovered that because of the route through which some academic staff took themselves to graduate and how they did their dissertation, they cannot carryout researches themselves, hence the government and politicians should be blamed for swarming the universities with an army of unqualified teachers to the detriment of the qualified one. Looking at this scenario, one will stop to contemplate that researches from most Nigerian universities are at best good for promotion purposes, but not for informing policy formulation and national development. From the University of Calabar perspective, a number of very good and sound researches have been done, but the visibility to the global academic community has impaired the use of such research outcomes, hence the poor global ranking of Unical publications.

Conclusion

From the above, one can authoritatively conclude that a lot of researches have been carried out in the University of Calabar, but very few are published in journals that are visible and still fewer exist in journals that are indexed in good and reputable databases, hence the reason for the poor citation index. It was further concluded that poor research facilities equipments and reagent including unconducive academic staff offices and lecture theaters are all factors influencing academic research activities and until these are corrected with the provision of research grants and the university takes over the payment of publication cost in reputable journals like is the case in other universities, these situations will continue. Therefore the university administration can encourage their academic staff to publish in visible journals and same forwarded to the relevant government agencies, to inform policy

formulation for national development and global competitiveness. This trend can be reversed if only the University of Calabar management can summon the will power to do so.

Recommendations:

Arising from this research, the following recommendations were made:

Government should as a matter of urgent public concern introduce functional research grants in Nigerian universities monitor and control the disbursement of such funds to academic staff with quality proposals and capacity to carry out ground breaking researches without any stress.

Private sectors should engage staff in their areas of operations to carry out ground breaking researches for their organizations, eg Dangote Group of Companies can commission universities to carry out biotechnological cross breeding of wheat, maize, guinea corn etc that can produce raw materials for the industrial production of flour among others.

University of Calabar and other Nigerian universities should immediately introduce the payment of publication fee to academic staffs who publish their papers in some selected journals; such journals should be clearly listed out so that academic staff can take the opportunity to publish in such journals University of Calabar authority should encourage publication of research articles in foreign journals that have high impact factors and indexed in reputable database (Thompson Reuters, EBSCO, AGRICOLA, Socioscope, Science Direct, SAGE, etc).

The craze for local journals should either be reduced or encouraged to hoist their journals online or only used to train junior academic staff how to write scholarly papers. The management of University of Calabar should institute prizes and grants for the publisher (s) of the best article in the best journals, so that academic staffs who published in such journals are given these prizes, others would be motivated to publish their papers in such journals to win prizes too, hence the visibility of Unical research outcome can be done through this medium.

Implication for policy formulation:

This results and the conclusion should guide policy makers to formulate educational policies that will encourage academic staff in all universities to be productive. This can be done through the introduction of non partisan university research grants from internally generated revenue, reimbursement for the cost of publication of articles in specific journals among other. While government and other private organizations should collaborate with universities and give them research grants and other facilities to carry out ground breaking researches in their area of interests to guarantee national development.

References

- Adebakin, A. B. (2014). Assessment of University Graduates' Employability and Productivity in Public and Private Organizations in Lagos State. Unpublished M.A (Ed) thesis, Department of Educational Management, Obafemi Awolowo University, Ile-Ife.
- Adepoju, T. L., & Fadokun, J. B. (2009). Higher education and youth preparation for labour market: Implication for economic growth in Nigeria. *Journal of Education Review*, 2(2), 185-193
- Al-Ansari, H. (2006). Internet use by the faculty members of Kuwait University. *The Electronic Library* 24(6), 791-803

- Aniedi, A. I. & Effiom, D. O. (2011). Research mandate of the university: an assessment of junior academic staff participation. *Journal of Education and Sociology* 4(2): 9-14.
- Anonson, A. (2008). *Exploring the Relationship between Higher Education and Development: A Review and Report*.....
- Arong, F.E. & Ogbadu, M.A. (2010). Major Causes of Declining Quality of Education in Nigeria from Administrative Perspective: A Case Study of Dekina Local Government Area. *Canadian Social Science*, 6(3), 183-198
- Asiyai, R.I., (2013). Challenges of Quality in Higher Education in Nigeria in the 21st Century: *International Journal of Educational Planning & Administration*. 3(2), 159-172. Available online @ <http://www.ripublication.com/ijepa.htm>
- Association of American Universities (AAU)/HEFEI (2013). *The ten characteristics of contemporary research universities: AAU, LERU, GO8 and C9*.
- Atkinson, R.C. and Blanpied, W.A. (2008). Research Universities: Core of the US science and technology system. *Technology in Society* 30:30–48. Available online @ www.elsevier.com/locate/techsoc
- Bamiro. B.,(2012). *The Nigerian university system and the challenges of relevance* In: Convocation Lecture University of Lagos, Akoka-Lagos 12 January. Federal Government of Nigeria and Academic Staff Union of Universities Agreement, October 2009.
- Bhattacharya, I. & Sharma, K. (2007), 'India in the knowledge economy – an electronic paradigm', *International Journal of Educational Management* 21(6), 543-568.
- Chandra, S. & Patkar, V. (2007). 'ICTS: A catalyst for enriching the learning process and library services in India', *The International Information & Library Review* 39(1),1-11.
- CHET, (2011) in Adebakin, Azeez B., Ajadi, O. T.& Subair, S. T. (2015). Required and Possessed University Graduate Employability Skills: Perceptions of the Nigerian Employers. *World Journal of Education* 5(2), 115-121. Available online @ <http://wje.sciedupress.com>
- Cholin, V. S. (2005). Study of the application of information technology for effective access to resources in Indian university libraries', *The International Information & Library Review* 37(3), 189-197.
- Cross, M. & Adam, F. (2007). ICT Policies and Strategies in Higher Education in South Africa: *National and Institutional Pathways*', *Higher Education Policy*, 20(1), 73-95
- Fadokun, J. B. (2009). University Research capacity in Nigeria and the challenges of National Development in a knowledge-based economy. *African Higher Education Review (AHER)*. 2p.
- Fafunwa, A. Babs (1978), "The Universities of Nigeria," *Commonwealth Universities Yearbook*.
- Ferreira, J., Ryan, L., & Tilbury, D. (2006). *Whole-school approaches to sustainability: A review of models for*

professional development in pre-service teacher education. Canberra: Australian Government Department of the Environment and Heritage and the Australian Research Institute in Education for Sustainability (ARIES).

Fister, K. R., & McCarthy, M. L. (2008). "Mathematics instruction and the tablet PC".

International Journal of Mathematical Education in Science and Technology, 39 (3), 285-292

Girasoli, A. J. & Hannafin, R. D. (2008). "Using asynchronous AV communication tools to increase academic self-efficacy". *Computers & Education*, 51(4), 1676- 1682

Gough, S. and Scott, W. (2006). Education and sustainable development: a political analysis. *Educational Review* 58(3), 36-59.

Green, H. and C. Hannon (2007). *Their space: education for a digital generation*, Leicester: Demos.

Grigore, L., Candidatu, C. and Blideanu, D. C. 2009. The mission of universities in th processes of research-Innovation and development of entrepreneurial culture. *European Journal of Interdisciplinary Studies* 1(12): 1-4

Imhonopi, D. and Urim, U.M. (2009). Factors affecting scholarly research output in Nigeria: perception of academics in south-western universities. *UniLag Sociological Review*,10:24-36

Isah, A. (2010). Electronic library use by academic staff at the University of Ilorin, Nigeria. *Journal of Library and Information Science (JOLIS)* 7(1/2):138-142.

Kors, L.A., (2008). *On the sadness of higher education*. The Wall Street Journal, 27: 1-7. London: Association of Commonwealth Universities.

March, T. (2007). What WebQuests Are (Really), Retrieved 24th July 2017, from http://bestWebquests.com/what_Webquests_are.asp.

MCEETYA ICT in Schools Taskforce (2005). *Learning in an Online World: Pedagogy strategy*. Carlton South, Melbourne: 1-12. Retrieved 24 July 2007 from http://icttaskforce.edna.edu.au/icttaskforce/Webdav/site/icttaskforcesite/users/root/public/learning_online_pedagogy_05.pdf

Meehan, B., & Thomas, I. (2006). Tertiary environmental education student projects: What the academics learnt. *Australian Journal of Environmental Education*, 22(1), 49-60

Miles, R., Harrison, L. & Cutter-Mackenzie, A. (2006). Teacher education: A diluted EE experience. *Australian Journal of Environmental Education*, 22 (1) 49-60

Mimiko, F., (2012). *Human Capital Development Blueprint: a pragmatic approach to resolving the challenge of capacity gaps in organizations in Nigeria.*" Paper delivered at the Ondo State Ministry of Economic Planning and Budget Year 2012 Quarterly Lecture, November 22

- Morse, R., and Foster, M., (2014). *Finding how to determine the world top universities overall and by region and country: How U.S. Calculated the Best Global Universities Rankings*. Thomas Reuters InCites™ , 27th October, 2014.
- NSW Council on Environmental Education (CEE). (2006). *Learning for sustainability*. Sydney: NSW CEE
- Ochuba, V. O. (2010). “*Strategies for improving the quality of education in Nigerian Universities*” in N. A. Nwagwu et al (eds). *Current Issues in Educational Management in Nigeria*, A publication of the Nigerian Association for Educational Administration and Planning.
- Okebukola, P.A. (2008). *Quality assurance mechanisms and academic mobility in Anglophone Countries: Case study of Nigeria*. Paper presented at the capacity building workshop on the License-Master-Doctorate (LMD) reform held at Universite Gaston Berger, Saint Louis, Senegal, and September 19-20.
- Phelps, R., Maddison, C., Skamp, K., & Braithwaite, R. (2008). Creating Web-based Environmental Education Resources through Community and University Partnerships. *Australian Journal of Teacher Education*, 33(3), 201-212
<http://dx.doi.org/10.14221/ajte.2008v33n3.4>
- Pidlisnyuk, V., (2010). Education in Sustainable Environment: *The Role of Universities in Economic and Environmental Studies*. 10(1) 22-29. March
- Pitan, O. S., & Adedeji, S. O. (2012). Skills Mismatch among University Graduates in the Nigeria Labor Market. *US-China Education Review*, A (1), 90-98.
- Popoola, S. O. (2008). The Use of information sources and services and its effect on the research output of social scientists in Nigerian Universities. *Library Philosophy and Practice*.
- Stevenson, R. (2007) Schooling and environmental/ sustainability education: from discourses of policy and practice to discourses of professional learning. *Environmental Education Research*, 13 (2), 265-285.
- World Bank (1994). *World Development Report 1994 : Infrastructure for Development*. New York: Oxford University Press. <https://openknowledge.worldbank.org/handle/10986/5977> License: CC BY 3.0 IGO.”