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**ENVIRONMENTAL NEWS AND THE FACTORS THAT
INFLUENCE ITS COVERAGE IN THE NIGERIAN PRESS**



**DOCTOR OF PHILOSOPHY
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of Arts And Sciences

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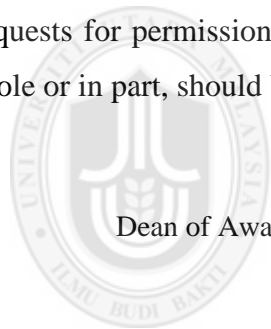
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Abstrak

Kebimbangan terhadap alam sekitar telah menjadi isu utama nasional dan antarabangsa; oleh itu terdapat keperluan untuk mengkaji seberapa banyak perhatian yang diberikan oleh media terhadapnya. Walaupun terdapat peningkatan perhatian terhadap isu-isu alam sekitar oleh pemegang taruh alam sekitar, umumnya laporan media global dan media Nigeria tidak menangani liputan berita alam sekitar dengan cara yang sesuai dengan perhatian yang sepatutnya. Oleh itu, tujuan kajian ini adalah untuk menentukan kuantum liputan alam sekitar oleh akhbar di Nigeria dan mengkaji faktor-faktor yang mempengaruhi liputan tersebut. Teori Sosiologi Pengeluaran Berita digunakan sebagai teori pendukung. Kajian ini menggunakan kaedah campuran berurutan untuk analisis kandungan dan temubual mendalam. Empat akhbar Nigeria yang terkenal iaitu Guardian, Business Day, Daily Trust, dan ThisDay telah dipilih untuk analisis kandungan berdasarkan edarannya yang meluas dan ketajaman dalam meliputi pelbagai isu penting dan menjadi antara 10 akhbar paling terkemuka di Nigeria. Sejumlah 17 orang wartawan yang dipercayai mampu memberikan maklumat yang berkualiti berkaitan dengan isu-isu alam sekitar telah dipilih untuk ditemubual. Analisis data dari kedua-dua kaedah digunakan dalam perbincangan dan kesimpulan kajian. Kajian ini mendapati bahawa liputan mengenai isu-isu alam sekitar di akhbar Nigeria amat menyedihkan. Dalam tempoh dua tahun kajian, empat surat khabar yang dianalisis hanya meliputi 754 berita. Isu-isu alam sekitar dilaporkan sekali seminggu, atau terpaksa digurukan bagi memberi laluan berita yang lebih menguntungkan. Gelora landskap politik di Nigeria juga turut menyumbang kepada kurangnya liputan ini. Kajian ini menyumbang kepada pengetahuan secara teori, metodologi dan praktikal. Secara teorinya, ia memperluaskan dan menguji teori dan pengetahuan semasa mengenai topik; kedua ia memberikan pemahaman yang lebih baik tentang konsep persekitaran; dan ketiga ia mengukuhkan kajian terdahulu. Secara metodologi, kajian ini telah meningkatkan status quo dengan menggunakan kaedah bercampur berurutan dalam mengkaji liputan berita isu-isu alam sekitar di Nigeria. Kajian ini menawarkan sumbangan praktikal kepada pengamal media, wartawan, editor, pasukan pengurusan media, orang awam dan sektor swasta bagaimana cara berurusan dengan alam sekitar dan kewartawanan alam sekitar.

Kata kunci: Kewartawanan alam sekitar, Liputan alam sekitar, Isu alam sekitar, Akhbar Nigeria, Analisis kandungan

Abstract

Environmental concerns have become major national and international issue; hence the need to study how much attention the press pays to it. Despite the intensification of attention on environmental issues by environmental stakeholders, generally global media report and the Nigerian media have not handled environmental coverage in a manner that is commensurate with the attention it demands. Therefore, the purpose of this study is to ascertain the quantum of environmental coverage by the Nigerian press and to examine the factors that affect coverage. Sociology of News Production Theory was used as the underpinning theory. The study used sequential mixed methods for content analysis and in-depth interview. Four prominent Nigerian newspapers that include the Guardian, Business Day, Daily Trust, and ThisDay were chosen for content analysis based on wide circulation and ruggedness in covering varying important issues and being among the 10 most leading newspapers in Nigeria. The 17 journalists who were believed to be able to provide quality information related to environmental issues were selected for interview. Data analyses from both methods were used in the study's discussions and inferences. This study finds that there was a dismal coverage of environmental issues in the Nigerian press. Within the two-year study period the four newspapers analyzed reported only 754 stories. Environmental issues were reported once a week, or dropped in favor of money spinning beats. Nigeria's turbulent political landscape also contributed to the poor coverage. The study contributes to knowledge theoretically, methodologically and practicality. Theoretically, it extends and tests theory and current knowledge on the topic; second, it provides a better understanding of the concept of environment; and third, it establishes previous studies. Methodologically this study improved the status quo by employing sequential mixed methods in investigating press coverage of environmental issues in Nigeria. Practicality of the study offers contributions to media practitioners, journalists, editors, media management team, the public and the private sectors on how to conduct 'businesses' relating to environment and environmental journalism.

Keywords: Environmental journalism, Environmental coverage, Environmental issues, Nigerian Press, Content analysis

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List of Abbreviations

ANEJ	African Network of Environmental Journalists
UNEP	United Nations Environment Program
UNDP	United Nations Development Program
COP	Conference of the Parties
EIA	Environment Impact Assessment
FEPA	Federal Environmental Protection Agency
NASREA	National Environmental Standards and Regulation Agency
MEA	Multilateral Environmental Agreements
LGA	Local Government Authority (third tier of government in Nigeria)
SEJ	Society of Environmental Journalists
PIEC	Project for Improved Environmental Coverage
NMMA	Nigerian Media Merit Award
ADVAN	Advertising Association of Nigeria
NES	Nigerian Environmental Society
NPAN	Newspapers Proprietors Association of Nigeria.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

This chapter begins with a general background information on the degrading environment in the global and Nigerian contexts and what is being done to bring about a sustainable environment especially the media role in this regard. Given that the environment has gained tremendous attention locally and internationally, and given that there seems to be an abject neglect of environmental issues by the media (Fischer, 2013; Fahey, 2013; Adel, 2013; Al Foor, 2013; Okunlola, 1996; Hassan, 2007; Abbas & Emenyeonu, 2015; Liebler & Bendix, 1996; Nitz & West, 2004), this chapter, therefore, presents an account of media and the environment in regard to their attitude toward covering environment. This chapter, as well, presents the research problem statement, research questions, and objectives of study, significance of study, and the scope of study. It concludes with the thesis structure.

Ordinarily, the features of the earth might appear changeless, but changes occur steadily. There is significant evidence (Tilman & Lehman, 2001) that the earth's surface has changed dramatically since its original formation. Every human society changes and transforms the natural environment in the process of gaining what they need for survival (Sutton, 2007). From Australia to Zimbabwe, environmental issues/problems have in one way or the other threatened human existence on earth. At the center of these environmental changes that threaten man, is man himself. Thus, environmental concern has become a major issue and has continued to attract attention in both the industrialized and less industrialized nations. (Pierre &

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REFERENCES

- Ackland, L. (1995). *A phantom audience for environmental journalism? Contents of the 1995. Conference on Communication and our environment Proceedings*, 248-255.
- Adegoke, A. (2007). *The Challenges of Environmental Enforcement in Africa: The Nigerian Experience*. Third International Conference on Environmental Enforcement.
- Adel, D. (2013). *Mainstream Media's Environmental Coverage: The Sound of Silence*. Retrieved from http://earthisland.org/journal/index.php/elist/eListRead/mainstraem_environmental.
- Adelegan, J.A. (2004). *The History of environmental policy and pollution of water sources in Nigeria (1960 – 2004)* Retrieved from <http://www.nigerianlawguru.com/articles/environmental>.
- Adelekan, I.O. (2009). The Nigerian Press and Environmental Information for Sustainable Development. *The International Journal of Justice and Sustainability*. 14 (4), 297-312.
- Ader, Christine R. (1995). A longitudinal study of agenda setting for the issue of environmental pollution. *Journalism & Mass Communication Quarterly* 72 (2) 300-311.
- Adler P.A., & Adler, P. (1994). Observation Techniques. In N.K., Denzin and Y.S. Lincoln (Eds.), *Handbook of qualitative research*. Thousand Oaks, CA: Sage.
- Agunwamba, J.C. (1998). Solid Waste Management in Nigeria: Problems and Issues. *Environ Manage.* 6 (22), 849 – 856.
- Akon-Yamga, G., Boadu, P., Obiri, B.D., & Amoako, J. (2011). Agricultural Innovations for Climate Change Adaptation and Food Security in Africa: The Case of Ghana and the Gambia. Fatou Janha African Technology Policy Studies Network Research Paper No. 11.
- Allan, K.B. & Gibson, E. (2012). Environment Revisited. In Deborah R. Gallagher (Ed.) *Environmental Leadership: A Reference Book*. Sage Publications.
- Allan, S. (2004). *News Culture* (2nd End). Maidenhead: Open University.
- Altheide, D.L. (1996). *Qualitative Media Analysis: Qualitative Research Methods*, Vol. 38. Thousand Oaks: Sage.
- Altheide, D.L., & Johnson, J.M. (1994). Criteria for assessing interpretive validity in qualitative research. N. K., Denzin and Y.S. Lincoln (Eds.), *Handbook of Qualitative Research*. Thousand Oaks, CA: Sage.
- Altschull, J.H. (1984). *Agents of Power: The Role of the News Media in Human Affairs*. New York: Longman.
- Anderson, A., Peterson, A., & David, M. (2005). Communication of Spin? Source – Media Relations in Science Journalism. In S. Allan (Ed.) *Journalism: Critical Issues*. Maidenhead: Open University.
- Anuradha, M. (2016). Coverage of Environmental Issues in Two National Dailies of India (The Hindu and The Times of India) *AJRRLSJM*, 1(11), 95-98
- Anyanwu, C.U. (2012). The Oil Industry and the Nigerian environment. IAIA12 Conference Proceedings' 32nd Annual Meeting of the

- International Association for Impact Assessment 27 May – 1 June 2012, Centro de Congresso da Alfandega, Porto – Portugal.
- ARD Report, (2002). Nigeria Environmental Analysis: Final Report. (ARD Report to USAID, 2002).
- Atwater, T., Salwen, M. & Anderson R. (1985). Media agenda setting with environmental issue. *Journalism Quarterly*, 62 (1985), 393-379.
- Bacon, W., Das, J. and Zaman, A. (2009). 'Theme: Giving the people what they want.' Covering the environmental issues and global warming in delta land: A study of three newspapers. *Pacific Journalism Review*, 15(2) 10-31
- Babalola, Y.T., Babalola, A.D. & Okhale, F.O. (2010). Awareness and Accessibility of Environmental Information in Nigeria: Evidence from Delta State. *Library Philosophy and Practice 2010*. Retrieved from <http://www.webpages.uidaho.edu/~mbolin/babalola-bablola-okhale.htm>.
- Babcock, W.A. (1979). *Environmental Pollution Coverage in "Newsweek" from 1969 through 1975*. Southern Illinois: UMI Publishing.
- Bailey, G. & Hackett, B. (1997). *News Watcher's Guide to Content Analysis*. Canada: School of Communication, Simon Fraser University.
- Bantz, C., McCorkle, S., and Baade, R (1980). "The News Factory." *Communication Research*, 7(1), 45-68
- Barnes, T. & Duncan, J. (1992). *Writing Worlds*. London: Routledge.
- Batta, H.E., Ashong, A.C., & Bashir, A.S. (2013). Press Coverage of Climate Change Issues in Nigeria and Implications for Public Participation Opportunities. *Journal of Sustainable Development*, 6 (2), 56 – 69.
- BBC World Service Trust (2008). *Using content analysis to measure the influence of media development interventions: Elections training for journalists in Yemen*. London: British Broadcasting Corporation.
- Bean, A. (2010). "I heard it on the News": *Mainstream Media and its Effect on Public Opinion and Environmental Policy*. Unpublished Manuscript, University Honors, Capstone Project.
- Beeman, W.O., & Peterson, M.A. (2001). Situations and Interpretations: Explorations in interpretive practice. *Anthropological Quarterly* 74 (4) 159 – 162.
- Bell, A. (1989). *Media Reporting and Public Understanding of Climate Change Issue in New Zealand*. Wellington: Department of Linguistics, University of Victoria.
- Berelson, B. (1952). *Content Analysis in Communication Research*. Glencoe, IL: Free Press.
- Berger, A.A. (1991). *Media Research Techniques*, California: Sage.
- Berkowitz, D. (1997). *Social Meaning of News: A Text Reader*. London: Sage.
- Berry, R.S.Y. (1999). Collecting data by in-depth interviewing. Paper presented at the British Educational Research Association Annual Conference, University of Sussex at Brighton, Sept 2 – 5 1999.
- Borman, C. (1978). Communication Accuracy in Magazine Science Reporting *Journalism Quarterly*, 55(2) 345-346.
- Boyce, C. & Neal, P. (2006). "Conducting in-depth interviews: A Guide for designing and Conducting In-Depth Interviews", Pathfinder International Tool series.

- Boykoff, M. (2010). Indian media representations of climate change in a threatened journalistic ecosystem. *Climatic Change*, 99 (1) 17-25.
- Boykoff, M. (2009). We Speak for the Trees: Media Reporting on the Environment. *Annual Review of Environment and Resources*, 34(2009), 431-57.
- Boykoff, M., & Boykoff, J. (2007). Climate change and journalistic norms: A case study of US mass media coverage. *Geoforum*, 38(6) 1190-1204.
- Boyagodu, E.W.M.S. (2017). Reporting Green: An Exploratory Study of News Coverage of Environmental Issues in Sri Lankan Newspapers. *Asia Pacific Journal of Advanced Business and Social Studies*, 3(10), 307-316
- Bourassa, E., Amend, E., & Secko, D.M. (2013). A thematic Review and Synthesis of Best Practices in Environment Journalism. *Journal of Professional Communication*, 3(1) 39-65.
- Brossard, D., Shanahan, J. & McComas, K. (2004). Are issue-cycles culturally constructed? A Comparison of French and American coverage of global climate change. *Mass Communication and Society*, 7(3), 359-77.
- Bubela, T.M., & Caulfield, T.A. (2004). Do the Print Media Hype Genetic Research? A Comparison of Newspaper Stories and Peer-Reviewed Research Papers. *Canadian Medical Association Journal*, 170(9), 1399-1407.
- Bucknall, J., Kraus, C. & Pillai, P. (2002). *Poverty and the environment* (The World Bank).
- Burke, E. (1995). Ecocrisis in Nepal: the role of environmental media. *Mass Communication Review*, 22(1/2), 4-63.
- Campbell, F. (1999). *The Construction of Environmental News*. London: Ashgate Publishing.
- Campbell, D.T., & Fiske, D. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, 56(2), 81-105.
- Cantrill, J.G. & Oravec, C.L. (1996). *The Symbolic Earth*. Kentucky: The University Press of Kentucky.
- Carlton, J.S., Perry-Hill, R., Huber, M. & Prokopy, L.S. (2015). The Climate Change Consensus extends beyond Climate Scientists. *Environment Research Letter*, 10(2015), 1-12.
- Carlson, M. (2009). Dueling, dancing, or dominating? Journalists and their sources. *Sociology Compass*, 3(4), 526-542.
- Carvalho, A. (2007). Ideological Cultures and Media Discourses on Scientific Knowledge: Re-Reading News on Climate Change. *Public Understanding of Science*, 16 (2), 223-243.
- Center for Energy & Climate Solutions (2009). Summary: Copenhagen Climate Summit. Retrieved from <http://www.c2es.org/print/international/negotiations/cop>.
- Chigbo, M. (2008). Why the war is starting late in Nigeria. *Newswatch*, 3 Nov. 2008.
- Cohen, H. (1994). *The Press and Foreign Policy*. Princeton: Princeton University Press.

- Cook, K.E. (2008). In-depth interview. In *The Sage Encyclopedia of Qualitative research Methods*. Retrieved from <http://srmo.sagepub.com/view/sage-encyc-qualitative-research>.
- Cotter, C. (2010). *Investigating the Language of Journalism*. Cambridge: Cambridge University Press.
- Cox, R. J. (2006). *Environmental Communication and the Public Sphere*. London: Sage Publications.
- Creswell, J.W. (2007). *Qualitative Inquiry and Research Design: Choosing among Five Approaches*. Thousand Oaks: Sage Publications.
- Creswell, J.W., & Plano Clark, V.L. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: sage.
- Creswell, J.W., Plano Clark, V., Gutmann, M., & Hanson, W. (2003). Advanced mixed methods designs. In Tashakkori, A., and Teddlie, C. (Eds.), *Handbook of mixed method research in the social and behavioral science*. Thousand Oaks, CA: Sage.
- Crossman, A. (2017). Understanding Purposive Sampling: An overview of methods and application Retrieved from <http://sociology.about.com/od/Types-of-Samples/a/Purposive-Sample.htm>.
- Curry, J.L. (1982). "Media Management and Political Systems", in J.L. Curry and R. Dassin (eds.) *Press Controls Around the World*, New York: Praeger Publishers.
- Daley, P. & O'Neil, D. (1991). Sad is too Mild a Word: Press Coverage of the Exxon Valdez oil spill. *Journal of Communication*, 41(4), 43-57.
- Davidson, A. (1990). *In the Wake of Exxon Valdez: The devastating Impact of the Alaska Oil Spill*. San Francisco: Sierra Club Books.
- Das, J., Bacon, W., & Zaman, A. (2009). Covering the environmental issues and global warming in Delta Land: A study of three newspapers. *Pacific Journalism Review*. 15(2), 10-33.
- Dennis, E. E. (1991). In Context: Environmentalism in the System of News. In Craig L. LaMay and Everrete E. Dennis (eds.) *Media and the Environment*. Washington D.C: Island Press.
- Denscombe, M. (2004). *The Good Research Guide for small-scale social research 2nd edition*. Open University Press.
- Denzin, N.K., & Lincoln, Y.S. (Eds.). (2005). *The handbook of qualitative research (3rd edn.)* Thousand Oaks, CA: Sage.
- Detjen, J. (1977). Environmental writing. In D. Blum and M. Knudson (Eds.), *A field guide for science writers*. New York: Oxford University Press.
- Dike, A.A. (1985). Environmental Problems in Third World Cities: A Nigerian Example. *JSTOR: Current Anthropology*, 26(4), 501-505.
- Dramola, A. & Ibem, E.O. (2010). Urban Environmental Problems in Nigeria: Implications for Sustainable Development. *Journal of Sustainable Development in Africa* 12 (1), 124 – 145.
- Dryzek, J. (2005). *The Politics of the Earth: Environmental Discourses*. Oxford: Oxford University Press.
- Dudo, A. D. (2005). *An Environmental Controversy: How Newspapers Framed Coverage of the Bush Administration's Proposal to Drill for Oil and Natural Gas in the Arctic National Wildlife Refuge*. M.A Thesis submitted to the Faculty of the University of Delaware.

- Dunwoody, S. & Griffin, R. (1993). Journalistic strategies for reporting long-term environmental issues: A case study of three superfund sites. In A. Hasen (Ed.) *The Mass Media and Environmental Issues*. New York: Leicester University Press.
- Dunwoody, S. & Ryan, M. (1987). The credible scientific source: *Journalism Quarterly* 64(1), 21 – 7.
- Dutt, B. Garg, K.C. & Bhatta, A. (2013). A quantitative assessment of articles on environmental issues published in English-language Indian dailies. *Annals of Library and Information Studies*, 60(2013), 219-226
- Earth Summit History: Conference on Human Environment, Stockholm (1972). Retrieved from <http://wecanada.org/about-erth-summit-history/>.
- Einsiedel, E., & Coughalan E. (1993). “The Canadian Press and the Environment: Reconstructing a Social Reality. In Hansen Anders (ed.). *The Mass Media and Environmental Questions*. Leicester: Leicester University Press.
- Echefu, N. & Akpofure, E. (2003). *Environmental impact assessment in Nigeria: regulatory back ground and procedural framework*. UNEP EIA training Resource Manual. Case studies from developing countries. Retrieved from <http://www.unep.ch/etu/publications/14>.
- Edeani, D.O. (1994). Nigerian Mass Media Handling of Conflict in the West African Sub-Region. *Africa Media Review*, 8(1) 25-68.
- Ekanem, I.A. (2003). Communicating Science Information in a Science-unfriendly environment: the experience of Nigeria. *Public Understanding of Science*, 12, 203-209.
- Elwood, S. & Martin, D. (2000). Placing interviews: location and scales of power in qualitative research. *Professional Geographer*, 52 (2000), 649-657.
- Emenyeonu, C.O. (2017). *Covering news in a digital age: Has digitalism eroded professionalism?* Paper presented at the International Scientific Conference on Digital Communication in the Age of Social Transformation, Ajman University 16-17 April 2017.
- Emenyeonu, C. O. & Ndulaka, S. (1998). *Reporting the Environment*. Paper presented at the Postgraduate workshop on advanced reporting and writing at Department of Mass Communication, University of Nigeria, Nsukka.
- Entman, R. (1993). Framing: Towards Clarification of a Fractured Paradigm. *Journal of Communication*, 43(4), 51-58.
- Environmental Law Research Institute (2009). *A synopsis of Laws and Regulations on the Environment in Nigeria*. Retrieved from <http://www.elri-ng.org/>.
- Eregha, P.B. & Irughe, I.R. (2009). Oil Induced Environmental Degradation in Nigeria’s Niger Delta: The Multiplier Effect. *Journal of Sustainable Development in Africa*. 11(4), 160 -170.
- Ettema J.E., Whitney, D.J., Wackman, D.B. (1987) “Professional Mass Communicators.” In *Handbook of Communication Science*, eds. Charley R. Berger and Steven H. Chaffee, Beverly Hills: Sage
- Fahn, J. (2008). *Media Coverage of Climate Change lags behind in Countries where it Matters Most*. Retrieved form <http://www.nature.com/climate/2008/0807/full/c108.64.html> imate.20.

- Federal Ministry of Environment, Abuja (2015). *Nigeria's Nationally Determined Contribution*. Requirement by Conference of Parties to the United Nations Framework Convention on Climate Change (COP-UNFCCC). Retrieved from <http://www4.unfccc.int>.
- Federal Republic of Nigeria: *Official Gazette* (2007). No. 92, Vol. 94. Lagos: Federal Government Printer.
- Fishman, M. (1980). *Manufacturing the News*. Austin: University of Texas Press.
- Flower, L. (2006). Environmental Challenges in the 21st century. *Assumption University Journal of Technology*. 9(4), 248-252.
- Freyenberger, D. (2013). *Amanda Knox: A Content Analysis of Media Framing in Newspapers around the World*. Unpublished M.A Thesis submitted to Faculty of the Department of Communication, East Tennessee State University.
- Friedman, S.M. (2004). And the Beat Goes On: A Third Decade of Environmental Journalism. Senecah Susan (ed.) *The Environmental Communication Year Book* (Volume 1) Mahwah: Lawrence Erlbaum Associates.
- Galadima, A. (2006). Coverage of Environmental Issues and problems by Nigerian News magazines: A Content Analysis. *Journal of Communications*. 4(1/2). 92-99.
- Gamson, W.A., & Modigliani, A. (1989). Media Discourse and Public Opinion on Nuclear Power: A Constructionist Approach. *American Journal of Sociology*. 95 (1), 1-37.
- Gans, H. (1979). *Deciding what's news: A Study of CBS News, NBC Nightly News, Newsweek and Time*. New York: Pantheon.
- Gardiner, R. (2002). *Towards Earth Summit 2002*. Earth Summit 2002 Briefing Paper. Retrieved from www.earthsummit2002.org on 30 Jan.2013.
- Gatlin, T. (1980). *The Whole World is Watching: Mass Media in the Making and Unmaking of the New Left*. London: University of California Press.
- Galtung, J. & Ruge, M.H. (1965). The Structure of Foreign News. *Journal of Peace Research*, 2(1) 64-91.
- Gavin, N. (2009). *Media Coverage Affects Climate Change Perceptions*. Retrieved from http://www.redorbit.com/news/science/1645162/media_coverage_affects_climate_change_perceptions/.
- Gavin, N., Leonard-Milson, L. & Montgomery, J. (2011). Climate Change, Flooding and the Media in Britain. *Public Understanding of Science*, 20 (3), 422-38.
- Ginnekan, J.V. (1998). *Understanding Global news: A Critical Introduction*. London: Sage.
- Glesne, C., & Peshkin, A. (1992). *Becoming qualitative researchers: An introduction*. White Plains, NY: Longman.
- Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. Cambridge, MA: Harvard University Press.
- Goldenberg, E.N. (1978). "An Overview of Access to the Media." In L.K. Epstein (Ed.) *Women and the Media*. New York: Hastings House.
- Goodfield, J. (1981), *Reflections on science and the media*. Washington, DC: American Association for the Advancement of Science.

- Gore, A. (1991). Steering by the stars. In C.L. LaMay & E. E. Dennis (Eds.), *Media and the Environment*. Washington DC: Island Press.
- Graffin, E. (2006). *A First Look at Communication Theory (6th edition)*. New York: McGraw-Hill.
- Grandy, O. (1982). *Beyond Agenda Setting: Information Subsidies and Public Policy*. Norwood: Abex.
- Greenberg, M.R., Sachsman, D.B., Sandman, P.M. and Salumone, K.L. (1989). Risk drama and geography in coverage of environmental risk by network TV. *Journalism Quarterly*, 66(2) 267-276.
- Greenberg M. R. et al. (1989). Network Television News Coverage of Environmental Risks. *Environment*, 31 (2), 16-20.
- Gubrium, J. and Holstein, J. (Eds.) (2002). *Handbook of Interview Research: Context & Method*. London: Thousand Oaks.
- Guide to the Nigerian Media. (2012). Prepared by the Communication Unit, UNDP Nigeria. Retrieved from <http://web.undp.org/comtoolkit/reaching-the-outside-world/docs>.
- Gunster, S. (2009). Environmental journalism viewed from Canada. *Media Development*, 2, 25-8.
- Hall, S. (1978). *Policing the Crisis*. London: Macmillan.
- Hall, S. et al. (1981). "The Social Production of News: Mugging in the Media." In S. Cohen and J. Young (Eds.) *The Manufacture of News*. California: Sage.
- Hallinan, B. (1995). *Media and Politics: An Exploratory and Public Support for MPs in New Zealand*. University of Canterbury Christchurch.
- Halloran, J. (1998). Mass Communication Research: Asking the Right Questions. In A Hansen, S. Cottle, R. Negrine and C. Newbold (Eds.) *Mass Communication Research Methods*. London: Macmillan Press.
- Hanitzsch, T. and Hoxha, A. (2014) News Production: Theory and Conceptual Framework. Infocore Working paper. Retrieved from http://www.infocore.eu/wp-content/uploads/2014/12/Theoretical-Framing_WP1_News-Productions.pdf
- Hansen, A. (2011). Communication, Media and Environment: Towards Reconnecting Research on Production, Content and Social Implications of Environmental Communication. *International Communication Gazette*, 73 (1-2), 7-25.
- Harrison, J. (2006). *News*. London: Routledge
- Hasan, Nik, N. N. (2007). *The Representation of Environmental News: A comparative Study of the Malaysian and New Zealand Press*. An unpublished PhD Thesis submitted to the University of Canterbury.
- Hellebrandti, D. & Hellebrandti, L. (2010). Representations in the Brazilian media of the impacts of climate change in the coastal zone. *Pan-American Journal of Aquatic Sciences* 5(2) 298-309.
- Hessing, M. (2003). Green mail: The social construction of environmental issues through letters to the editor. *Canadian Journal of Communication*, 28(1), 25-42.
- Herman, E. & Chomsky, N. (1998). *Manufacturing content: The Political Economy of the Mass media*, New York: Pantheon.
- Hilmi, A.H. & Emenyeonu, C. O. (2015). Environmental Journalism: A Content Analytical Study of Omani Newspaper Coverage of

- environmental Issues. *International Journal of Arts and Commerce* 4 (6) 69-82.
- Holsti, O. (1969). *Content Analysis for the Social Sciences and Humanities*. London: Addison-Wesley Publishing Company. The International Gazette, 73 (1-2), 27-43.
- Howard-Williams, R. (2011). Consumers, Crazies and Killer Whales: The Environment of New Zealand Television.
- Hunter, M.G., (2004). "Qualitative Research in Information Systems: An Exploration of Methods". In Whiteman, M.E. and Wyszcznski (Eds.) *The Handbook of Information Systems Research*, USA: Ideal Group Publishing.
- Ibimilua, F. O.&Ibimilua, A. F. (2014). Environmental Challenges in Nigeria: Typology, Spatial Distribution, Repercussions and Way forward. *American International Journal of Social Science*, 3(2), 246-253.
- Idid, S. A. (2017). Agenda Setting: Probing the issues during the 13th General Election. *Journal of Communication*, 33(2), 1-12.
- Ifeanyi, A. (2002). Environmental impact assessment as a tool for sustainable development: The Nigerian experience. *Proceedings of the FIG XXII International Congress, April 19-26, Washington, DC USA*.
- Igbeka, J. U. &Ola, C.O. (2010). Use of Newspapers by Nigerian University Students: The Case of Delta State University, Anwai Campus. *Library Philosophy and Practice* 2010.
- Isreal, G.D. (2013).Determining Sample Size.University of Florida IFAS Extension.Retrieved from <http://edis.ifas.ufl.edu>.
- Ityavyar, E. M., Thomas, T.T. (2012). Environmental Pollution in Nigeria: The Need for Awareness Creation for Sustainable Development. *Journal of Research in Forestry, Wildlife and Environment*, 4 (2), 92-105.
- Jalarjan, RS. & Sreekumar, R. (2011). 'The Commercial misrepresentation of environmental issues: Comparing environmental media coverage in the first world and the developing nations, *Amity Journal of Media & Communication Studies*, 1(2) n.p
- Jackson, S. E., Renwick, D. W., Jabbour, C. J., & Muller-Camen, M. (2011). State-of-the-art and future directions for green human resource management: Introduction to the special issue. *German Journal of Human Resource Management*, 25(2), 99-116.
- Jick, T.D. (1979).Mixing qualitative and quantitative methods: Triangulation in action.*Administrative Science Quarterly*, 24(4), 602-611.
- Karborga, I. & Bertero, C. (2002). Using an interpreter in qualitative interviews: Does it threaten validity? *Nursing Inquiry*, 9 (1), 52-56.
- Keating, M. (1993).Covering the Environment: *A Handbook on Environmental Journalism*. Ottawa: National Round Table on Environment and the Economy.
- Keating, M. (1997). Three Decades on the Green Belt. *Alternative Journal*, 23 (1), 11-23.
- Keith, S. (2011) Shifting Circles: Reconceptualizing Shoemaker and Reese's Theory of Influences on Media Content for a Newer Media Era. *Web Journal of Mass Communication*, 29(1) n.p

- Kimberly, A. Neuendorf., Jasntova, P., Snyder-Suhy, S., & Gore, T.D. (2006). *James Bond 007 Analysis Codebook*. School of Communication, Cleveland State University.
- Kim, H. (1977). Small department can gain from science writing course. *Journalism Educator*, 32(3), 81-83.
- Kostarella, I. & Tsantopoulos, G. (2013). The coverage of environmental issues by the Greek media from the editors' perspective. Paper presented at the 1st Global Virtual Conference. April 8 – 12 2013.
- Krimsky, S. & Plough, A. (1988). *Environmental hazards: Communicating risks as a social process*. Dover, Massachusetts: Auburn House Publishing Company.
- Krippendorff, K. (1980). *Content Analysis*. Beverly Hills, CA: Sage.
- Krippendorff, K. (2004). *Content Analysis (2nd edn.)*, London: Sage.
- Labov, W. (1972). *Sociolinguistic Patterns*. Philadelphia: University of Pennsylvania Press.
- Lacy, S. & Coulson, D.C. (2000). Comparative case study: Newspaper source on the environmental beat. *Newspaper Research Journal*, 21(1), 13-25.
- LaFollette, M.C. (1990). *Making science our own: Public images of science 1910-1995*. Chicago: The University of Chicago Press.
- LaMay, C. (1991). Heat and Light: The Advocacy-Objectivity Debate. In LaMay Craig and Everette E. Dennis (Eds.) *Media and the Environment*. Washington D.C: Island Press.
- Lasswell, H. (1927). *Propaganda techniques in the world war*. New York: Knopf.
- Lasswell, H.D, Lerner, D, and de Sola Pool, I. (1952). *Comparative Study of Symbols*. Stanford: Stanford University Press
- Leff, L. (2005). *Buried by the Times: The Holocaust and America's Most Important Newspaper*. Cambridge: university of Cambridge Press.
- Lemons, J. (2011). "The Urgent Need for Universities to Comprehensively Address Global Climate Change Across Disciplines and Programs. *Environmental Management*, 48(2011) 379-391.
- Libler, C.M. & Bendix, J. (1996). Old growth forests on network news: News sources and the framing of environmental controversy. *Journalism Quarterly*, 73(1), 53-65
- Lima, M. D. V. D., Loose, E. B., Mei, D., Schneider, T., Duarte, V., & Lambach, H. (2015). Journalism and environment: academic production of a decade in the Intercom events. *Intercom: Revista Brasileira de Ciências da Comunicação*, 38(2), 231-252.
- Lindenfield, L.a., et al. (2012). Creating a Place for Environmental Communication Research in Sustainability Science. *Environmental Communication*, 6 (1), 23-43.
- Lineman, M., Do, Y., Kim, J.Y. & Joo, G. (2015). Talking about Climate Change and Global Warming. *PLoS ONE*, 10(9), 1-12.
- Livingstone, S. & Bennett, W.L. (2003). Gatekeeping, indexing, and live-event news: Is technology altering the construction of news? *Political Communication*, 20(4), 363-380.
- Luedcke, G. & Boykoff, M.T. (2017). Media communication on environmental issues. In Douglas Richardson et al., (eds.) *The International Encyclopedia of Geography*. John Wiley and Sons Ltd.

- Macnaghten, P. & Urry, J. (1998). *Contested Natures*. London: Sage.
- Macnamara, J. (2005). Media Content Analysis: Its uses; benefits and best practices methodology. *Asia Pacific Public Relations Journal*, 6(1), 1-34.
- Makere University (2011). *Media Coverage of Science and Technology in Africa*. A UNESCO Sponsored Research.
- Manning, P. (2001). *News and News Sources: A critical Introduction*. London: Sage.
- Manzur, A. (1998). Global Environmental Change in the News: 197-90 vs 1992-6. *International Sociology*, 13 (4), 457-472.
- Mare, A. (2011). *Climate change mediation and mediatisation in Southern Africa: Towards climate and environmental journalism*. Climate Change Symposium 2011.
- Marukatat, S. (1991). *A comparative content analysis of environmental news coverage in Time and The Weekly Review*. M.A Thesis, Iowa State University.
- Maykut, P. & Morehouse, R. (1994). *Beginning Qualitative Research: A Philosophic and Practical Guide*. London: The Falmer Press.
- McAdams, D.P. & Zeldow, P.B. (1993). Construct Validity and Content Analysis. *Journal of Personality Assessment*, 61(2), 243-245.
- McCombs, M. (2004). *Setting the Agenda: The mass media and public opinion*. Cambridge: Polity.
- McCombs, M. & Shaw, D.L. (1972). The agenda-setting function of mass media. *The Public Opinion Quarterly*, 36 (2), 176-187.
- McCombs, M., Shaw, D. & Weaver, D. (1997). *Communication and Democracy: Exploring the Intellectual Frontiers in Agenda Setting Theory*. Mahwah, NJ: Lawrence Erlbaum.
- McGeachy, L. E. (1987) "Trend in Magazine coverage of Environmental Issues, 1961 – 1986". M.A Thesis, The University of North Carolina
- McQuail, D. (1993). *Media Performance: Mass Communication and the Public Interest*. London: Sage.
- McQuail, D. (1987). *Mass Communication Theory*. Beverly Hills: California.
- Meakin, S. (1992). The Rio Earth Summit: Summary of the United Nations Conference on Environment and Development. Retrieved from <http://www.publications.gc.ca/collections/Collection-R/LoPBdP/bp3-e.htm>.
- Mencher, M. (1984). *Basic News Writing*. USA: WCB Publishers.
- Miller, M.M., & Reichert, B.P. (2000). Interest Group Strategies and Journalistic Norms: News Media Framing of Environmental Issues. In Allan Stuart, Barbara Adam and Cynthia Carter (Eds.) *Environmental Risks and Media*. New York: Rutledge.
- Miller, T., & Pollak, T. (2013). "Environmental Coverage Ranking Report". Retrieved from www.environmentalcoverage.org/ranking.
- Muruktla, N. et al. (2017). Online Media Coverage of Air Pollution Risks and Current Policies in India: A Content Analysis. *WHO South-East Asia Journal of Public Health*, 6(2) 41-49

- Muti, A.G., Mohammed, R., & Ismail, A. (2017). Disaster Risk Reduction: Framing of Flood Disaster in Nigerian Newspapers. *Journal of Social Sciences and Humanities*, 12(1) 151-164.
- Nasser, M.K. (1993). The Nature and Treatment of News. In L.J Martin and A.G. Chaudhary (Eds.) *Comparative Mass Media Systems*. New York: Longman.
- Ndubisi, N.O. & Nair, S.R., (2009). Green Entrepreneurship (GE) and Green Value Added (GVA): A Conceptual Framework. *International Journal of Entrepreneurship*, 13(1), 21-34.
- Nelkin, D. (1995). *Selling Science: How the press covers science and technology*. New York; W.H Freeman.
- New World Encyclopedia (2015). Federal Republic of Nigeria. Retrieved from <http://www.newworldencyclopedia>.
- Nguyen, A. (2008). Facing “the fabulous monster.” The Traditional media’s fear-driven innovation culture in the development of online news. *Journalism Studies*, 9(1), 91-104.
- Nigeria: Country Profile (2007). *Implementation of Agenda 21: Review of progress made since the United Nation’s Conference on Environment and Development, 1992*. Retrieved from <http://www.un.org/dpcsd/>
- Nigerian Environment (2012) –*Current issues* Retrieved from <http://www.indexmundi.com/nigeria/environment>.
- Nibset, M.C. (2011). *Climate shift. Clear Vision for the Next Decade of Public Debate*. Washington D.C: American University School of Communication.
- Nitz, M. & West, H. (2004). Framing of newspaper news stories during a presidential campaign cycle: The case of Bush-Gore in election 2000. In Senech, S.L. (Ed.), *The Environmental Communication Year Book*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Nnanyelugo, O., & Nnaji, G. O. (2012). Press Coverage of Environmental Pollution in the Niger Delta Region of Nigeria: A Content Analysis of the Guardian, Vanguard, Daily Sun and Thisday Newspapers. *Journal of Humanities and Social Science*, 3, (2) 34-46.
- Nossek, H. (2008). News. In W. Donsbach, *The International Encyclopedia of Communication Online* Retrieved from http://www.communicationencyclopedia.com/public/tocnode?id=g9781405131995_yr2015_chunk_g978140513199519_ss14-1#citation
- Nwabueze, B.O. (1994). Nigeria '93: *The Political Crisis and Solutions*. Ibadan: Spectrum Books.
- Nwabueze, C. (2007). *Environmental Communication: Perspectives on green communication and information management*. Enugu: Daisy Press.
- Nwabueze, C., Nnaemeka, F., Umeora, D. & Okika, E. (2015). Nigerian Newspapers’ Coverage of Climate Change Issues. *European Scientific Journal*, 11 (17), 171-184.
- Nwagbara, U. (2010). *The Nigerian Press, the Public Sphere and Sustainable Development: Engaging the Post Amnesty Deal in the Niger Delta*. Retrieved from <http://www.jsdafrica.com> on 18 Feb.2013.
- Nworgu, B. (1991). *Education Research: Issues and Methodology*. Ibadan: Wisdom Publisher Ltd.

- Nwufu, C. C. (2010). Legal Framework for the Regulation of Waste in Nigeria. *African Research Review*, 4 (2), 491-501.
- Obiechina, T. (1987). "News Sources for Starting Reporters", in *Handbook for African Journalists*, USA: World Press freedom Committee.
- O'Donnell, C., & Ronald E. R. (2008). "Coverage of Environmental Event in US and UK Newspapers: Frequency, Hazard, Specificity, and Placement." *International Journal of Environmental Studies*, 65(5), 637-654.
- Ogunjinmi, A.A., Onadeko, S.A., & Ogunjinmi, K.O. (2013). Media coverage of nature conservation and protection in Nigeria National Parks. *International Journal of Biodiversity and Conservation*, 5(10), 687-695.
- Okafor, O. (2011). Environmental Laws and Factors affecting them in Nigeria: A Case Study of Gas Flaring Laws in Niger Delta. Retrieved from <http://www.academia.edu> On 5 Feb. 2013.
- Okpi, A. Punch (Online) (April 8, 2012). 66 million Nigerians lack access to portable water – WHO/UNICEF.
- Okunola, P. (1966). Reporting the Environment: The Nigerian Print Media Experience. Paper Presented at Environmental Reporting Conference in Otta, Ogun State Nigeria.
- Olausson, U. (2009). Global Warming – Global Responsibility? Media frames of Collective Action and Scientific Certainty. *Public Understanding of Science*, 18 (4), 421-36.
- Olokesusi, A. (1987). Characteristics of Environmental problems in Nigeria and Management Problems. *Environmentalist*, 7 (1), 55-60.
- Omofonmwam, S.I., & Osa-Edoh, G.I. (2008). The Challenges of Environmental Problems in Nigeria. *Journal of Human Ecology*, 23(1), 53-56.
- Onyenekewa, C.E. (2011). Managing Nigeria's Environment: The Unresolved Issues. *Journal of Environmental Sciences and Technology*, 4 (3), 250-263.
- O'Shaughnessy, M. & Stadler J. (2008). *Media and Society (4th edn.)* Victoria: Oxford.
- Oso, I. (2006). Framing the Environment: Press Coverage of Environmental Problems. *Nigerian Journal of Communications*, 4 (1&2), 66-77.
- Osuntokun, A. (ed.) (1997). *Dimensions of Environmental Problems in Nigeria*. Lagos: Davidson Press University of Ibadan.
- Ottman, J.A. (1998). *Green Marketing: Opportunity for Innovation (2nd ed.)* Chicago IL: NTC Business Books.
- Owen, D. (2013). New media and contemporary interpretations of freedom of the press. In T.E Cook and R.G. Lawrence (Eds.), *Freeing the Press: The First Amendment in Action (rev.)* Baton Rouge: Louisiana State University Press.
- Oyeniya, B.A. (2011). Waste Management in Contemporary Nigeria: The Abuja Example. *International Journal of Politics and Good Governance*, 2 (22), 1-18.
- Ozor, N. & Madukwe, M.C. (2012). Influencing Curriculum Development and Knowledge of Climate Change Issues in Universities: The case of

- University of Nigeria Nsukka. *Journal of Agricultural Extension*, 16(1), 103-118.
- Palen, J.A. (1999). Objectivity as Independence: Creating the Society of Environmental Journalists, 1989-1997. *Science Communication*, 21 (2), 156-71.
- Paletz, D.L. & Entman, R.M. (1981). *Media Power, Politics*. New York: Free Press.
- Palys, T. (2008). Purposive Sampling. In Given L.M. *The Sage Encyclopedia of Qualitative Research Methods*. Sage: Thousand Oaks.
- Parenti, M. (1986). Who controls the news? The myths of independence and objectivity. In *Inventing Reality: The Politics of the Mass Media*. New York: St. Martins Press.
- Paskey, J., & Steward, G. (2012). *The Alberta Oil Sands, Journalists, and Their Sources*. Edmonton: Oil Sands Research and Information Network, University of Alberta.
- Pate, U.A. (2012). *Media and the process of democratization in Nigeria*. Paper presented at a workshop on The Media and Democracy in Nigeria, Kaduna, December 15 – 17 2011.
- Patton, M.Q. (2002). *Qualitative Research and Evaluation Methods (3rd ed.)*. Thousand Oaks, CA: Sage.
- Peattie, K. (1992). *Green Marketing, The M&E Handbook Series*. London: Pitman Publishing.
- Peters, H.P. (1992). The Credibility of Information Sources in West Germany after the Chernobyl Disaster. *Public Understanding of Science*, 1, 325-43.
- Peterson, M.A. (2003). *Anthropology and Mass Communication: Media and Myth in the New Millennium*. New York: Berghahn Books.
- Pierre, M. & Prothero, A. (1997). *Green Management: A Reader*. London: Dryden Press.
- Popoola, M. (2014). Content and Hermeneutical Analysis of Selected Newspapers' Reportage of Environmental Issues in Nigeria. *Journal of Humanities and Social Sciences*, 19(3), 137-165.
- Preston, P. and Metykova, M. (2009). "From News to House Rules: Organisational Contexts." In *Making News: Journalism and News Cultures in Europe*, ed. Paschal Preston. London and New York: Routledge
- Priest, S. (2001). *A grain of truth: The media, the public, and biotechnology*. New York: Rowman & Littlefield.
- Project for Improved Environmental Coverage (PIEC) (2014). *Strengthening Environmental Coverage in the news over the next Decade*. Retrieved from <http://www.greeningthemedias.org>.
- Provisions on the Environmental Management of New Chemical Substances (2003). Retrieved from <http://www.crc-mep.org>.
- Rademakers, L. (2004). *Examining the handbooks on Environmental Journalism: A Qualitative Document Analysis and Response to the Literature*. An unpublished MA thesis in mass communication, University of South Florida.

- Reese, S.D., and Shoemaker, P.J. (2016). A Media Sociology for Networked Public Sphere: The Hierarchy of Influences Model, *Mass Communication and Society*, 19(4), 389-410
- Reese, S.D., & Ballinger, J. (2001). The roots of a sociology of news: remembering Mr. Gates and social control in newsroom, *Journalism and Mass Communication Quarterly*, 78(4), 641-658.
- Reese, S.D. (2007). Journalism Research and the Hierarchy of Influence Model: A Global Perspective, *Brazilian Journalism Research*, 3(2), 29-42.
- Reinisch, L. (2010) Environmental Journalism in the UAE. *Arab Media and Society*, 11(1),
- Remillard, C. (2011). Picturing Environmental Risk: The Canadian Oil Sands and the National Geographic. *International Communication Gazette*, 73 (1-2), 127-43.
- Renfro, P.C. (1979). "Bias in Selection of Letters to the Editors". *Journalism Quarterly*, 56(4), 822-826.
- Reza, S.M.S. (2010). From Development Communication to Development Journalism: Agenda Setting on Environmental Issues in Bangladesh News Media. Retrieved from <http://203.131.210.100/conference/wp-content/uploads/2011/06/03-05-Reza-Haque-Agenda-Setting-on-Environmental-Issues-in-Bangladesh-News-Media.pdf>
- Riaz, S. (2008). Agenda Setting Role of Mass Media. *Global Media Journal*, 1 (II), 187-202.
- Riffe, D., Lacy, S., & Fico, F.D. (2005). *Analyzing Media Message: Using Quantitative Content Analysis in Research (2nd Edition)*. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Rogers, C.L. (1999). The importance of understanding audiences. In S. M. Friedman, S. Dunwoody, and C.L. Rogers (Eds.), *Communicating uncertainty: Media coverage of new and controversial science*, Mahwah, New Jersey: Lawrence Erlbaum Associates Publishers.
- Rogers, E.M. (2003). *Diffusion of Innovations (5th edn.)* New York: Free Press.
- Rogers, P. (2002). Complexity in environment reporting is critical to public decision-making. *Nieman Reports*, 56 (4), 32-34.
- Ronald, A. (2003). *Reader of the purple sage: Essays on western writers and environmental literature*. Reno Nevada: University of Nevada Press.
- Rubin, D.M. & Sachs, D.P. (1973). *Mass media and the environment: Water resources, land use, and atomic energy in California*. New York: Praeger Publishers.
- Ruse, M. (1995). *Evolutionary Naturalism*. London: Routledge.
- Sachsman, D. (1999). Commentary: Should reporters use risk as detriment of environmental coverage? *Science Communication*, 21(1), 88-95.
- Sachsman, D. (1996). The mass media "discover" the environment: Influences on environmental reporting in the first twenty years. In J. G. Cantrill and C.L. Oravec (Eds.), *The Symbolic Earth*. Kentucky: The University Press of Kentucky.
- Sachsman, D. (2000). The Role of the Mass Media in Shaping Perceptions and Awareness of Environmental Issues. Climate Change Communication Conference, June 2000, University of Tennessee.

- Sahin, I. (2006). Detailed Review of Roger's Diffusion of Innovations Theory and Educational Technology Related Studies Based on Roger's Theory. *The Turkish Online Journal of Educational Technology*, 5(2), 14-23.
- Sahlins, M. (1985). *Islands of History*. Chicago: University of Chicago Press.
- Sampei, Y. & Aoyagi-Usui, M. (2009). Mass Media Coverage, its influence on public awareness of climate change issues and implications for Japan's national campaign to reduce greenhouse gas emissions. *Global Environmental Change*, 19(2), 203-212.
- Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research methods for Business Students*, 4th edition, Prentice Hall.
- Scacco, J., Curry, A.L., & Stroud, N.J. (2015). Digital Divisions: Organizational gatekeeping practices in the context of online news. *Research Journal of the International Symposium on Online Journalism*, 5(1) 106-123.
- Schafer, M. et al., (2016). Investigating Mediated Climate Change Communication: A Best Practice Guide. School of Education and Communication, Jonkoping University: Research Reports No.6, 2016.
- Schamberger, M.M. (1997). Elements of quality in a qualitative research interview. *South African Archives Journal*, 39 (1997), 25-35.
- Schelsinger, P. (1990). "Changing Media Process: Politics and Power." In M. Ferguson (Ed.) *Public Communication: The New Imperatives, Future Directions for Media Research*. Worcester, UK: Sage.
- Scheufele, D.A., & Tewksbury, D. (2007). Framing, agenda setting, and priming: The evolution of three media effects model. *Journal of Communications*, 57 (1), 9-20.
- Schudson, M. (1989). *Sociology of News production*. Retrieved from <http://www.mcs.sagepub.com/content/11/3/263> on 17 July 2015.
- Shaari, H. (1997). *Influences on Ethics in News Production: The Socio-Cultural and Political Influences on the Mass Media in Malaysia*. Unpublished PhD thesis submitted to the University of Leicester.
- Shoemaker, P.J. & Reese, S.D. (2014). *Mediating the message in the 21st century* (3rd ed.) New York: Routledge.
- Shoemaker, P.J. & Vos, T.P. (2009). *Gatekeeping theory*. New York: Routledge.
- Showkat, N. (2016). Coverage of Sanitation Issues in India. Sage Open Access <https://doi.org/10.117721582440166753995>
- Silverman, D. (2010). *Doing Qualitative Research*. 3rd edn. Los Angeles, Sage.
- Singer, E. (1990) A Question of Accuracy: How Journalists and Scientists Report Research on Hazards. *Journal of Communication*, 40 (4), 102-16.
- Singer, J.B. (2004). More than ink-stained wrhes: The resocialization of print journalists in converged newsrooms. *Journalism & Mass Communication Quarterly*, 81(4), 838-856.
- Singer, J.B. (2006). Stepping back from the gate: Online newspaper editors and the co-production of content in campaign 2004. *Journalism & Mass Communication Quarterly*, 83(2), 265-280.
- Singer, J.B. (2014). User-generated visibility: Secondary gatekeeping in a shared media space. *New Media & society*, 16(1), 55-73.

- Smith, J. (2000). Introduction In J. Smith (Ed.) *The Daily Globe: Environmental Change, the Public and the Media*: London: Earthscan Publications Ltd.
- Smith, E. (2002). *Energy, the environment, and public opinion*. Lanham, MA: Rowman & Littlefield.
- Sonnet, J., Morehouse, B.J., Finger, T.D., Garfin, G., Raltray, N. (2006). Drought and declining reservoirs: Comparing media discourse in Arizona and New Mexico, 2002 – 2004. *Global Environmental Change*, 16(1), 95-113.
- Soroka, S. N (2012).Issues attributes and agenda-setting by media, the public, policy makers in Canada.*International Journal of Public Opinion Research* 14(3) 264 – 285.
- Stamm, K.R., Clark, F., and Eblacas, P.R. (2000). Mass Communication and public understanding of environmental problems: the case of global warming. *Public Understanding of Science*, 9 (2000), 219-237.
- Stempel 111, G.H. (1981). “Statistical Designs for Content Analysis”, in G.H. Stempel111 and B.H. Westley (eds.), *Research Methods in Mass Communication*, New Jersey: Prentice-Hall.
- Stocking, S. H. (1999). ‘How Journalists deal with scientific uncertainty. In S. Friedman, S. Dunwoody and C. Rogers (Eds.) *Communicating Uncertainty: Media Coverage of New and Controversial Science*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Sudarmadi, S., Suzuki, S., Kawada, T., Netti, H., Soemantri, S., & Tugaswati, A. T. (2001). A survey of perception, knowledge, awareness, and attitude in regard to environmental problems in a sample of two different social groups in Jakarta, Indonesia. *Environment, development and sustainability*, 3(2), 169-183.
- Sutton, P.W. (2007). *The Environment: A Sociological Introduction*. Cambridge: Polity Press.
- Tagbo, E. (2010). Media Coverage of Climate Change in Africa: A case Study of Nigeria and South Africa. Reuters Institute Fellowship Paper, University of Oxford.
- Tandoc, E.C. & Eng, N. (2017).Climate Change Communication in Social Media.In *Oxford Research Encyclopedia*. USA: Oxford University Press, USA.
- Tantawi, P., O’Shaughnessy, Gad, K., & Ragheb, M.A.S. (2009). Green Consciousness of Consumers in a developing Country: A Study of Egyptian Consumers. *Contemporary Management Research*. 5(1), 29-50.
- Teklesilassie, G. (2015) *Environmental Issues Coverage in Ethiopian Stae Media: The Case of Ethiopian Radio and Addis Zemen Newspaper*. Unpublished M.A Thesis, Addis Ababa University, Ethiopia
- Tesema, F. (2012).*Media and Environmental Awareness: A Geographical Study in Kembata Tembaro Zone, Southern Ethiopia*.MA Thesis, University of South Africa.
- Tessier, D. (2012).*Story Placement Clues readers into what the Journal views as important*.Retrieved from <http://www.civicpolicy.com/journalwatch>.

- Thirumalailah, N. &Aram, A. (2017).Framing of environment in English and Tamil newspapers in India.*Journal of Media and Communication*. 9(1), 1-9.
- ThisDay.(26 June 2012).Jonathan, Rio and the Environment.*Thisday Newspaper* Retrieved from <http://www.thisdaylive.com/articles/jonathan-rio-20>.
- Tichenor, P., Donohue, G. &Olien, C. (1980).*Community conflict and the press*. California: Sage.
- Tilman, D. &Lehman, C. (2001). Human-caused environmental change: Impacts on plant diversity and evolution. *PNAS*, 98(10) 5433-5440.
- Titscher, S., Meyer, M., Wodak, R., &Vetter, E. (2000).*Methods of text and discourse analysis*. London: Sage.
- Tobechukwu, E. (2011).The Nigerian Press Coverage of Political Conflicts in a Pluralistic Society. *Global Media Journal African Edition*, 1(1) 64-91.
- Tran, L.O. (2014). Environmental Journalism: A Case Study of the Canadian Bituminous Sands. Unpublished M.A Thesis submitted to Concordia University Montreal, Quebec, Canada
- Tuchman, G., (1973). Making News by Doing Work: Routinizing the Unexpected, *The American Journal of Sociology*, 79(1), 110-131.
- Tuchman, G. (1978).*Making News – A Study in Constructing Reality*. London: The Free Press.
- Ukonu, M.O., Akpan, C.S., &Anorue, L.I. (2012). Nigerian Newspaper Coverage of Climate Change, 2009 – 2010. *New Media and Mass Communication*, 5 (2012), 22-37.
- Umechukwu, P.O.J. (2001).*Mass Media and Nigerian Society: Development Issues and Problems*. Enugu: Thompson Printing and Publishing Co.
- UNEP, (2010).African network for Environmental Journalists (ANEJ).Retrieved from http://www.unep.org/roa/Project_programme on 14 June 2015.
- UNICEF (2011) - *33 Million Nigerians Defecate In Open Places*. Retrieved from <http://www.nairaland.com/701916/33-million-nigerians-defecate-open#8614785>.
- Ungar, S. (2008). Global Bird Flu Communication: Hot Crisis and Media Reassurance. *Science Communication*, 29 (4), 472-497.
- Ungar, S. (2014). Media context and reporting opportunities on climate change: 2012 versus 1998. *Environmental Communication*, 8(2004), 233-248.
- Upton, J. (2014) *Major newspaper coverage of climate change plummeted last year*. Retrieved from <http://grist.org/news/major-newspaper-coverage-of-climate-change>.
- Uyo, A. (1996).*Management of Environmental Issues in Nigeria*. A paper Presented at Environmental Workshop on Environmental Reporting.
- Valenti, J. M. (1998).Ethical Decision Making in Environmental Communication.*Journal of Mass Media Ethics*, 13 (4), 219-31.
- Vandevordt, R. (2017). Why Journalists covered Syria the way they did: On the role of economic, social and cultural capital, *Journalism*, 18(5), 609-625

- Webb, E. J., Campbell, D. T., Schwartz, R. D., & Sechrest, L. (1966). *Unobtrusive measures: Nonreactive research in the social sciences* (Vol. 111). Chicago: Rand McNally.
- Weingart, P., Engels, A., & Pansegrau, P. (2000). Risks of Communication: Discourses on Climate Change in Science, Politics, and the Mass Media. *Public Understanding of Science*, 9 (2000), 261-83.
- West, B.M., (2003). *The Reporter's Environmental Handbook*, 3rd edn. New Brunswick and London: Rutgers University Press.
- Wiio, O.A. (1983). The Role of Mass Media. In Martin, L.J. and Chaudhary, A.G. (eds.) *Comparative Mass Media Systems*. New York: Longman.
- Wildemuth, B.M., (2003). *Why conduct user studies? The role of empirical evidence in improving the practice of librarianship*. Keynote address at "Fine-Tuning Information Strategies" INFORUM 2003: 9th Conference on Professional Information Resources, Prague, May 27 – 29, 2003. Retrieved from <http://www.sils.unc.edu/~wildem/INFORUM-2003.Wildemuth.pdf>.
- Weigold, M. (2001). Communicating Science: A Review of the Literature. *Science Communication*, 23(2), 164-193.
- Wilkins, L. & Patterson, P. (1990). Risk Analysis and the Construction of News. *Journal of Communication*, 37 (1990), 80 - 92.
- Willis, J. & Okunade, A.A. (1997). *Reporting on risks: The practice and ethics of health and safety communication*. Westport, Connecticut: Praeger.
- Wimmer, R.D. & Dominick, J.R. (2006). *Mass Media Research: An Introduction*. (8th edition) Belmont: Thomson Wordsworth.
- Wolfsfeld, G. (1997). Promoting Peace through the news media: some initial lessons from the Oslo peace process, *International Journal of Press and Politics*, 2(4), 52-70.
- World Federation of Science Journalists (2013). *Nigeria association of Science Journalists (NASJ)*. Retrieved from www.wfsj.org on 14 June 2015.
- Wrench, J.S., Thomas-Maddox, C., Richmond, V.P. & McCroskey, J.C. (2009). *Quantitative Research Methods for Communication – A Hands-On Approach (Indian edition)*. Oxford: Oxford University Press.
- Wyss, B. (2008). *Covering the Environment: How Journalists Work the Green Beat*. New York: Routledge.
- Yang, T. & Percival, R.V. (2009). The Emergence of Global Environmental Law. Retrieved from <http://digitalcommons.law.scu.edu>.
- Yared, B. (2009). *Environmental Problems and Solutions in Ethiopia Generally and Africa specifically (A Case Study on Ethiopia)*. Jimma University faculty of Law.
- Young, N. & Dugas, E. (2011). Representations of Climate Change in Canadian National Print Media: the Banalization of Global Warming. *Canadian Review of Sociology*, 48 (1), 1-22.
- Zhu, J., Watt, J.H., Snyder, L.B, Yan, J. & Jiang, Y. (1993). Public issue priority formation: Media agenda-setting and social interaction. *Journal of Communication*, 43(1993) 8-29.

Appendix A

List of Newspapers in Nigeria (Functional National Newspapers)

Source: Member Nigerian Union of Journalists
(NUJ)

- 1.Vanguard (National) - Based in Lagos - Privately Owned
- 2.The Punch (National) - Based in Lagos - Privately Owned
- 3.This Day (Nationa) - Privately Owned
- 4.The Nation (National) - Based in Lago Privately Owned
- 5.Nigerian Tribune - Based in Ilorin - State Owned
- 6.The Guardian - Based in Lagos - Privately Owned
7. Leadership Nigeria (Abuja) Privately Owned
- 8.The Sun (Lagos) Privately Owned
- 9.PM News (Lagos) Privately Owned
- 10.Daily Trust (Abuja) Privately Owned
11. Daily Independent (Abuja and: Lagos)
- 12.National Mirror Newspapers (National) Edo State
- 13.Daily Newswatch (Lagos) Privately Owned
- 14.Complete Sports (Oyo, Ibadan, Lagos Abuja) Privately Owned
- 15.Business World (Lagos) Privately Owned
16. Business Day (Lagos) Privately owned
- 17.The Advocate (Enugu)
18. New Telegraph (Lagos) Privately Owned
19. Manufacturing Today (Lagos) Privately Owned
20. Orient News (Awka) Privately Owned
21. Sunday Nitch (Lagos) Privately Owned

Note: There are other newspapers that are not regular and not national in outreach hence they are not included in this list.



Appendix B

Coding Guide

- I. Serial number of paper: Fill out the serial numbers of the newspapers to be analysed (1 -386).
- II. Paper Id. The papers ID should be filled in the following order
 1. The Guardian
 2. Daily Trust
 3. Business day
 4. ThisDay
- III. Newspaper date: Enter in the following way: 1 Jan. 2013.
- IV. Story ID: Number all stories carried in the newspaper analyzed serially, e.g. 1-5)
- V. Page number of story: Page where story is carried.
- VI. Item type (Treatment of story). This refers to the way the story is written and should not be confused with the subject of the story
 1. **News:** for any story that emphasizes facts of recent events. Often uses a straight news or inverted pyramid style of writing
 2. **Feature/Column/article/analysis:** Longer, more reflective, interpretive, investigative stories that don't just regurgitate facts of recent events.
 3. **Editorial:** Stated opinion of the newspaper
 4. **Advertorial:** any advertisement in an article form
 5. **Readers' comments:** Any reactions from newspaper readers
 6. **Cartoon:** any drawings that tell a joke or satire on the issues analysed.
 7. **Other combination:** Anything that does not fall within the above categories.
- VII. Placement 1: This identifies the page on which environmental news is placed.
 1. Front page: Enter 1 if the story is on the front page, or starts from the front page and continues in the inside page. This does not include promotion of the item on the front page. (if a skybox refers to a story inside, it does not count as a front page story)
 2. Inside page: Enter 2 if stories are carried on the inside pages
 3. Back page: Enter 3 if story is carried on the back page
- VIII. Placement 2: This identifies the position of the page on which item is placed.
 1. Top: Enter 1 if on the top.
 2. Middle: Enter 2 if in the middle.
 3. Bottom: Enter 3 if at the bottom.

IX. Graphics/photos: this identifies graphs, charts, photos, and artists impressions used to help tell the story.

1. Pictures: Enter 1 if photos are used.
2. Graphs/charts: Enter 2 if graphs or charts are used.
3. Artist impression: Enter 3 if artist impression is used.

X. Main Issues: This identifies environmental issues carried by the newspapers and should be entered in the following order/number. However in cases where the story is complex and involves more than one issue, the dominating issue should be entered.

1. Pollution
2. Public sanitation
3. Environmental sanitation/strategy
4. International environmental conventions
5. Conservation
6. Biodiversity
7. Climate change/global warming
8. Desertification
9. Deforestation
10. Nature preservation
11. Hazardous chemicals
12. Waste disposal
13. Corporate green policies/actions
14. Other

XI. Origin

1. Staff/by line (Stories written by newspaper staff, or stories identified as coming from the news)
2. Wire service
3. Press release
4. Government
5. Readers' letters
6. Unknown

XII. News Authors

1. By line
2. Wire services
3. Press release

XIII. Geographical focus/Dateline

1. Community
2. LGA
3. State/Sate capital
4. National
5. Federal capital
6. Continental
7. Global/international

XIV. Sources/Main actors quoted (Note: Code multiple sources, not just one, eg. 1, 3, 4. Sources from government, expert, activist)

1. Government officials
2. Politicians
3. Environmental activists
4. Industrialists
5. NGO's
6. Advertisers

XIV. Subsidiary actors (multiple coding where necessary)

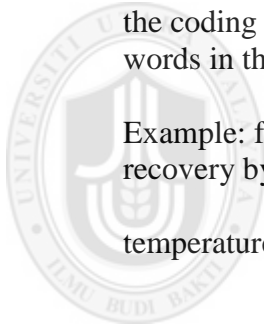
1. Citizens
2. Unions
3. Victims of disasters

XV. Direction/Tone

1. Favorable
2. Unfavorable
3. Indifferent.

Please write down sentences that denote tones in the space provided in the coding form. The headlines could be used where necessary, or key words in the story could be used in summing up the story.

Example: favorable tone: 1. Conservationists push for 25% forest recovery by 2030
2. World wide effort to keep global temperature rise to 2 degrees centigrade. .



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Appendix C

Coding Instrument

Serial no	Paper ID	Story ID	Date of	Page no.	Item type	Placement1	Placement2	Graphics	Main issues	Origin	Dateline	Sources quoted	Main actors	Subsidiary	Tone	Summarise news
1	1	1	2 N ov 15	48	1	2	1		7	2	9	3	5		1	



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Appendix D

Inter-Coder Reliability Result

Categories coded	No. of Coding decisions	Decisions agreed upon by the two coders	Decisions on which the two coders disagree	Reliability	Percentage of Agreement
Environmental themes in the stories	50	50	0	1	100
Prominence/value/placement of environmental news	50	50	0	1	100
Environmental news sources	50	50	0	1	100
Origin of environmental news stories	50	44	6	0.88	88.00
Direction/Tone of environmental news stories	50	50	0	1	100
	250	246	6	0.984	98.41

Note: Reliability = $\frac{2(C1, C2)}{C1+C2}$

$C1+C2$

$2(C1, C2)$ represent the coding decisions which the two coders agreed upon, while $C1 + C2$ refer to the total number of coding decisions done by both the first and second coders respectively.

Appendix E

Interview Guide/Protocol

Dear Respondent,

I am a PhD student at University Utara Malaysia. I am conducting a study on Press Coverage of Environmental Issues in Nigeria to determine the quantum of environmental coverage by the Nigerian press and what influences such coverage.

In order to realize these objectives, I would appreciate it immensely if you could spare your time to answer, objectively, the questions in this interview.

I confirm that the answers given and the opinions expressed in this interview will be dealt with utmost confidentiality and strictly used for the purpose of this study.

Thank you.

Respondent's biographical data.

- a. Name (Full name – underline the surname/last name) _____
- b. What is your position, e.g. editor/reporter?
- c. What is your highest academic qualification?
- d. Which newspaper do you work for?
- e. What is your position?
- f. How many years of work experience do you have?

Interview questions:

1. How long have you been reporting the environment?
2. Does your number of years as an environmental reporter (experience) affect you in the way you report the environment? If yes how?
3. Do you think you are qualified to report the environment? Why/How?
4. Do you belong to any environmental reporters' association? What are the implications of belonging / not belonging to such associations?
5. What are the major impediments to reporting the environment
6. Why is the coverage of environment not prioritized?
7. Would you say that environmental reporters possess the required skills, knowledge, and awareness to report the environment?
8. What is the impact of institutional control on environmental reportage?
9. Does your newspaper have a clear policy or interest in covering the environment? If yes please briefly mention and explain the policy.
10. How do the policies of your organization affect environmental coverage?
11. What do you consider the purpose of your environmental news coverage – information, mobilization, education.

12. What aspect(s) of the environment does your newspaper pay more attention to and why?
13. Why are most of your reports straight news rather than interpretive or investigative reports.
14. Does your newspaper provide refresher courses, or updates for journalists covering the environment?
15. How does the provision of such courses or lack of it affect your coverage of the environment?
16. Do you have access to any environmental reporting handbook and would such handbook help in improving environmental reporting?
17. What are your sources of environmental news and which ones do you prefer and why?
18. Given the number of stories and the depth of such stories on the environment, would you say that your newspaper (press) plays its agenda setting role on a crucial issue as the environment?
19. Do you have regular pages/columns for environmental news/issues? If no why?
20. Do environmental stories enjoy the same prominence as political stories, conflict stories, crime, and entertainment? If no why?
21. Do you have access to bodies, organizations, institutions that shape environmental policies?
22. What are the implications of having/not having access to such institutions?
23. What is your level of knowledge of environmental issues regarding legislation, laws and implementation of such laws?
24. Is there any activity or event that is celebrated to encourage, support, and appreciate environmental reporters within and outside your newspaper organization?
25. Do you think government has done enough in regulating the environment? If yes or no please explain.
26. Overall are you satisfied with the way environmental issues are reported in the Nigerian press?
27. If no, what needs to be done?
28. Note that there were other follow up/probing questions that are not written down here

Appendix F

Interviewing techniques/process informed by the literature.

Source: Berry, R.S.Y.L. (1999)

One essential element of all interviews is the verbal interaction between the interviewer/s and the interviewee/s. Hitchcock (1989:79) stresses that 'central to the interview is the issue of asking questions and this is often achieved in qualitative research through conversational encounters.' Consequently, it is important for the researchers to familiarize themselves with questioning techniques before conducting interviews.

(A) Questioning techniques

Individuals vary in their ability to articulate their thoughts and ideas. With good questioning techniques, researchers will be more able to facilitate the subjects' accounts and to obtain quality data from them. Current literature suggests some questioning techniques, summarized in the following ten points:

1. Ask clear questions

Cicourel (1964) reflects that 'many of the meanings which are clear to one will be relatively opaque to the other, even when the intention is genuine communication.' Accordingly, it is important to use words that make sense to the interviewees, words that are sensitive to the respondent's context and world view. To enhance their comprehensibility to the interviewees, questions should be easy to understand, short, and devoid of jargon (Kvale 1996:130).

2. Ask single questions

Patton (1987:124) points out that interviewers often put several questions together and ask them all as one. He suggests that researchers should ask one thing at a time. This will eliminate any unnecessary burden of interpretation on the interviewees.

3. Ask truly open-ended questions (Patton 1987:122-3)

Truly open-ended questions do not pre-determine the answers and allow room for the informants to respond in their own terms. For example, "What do you think about your English?" "How do you feel about the method of English teaching in your home country?" "What is your opinion of English lessons in the UK?"

4. Ask experience/behaviour questions before opinion/feeling questions
(Patton 1987:115)

It is useful to ask questions about experience or behaviour before asking questions about opinions or feelings as this helps establish a context for the informants to express the latter. For example, asking "What happened?" before "How do you feel now?"

5. Sequence the questions (Cohen and Manion 1994:277)

This refers to using a special kind of questioning technique called 'Funnelling', which means asking from general to specific, from broad to narrow. Cohen and Manion quote an example from the study by Sears, Maccoby and Levin:

All babies cry, of course. Some mothers feel that if you pick up a baby every time it cries, you will spoil it. Others think you should never let a baby cry for very long. How do you feel about this? What did you do about it? How about the middle of the night?

(Cohen and Manion 1994:277)

6. Probe and follow-up questions (Patton 1987:125-126)

The purpose of probing is to deepen the response to a question, to increase the richness of the data being obtained, and to give cues to the interviewee about the level of response that is desired. This can be done through direct questioning of what has just been said, for example, "Could you say something more about that?"; "Can you give a more detailed description of what happened?"; "Do you have further examples of this?" Alternatively, a mere nod, or "mm," or just a pause can indicate to the subject to go on with the description. Repeating significant words of an answer can lead to further elaboration (Kvale 1996:133).

7. Interpret questions (Kvale 1996:149)

Throughout the interview, the researchers should clarify and extend the meanings of the interviewee's statements to avoid misinterpretations on their part. Kvale (1996:135) suggests that researchers may use question like 'Is it correct that you feel that.....?'; "Does the expression..... Cover what you have just expressed?" to allow the interviewees to confirm or disconfirm what has been interpreted by the researchers.

8. Avoid sensitive questions

It is advisable to avoid deep questions which may irritate the informants, possibly resulting in an interruption of the interview. Cicourel (1964) agrees that 'the respondent may well feel uneasy and adopt avoidance tactics if the questioning is too deep.'

9. Encourage a free rein but maintain control

The researchers should be prepared to let the interviewees 'travel' wherever they like, but a rough checklist of ideas or areas the former want to explore is useful. Palmer (1928:171) suggests that proficient interviewers should be always in control of a conversation which they guide and bend to the service of their research interest.

10. Establish rapport

This can be achieved by, for example, respecting the informants' opinions, supporting their feelings, or recognising their responses. This can also be shown by the researchers' tone of voice, expressions or even gestures. In addition, Kvale (1996:128) suggests that 'a good contact is established by attentive listening, with the interviewer showing interest, understanding, and respect for what the subjects say.' He (1996:148) continues, '[a good interview] allows subjects to finish what they are saying, lets them proceed at their own rate of thinking and speaking.'

(B) Other techniques informed by the literature

In addition to questioning techniques, there are other factors which may have an impact on to interview. Cohen and Manion (1994:286) cites Tuckman's (1972) guidelines for interviewing procedures, as follows:

At the meeting, the interviewer should brief the respondent as to the nature or purpose of the interview (being as candid as possible without biasing responses) and attempt to make the respondent feel at ease. He should explain the manner in which he will be recording responses, and if he plans to tape record, he should get the respondent's assent. At all times, an interviewer must remember that he is a data collection instrument and try not to let his own biases, opinions, or curiosity affect his behavior. Tuckman (1972)



Appendix G

Sample of In-depth Interview Transcript.

Interviewer: The researcher

Transcriber: The Researcher

Interviewee/Respondent: Environmental journalist @ ThisDay Newspaper

Interview Setting: The Interview took place in the office of the publisher of Nigerian Catholic Reporter, Lagos Nigeria on 15 -2-16 from 2 – 3 pm.

Interview Duration: 60 mins.

Start of Interview:

Do you consent freely to participate in this interview?

Yes, but on the condition that it will not be recorded electronically and that my name will not be mentioned.

What is your position – eg.editor/reporter

I am a senior correspondent.

What exactly do you do?

I work both in the office and in the field collecting and writing environmental news.

What is your highest academic qualification?

I hold diploma in Journalism.

Which newspaper do you work for?

I work for ThisDay.

How many years of work experience do you have?

Five years...or should I say going to my sixth year.

How long have you been reporting the environment?

That's some three years now.

What was the single most significant factor that led you to the coverage of the environment?

I have diploma in journalism and was posted to cover environment

Do you think the number of years you have covered the environment (experience) has in any way influenced the way you report the environment?

No. I don't think so.

In other words would you say that you have enough qualification and experience to cover environment?

Eeeem... well it depends. From the way we report environment I will say that I do well in covering the environment.

What do you mean by “the way we cover environment”?

We write news of environmental issues that happen like any other news story

Generally would you say that environmental reporters possess the required skills, knowledge and awareness to report the environment?

Well like I just said I think we do because we write environmental stories just like we do other stories

Given that environment is complex would you say that you do in-depth story on the environment?

My brother (referring to the researcher) I won't lie to you. That doesn't happen most of the time. There may not be need for that. Who will even read?

What are the major impediments to reporting the environment?

Wallahi (honestly) it is a very dry area. It's a field that lack any form of business a journalist can do. No incentives like other areas of reporting.

Does your newspaper have any policies on interests in covering environmental news? If yes what are they?

Shrugs ... Eeeem I don't know much about any specific policies but I know that we prefer stories that help us sell our publication especially now that there is no money in the country.

Did you mean that you don't prioritize environmental news?

Most likely because it's a dry area.

How does the policy of your organization affect environmental coverage?

To be honest with you there are stories that can be stopped by your superiors due to interests.

What interests?

Financial interests. Sometimes when there are more contents that are paid for, we may drop environmental story.

What are the impacts of institutional control on environmental coverage?

Not much control happens here... nothing seems to be happening so what do you want to control? Editors and proprietors may be exert some controls that may not be good for the beat.

What are the purposes of environmental coverage – information, mobilization, education, advocacy?

All of them. As a national newspaper we have to all these purposes.

What aspects of the environment does your newspaper pay more attention to and why?

I think this is the prerogative of the editor or editorial board. But we have more climate change news.

Why?

Well because that is the news that is trending. Everyone big or small reports it mostly these days.

How do you generate climate change news?

Mostly from news agencies. Most of the stories don't happen here.

What of some major issues like pollution and waste disposal?

Sometimes they are covered but they are local issues. Do we need to report them again when everyone knows about them?

What about reporting them regularly so government can do something about them?

Government? You are talking like you don't know the Nigerian government.

Do environmental stories enjoy the same prominence as political stories, conflict stories, crime and entertainment?

I don't think so. These stories you mentioned are the stories that people are interested in. not the environment. Every Nigerian is interested in politics. Even those that are hungry. The same with conflict.

Do you have regular pages for environmental news?

Yes

Given the number of stories and depth of such stories on environment, would you say that your newspaper plays its agenda setting role on crucial issue as the environment?

Not quite. Much could be done.

Like what?

Yeah ... like adding depth to stories, and maybe better placements on prime pages and reporting it more regularly.

What of environmental regulation, do you have enough knowledge of this?

I can read up any environmental regulation or law when the need arises.

Do you think government has done well in promulgating environmental laws and regulations?

Absolutely. Good laws are there but implementation is the big problem. There are thousand and one regulations but compliance is poorly tracked.

Does your newspaper provide refresher courses or updates for journalists covering the environment?

Not specifically. Sometimes it is a general refresher course for all reporters. Nothing specific for environmental reporters.

How does this affect your coverage?

Well the essence of refresher courses or updates is to stay current and know what is trending in the field and how to report them. When you don't get updated you definitely will be lagging behind.

Do you have access to any tools, like environmental handbooks, that aid in reporting environmental news properly?

For where? (Pigin English that emphatically means NO!) We don't have such books here. We only get handouts in some assignments. That's all.

Would such handbooks be handy?

Why not? They definitely will help in defining concepts and explain terms in an understandable manner.

Do you have access to bodies, organizations and institutions that shape environmental policies? If yes mention them.

Yes. We are affiliated to UN agencies, and government agencies, ministries and parastatals and NGOs

What are the implications of having access to such bodies?

They are good story sources. They help deepen the authenticity of your report.,

What are the sources of environmental news?

Wire services, breaking news, experts, government officials, NGOs, and other bodies.

Which of these sources dominate and why?

As in most cases government or official sources are preferred because they save your time. You may not have enough time to begin to verify your stories..in some cases the stories are readymade.

Is there any activity or event organized to honor, encourage and support environmental reporters?

Well there is Nigerian Media Merit Award (NMMA) which gives a prize for the best environmental journalist.

Does such an award encourage good coverage?

Absolutely. It encourages competition, original work and more zeal in covering the beat because you know you could get the prize therefore you give it your best shot.

Overall are you satisfied with the way environmental issues are reported in the Nigerian press?

Yes I am satisfied but more needs to be done. For example it needs to be reported regularly and in a way that people can relate to it. May be it should deserve front page placements and more editorials can be written on environmental issues.