

**Promoting Sustainable Development in Nigeria through Rural
Women's Participation in Decision-Making about Renewable
Energy Law and Policy**

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Thesis submitted to the University of Ottawa
in partial Fulfillment of the requirements for the
Doctorate in Philosophy degree in Law

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ABSTRACT

“[T]o devise development planning without the participation of [rural] women is like using four fingers when you have ten.”¹

Both lack of access to energy and climate change threatens poverty reduction and sustainable development in Nigeria. Most poor communities in Africa use inadequate fuels and are highly vulnerable to the impacts of climate change, with women bearing most of the social, economic, and environmental costs. Promoting access to affordable and sustainable energy through policy interventions is one crucial path to achieving sustainable development. Renewable energy offers countries the opportunity to meet the energy demands of the poorest and most vulnerable in each society, and thereby achieve many of the sustainable development goals, such as: hunger and poverty eradication,² gender equity, affordable and clean energy,³ climate action,⁴ and maternal health.⁵ The Nigerian government is constantly formulating legal frameworks for renewable energy to expand the availability of energy (including electricity) to rural areas while reducing the impacts of climate change. Yet the extent to which these legal frameworks will be implemented successfully remain in doubt; as to date, Nigeria has been unable to achieve its stated goal of sustainable development.⁶ Why are renewable energy policies and laws in Nigeria not succeeding? This thesis asks whether one reason may be that Nigerian women living in rural areas have little role in both designing renewable energy laws and policies and participating in their effective implementation. This is a problem given that rural women are the primary users of unsustainable energy, they suffer most from its negative impacts, they are the main beneficiaries of rural electrification, and the closest to the needs and capacities of the population in rural communities.

This thesis is mainly qualitative. Multiple approaches (feminist historical research, documentary or doctrinal analysis as well as analysis by specific illustrative examples) were used to explore the phenomenon of why the Nigerian government’s concerted efforts at developing the legal frameworks for renewable energy have not yielded their desired goals of promoting sustainable development, and what lessons could be learned from South Africa. In addition to contributing to the gender and renewable energy literature, the research attempts to develop a blueprint for inclusive approaches to renewable energy law. It investigates how renewable energy legal and institutional frameworks could effectively include rural women. Using ideas from feminist legal theorists, the thesis makes a case for why rural women should be considered suitable stakeholder participants. It concludes that renewable energy policy- and law-making processes which consider the voices and active participation of rural women could encourage an increase in

¹ Thomas Sankara, “Women’s Liberation and African Freedom Struggle” (2011) 75 *The Militant* at 11. See also, Gail Karlsson, *Where Energy is Women’s Business: National and Regional Reports from Africa, Asia, Latin America and the Pacific* (Leusden: Energia International Network on Gender & Sustainable Energy, 2007) at 14.

² SDGs 10, 2 & 1.

³ SDG 7.

⁴ SDG 13.

⁵ SDGs 3 & 5.

⁶ Federal Republic of Nigeria, *Implementation of the SDGs: A National Voluntary Review* (s:1: Office of the Senior Special Assistant to the President, 2017) at 22-48. See also, “Clean Technology Investment Plan for Nigeria: Update Note” (July, 2014), accessed January 20, 2021, online: <<https://www.climateinvestmentfunds.org/country/nigeria>> at 15.

the generation, distribution, and use of renewable energy in the poorest inaccessible areas while closing the gap between renewable energy policies and laws, and sustainable development. Finally, it recommends that renewable energy policies and laws should increase rural women's participation by using among other things "recognition politics," which allows for the representation of subordinate social groups in bodies such as Parliaments; for example, by using measures such as mandatory affirmative action – quota system clauses,⁷ and techniques such as "Taking Parliament to the People."⁸

⁷ Sylvia Walby, "Feminist Theory: Marxist and Socialist" in Neil J. Smelser & Paul B. Baltes, eds, *International Encyclopedia of the Social & Behavioural Sciences* (Amsterdam: Elsevier, 2001) at 5504.

⁸ Parliamentary Monitoring Group, "ATC080515": Report NCOP "Taking Parliament to the People" Western Cape: NCOP Women, Children and People with Disabilities" online: <<https://pmg.org.za/taled-committee-report/630/>>. See also, In session, *Taking Parliament to the People: NCOP Conducts Oversight on Service Delivery in Free State* (s:I: Parliamentary Communication Services, 2017).

TABLE OF CONTENT

ABSTRACT.....	ii
TABLE OF CONTENT.....	iv
SELECT ABBREVIATIONS	ix
ACKNOWLEDGEMENTS	xi
Defining Terms.....	xii
Chapter One.....	1
1.0 Introduction.....	1
1.1 Background and Context	1
1.2 Renewable Energy Options in Nigeria and Rural Women	5
1.2.1 Biomass Energy.....	5
1.2.2 Hydropower.....	7
1.2.3 Wind Energy.....	9
1.2.4 Geothermal Energy.....	10
1.2.5 Solar Energy	10
1.3 The Key Role of Rural Women in Promoting Renewable Energy and Sustainable Development.....	12
1.4 Problem Statement.....	15
1.5 Literature Review	16
1.5.1 Renewable Energy Legal Framework and Sustainable Development.....	16
1.5.2 Renewable Energy Legal Frameworks, Women’s Participation, and Sustainable Development.....	20
15.2.1 Why Rural Women?.....	27
1.6 Research Questions.....	29
1.7 Theoretical Perspectives.....	30
1.8 Research Methodology	31
1.8.1 Document or Doctrinal Analysis.....	32
1.8.1.1 Types of Data Collected using Document Analysis	32
1.8.2 Feminist Historical Methodology.....	33
1.8.2.1 Type of Data Collected using a Feminist Historical Approach	33
1.8.3 Analysis by Specific Illustrative Examples	34
1.9 Scope of study.....	36

1.10	Thesis Structure/Organization of Chapters.....	38
Chapter Two.....		40
Laying the Foundation: Why and How Critical Legal Feminist Theory Suggests Rural Women in Nigeria Should Participate in Renewable Energy Decision-Making.....		40
2.0	Introduction.....	40
2.1	Feminist Legal Theory.....	41
2.1.1	The Private/Public Divide: “The Personal is Political”	43
2.1.2	“The Politics of Difference” - Gender and Gendered Differences.....	45
2.1.2.1	“The Politics of Difference”: Gender Difference	45
2.1.2.2	Differences among Women (Gendered Differences)	49
2.1.2.3	Gendered Differences in Access to Energy in Rural Nigeria	51
2.1.3	The Concept of Representation: Who Represents Whom in Renewable Energy Decision-Making?	54
2.1.4	Stakeholder Participation.....	59
2.2	Chapter Summary and Conclusion	66
Transition in Energy Use, Influencing Decision-Making Institutions and the Participatory Status of Rural Women: From Past to Present.....		68
3.0	Introduction.....	68
3.1	Women and Energy in Pre-Colonial Nigeria.....	69
3.1.1	Influencing Decision-making Institutions in Pre-colonial Times.....	71
3.1.1.1	Families.....	71
3.1.1.2	Dual-Sex Institutional System	73
3.2	The End of Rural Women’s Participatory Status, the Beginning of the Colonial Era	76
3.2.1	Women and Energy in Colonial Times	78
3.2.2	Influencing Decision-Making Institutions in Colonial Times.....	80
3.2.2.1	The Colonial Institution of Indirect Rule	80
3.3	Women and Energy in Post-Colonial Times.....	81
3.3.1	Policy Interventions on Women’s Energy Issues: An Example of Bishop Kodji Village	85
3.3.2	Institutions Influencing Renewable Energy Decision-Making in Post-Colonial Nigeria.....	88
3.3.2.1	Legislative and Institutional Frameworks and Rural Women’s Participatory Status	89
3.3.2.2	Enabling Renewable Energy Legislation Empowering MDAs	90
3.3.3	The "Invisible" Role of Rural Women in Decision-Making about Renewable Energy Systems: An Argument for Legislative Inclusion.....	94
3.3.3.1	An Example of Urine-Powered Technology	98

3.3.4	Trends and Status of the Representation of Women in Renewable Energy Issues in the Federal Legislature	101
3.3.4.1	The Present.....	101
3.4	Barriers to Women’s Participation	105
	While the barriers to rural women’s participation are many, the essential question is how these barriers can be overcome. This will be addressed in Chapter six – Proposals for Reform.....	111
3.5	Summary and Conclusion	111
Chapter Four.....		112
A Gender-Inclusive Renewable Energy Legal Framework: The South African Example.....		112
4.0	Introduction.....	112
4.1	A Brief History of Why and How Rural Women’s Participation Occurred in South Africa .	113
4.1.1	Apartheid Energy Policy and Rural Women’s Struggle for Sustainable Human Development.....	113
4.1.2	The Role and Impact of Apartheid Energy Policy on Black Women.....	115
4.1.3	Women’s Leadership and the Transformation of Apartheid Laws	119
4.1.4	Organizing Rural Women toward a Transformative Decision-Making Process	122
4.1.4.1	An Example of the Land Crisis in Mousté Community	125
4.1.4.2	An Example of the Water Crisis in Mousté Community	128
4.1.4.2.1	The Effect of Moutse Women’s Water Activism.....	131
4.2	The Legal Framework for Renewable Energy in South Africa in the Context of Participation	134
4.2.1	The Constitution of the Republic of South Africa, 1996.....	135
4.2.1.1	The Impact of Constitutionally Promoting Public Participation in South Africa	139
4.2.2	White Paper on Energy Policy Development.....	141
4.2.2.1	Case Study: The Active Participation of Rural Women in Renewable Energy Policy-making Process	144
4.2.3	White Paper on Renewable Energy Policy	148
4.3	Why South Africa?	150
4.4	Similarities and Differences between the Nigeria Example and the South Africa Example ...	150
4.4.1	Similarities	150
4.4.2	Differences	151
4.5	Summary and Conclusion	153

A Critical Analysis of the Legal Framework for Participation in Decision-making on Renewable Energy Development in Nigeria: Giving Voices to the Voiceless	155
5.0 Introduction.....	155
5.1 The Constitution and other Legal Provisions: Legislative Framework for Participation.....	156
5.1.1 The Nigerian Constitution.....	156
5.2 Other Legal Provisions: Legislative Frameworks for Participation	159
5.2.1 Standing Rules (Powers and Procedures) Act (Standing Rules).....	159
5.2.2 Freedom of Information Act (FoIA).....	162
5.2.3 Environmental Impact Assessment (EIA) Act.....	163
5.2.4 National Energy Policy (NEP).....	165
5.2.5 The Renewable Energy Master Plan (REMP).....	167
5.2.6 Electric Power Sector Reform Act (EPSRA).....	169
5.2.7 Renewable Electricity Policy Guidelines 2006, and Nigerian Biofuels Policy Incentives 2007	173
5.2.8 National Climate Change Policy 2011: National Adaptation Strategy and Plan of Action on Climate Change for Nigeria (NCCP/NASPA-CCN).....	174
5.2.9 Renewable Energy Master Plan, 2012.....	176
5.3 Women’s Participation in Implementing Renewable Energy Policies and Projects.....	178
5.3.1 Rural Women and Renewable Energy Financing in Nigeria	182
5.3.1.1 Crowdfunding Platforms (CPs).....	182
5.3.1.2 Federal Funding.....	184
5.3.1.3 Climate Investment Funds (CIFs).....	184
5.3.1.4 Local Commercial Banks	187
5.3.1.5 Project Finance	188
5.4 A Critical Analysis of the Efficacy of Renewable Energy Law in the context Participation and Rural Women	189
5.4.1 Women/Gender	190
5.4.1.1 Energy - A Rural Woman’s Issue and a Challenge for Sustainable Development	192
5.4.2 Private Sector Participation.....	194
5.4.3 Non-Governmental Organizations (NGOs), Civil Society Organizations (CSOs) and Women’s Groups	197
5.5 Summary and Conclusion	200
Overcoming the Barriers to the Participation of Rural Women: Proposals for Reform	202
6.0 Introduction.....	202

6.1	Measures for Increasing and Strengthening the Participation Rural Women.....	203
6.1.1	Financial Capability.....	203
6.1.2	Consciousness Raising	206
6.1.3	Trainings, Skills Development and Education	207
6.1.4	Location	209
6.1.5	Developing Grassroots Women Organizations.....	209
6.1.6	Information, Communication and Outreach Programmes	212
6.1.7	Legal Empowerment.....	213
6.2	Techniques for Involving Rural Women: A Comparative Analysis.....	216
6.2.1	“Taking Parliament to the People”: Committee Meetings and House Sittings	216
6.2.2	Public Hearings	219
6.2.3	Sectoral Parliaments	224
6.2.4	Constituency Offices	226
6.3	Directions for Future Research	228
6.4	Summary and Conclusion	229
BIBLIOGRAPHY	231

SELECT ABBREVIATIONS

CBOs	Community-Based Organizations
CHELD	Center for Health Ethics Law and Development
COP	Congress of the People
CRIAW	Canadian Research Institute for the Advancement of Women
CUWO	Cape-based United Women’s Organization
DMEA	Department of Minerals and Energy Affairs
ECN	Energy Commission of Nigeria.
EDRC	Energy Development Research Centre
EIA	<i>Environmental Impact Assessments Act</i>
EPSRA	<i>Electric Power Sector Reform Act</i>
FEC	Federal Executive Council
FEPA	Federal Environmental protection Agency
FiT	Feed-in Tariff
FLS	Feminist Legal Scholars
FLTs	Feminist Legal Theorists
FME	Federal Ministry of the Environment
FoIA	<i>Freedom of Information Act</i>
GNU	Government of National Unity
IFNASA	Indigenous First Nation Advocacy South Africa
INEP	Integrated National Electrification Programme
IRENA	International Renewable Energy Agency
KW	Kilowatt
MDAs	Ministries, Departments Agencies
MW	Megawatt
MEPC	Minerals Energy Policy Centre
NAPTIN	National Power Training Institute of Nigeria

NCCP/NASPA-CCN *National Climate Change Policy 2011: National Adaptation Strategy and Plan of Action on Climate Change for Nigeria*

NCOP	National Council of Provinces
NEP	<i>Nigeria Energy Policy</i>
NERC	Nigerian Electricity Regulatory Commission
NGOs	Non-Governmental Organizations
NIBET	Nigerian Bulk Electricity Trading Plc.
NNPC	Nigerian National Petroleum Corporation
NOA	<i>Native Ordinance Act</i>
NOW	Natal Organizations of Women
<i>NREEEP</i>	<i>National Renewable Energy and Efficiency Policy</i>
NWTF	Nigerian Women Trust Fund
RE	Renewable Energy
REA	Rural Electrification Agency
REAN	Renewable Energy Association of Nigeria
REAP	<i>Renewable Electricity Action Program</i>
RELFW	Renewable Energy Legal Framework
RET	Renewable Energy Technology
RESIP	<i>Rural Electrification Strategy and Implementation Plan</i>
RP	Review Panel
RW	Rural Women
RWM	Rural Women's Movement
SK	Stakeholder Knowledge
SP	Stakeholder Participation
TRAC	Transvaal Rural Action Committee
WCED	World Commission on Environment and Development
WEP	Women Environmental Programme

ACKNOWLEDGEMENTS

I am thankful to the Almighty God for a fulfilling life, of which this project is an example. The personal sacrifices of my parents, siblings, Prince Henry Iseghohi, and my Queen and daughter, Princess Olivia were invaluable in this endeavour.

I express my deep appreciation to my supervisor, Professor Heather McLoed-Kilmurray, for the expeditious feedback, valuable comments, and encouragement she provided me with. My thanks go to my supervisory committee Professors Patricia Farnese, Lynda Collins, Jamie Benidickson, Nathalie Chalifour, and Geoff McCarney for their constructive feedback. My special thanks go to Professor Lynda Collins for her support, words of encouragement and believe in my academic strengths. I appreciate the insightful criticism of Professor Graham Mayeda, a foundation member of my committee at the early stage of this project. I am grateful to Professor Chidi Oguamanam, for his words of encouragement. To Professor Olusoji J. George, thank you for being a good mentor.

I am grateful to the University of Ottawa for the financial support, and to Professor Sophie Thériault and Sochetra Nget for informing me about the scholarship after a successful first semester.

My thanks go to the members of staff of the Faculty of Law, especially Elvira Evangelista, and Lise Dazé. My gratitude goes to the staff of the Law Library, especially to my friend Richard Harkin who made the library a comfort zone for me during this project.

My immense thanks go to my friends, including Mr. Ndubuka Uwaezuoke, Mrs. Colleen Kerr, and Mr. Brian John Kerr.

DEDICATION

To my father:

Chief Benedict I. Ijoma (*Chineyerugo 1*), I express my heartfelt gratitude for instilling the value of faith and hard work in your children and for the sacrifices you accepted for us. You are my superhero.

To my mother:

Mrs. Tessy N. Ijoma (*Ihédímmà riemégò*), a woman of exemplary character. Thank you.

To my Queen and adorable daughter:

Princess Olivia, your appreciation keeps me going. Thank you, baby. Mom loves you.

Defining Terms

Embedded Generation

Embedded generation refers to the generation of electricity that is directly connected to a distribution network. Typically, small-scale embedded generation is either located within local distribution companies or at the site (residential, commercial, or industrial) where electricity is directly consumed.⁹

Downstream Implementation

This refers to the production and distribution of energy resources. In other words, it means the process of converting biomass into the finished product - fermenting biomass into bioethanol etc. or refining crude oil into natural gas liquids.¹⁰

Feed-in Tariff

A Feed-in Tariff (FiT) is an incentive or payment made to a person or company where the electric supply grid is fed by renewable energy sources, such as wind or solar. FiT is either offered voluntarily by an electricity retailer or mandated by the government. In Nigeria, FiT is applied by the government as an incentive to electricity generation companies.¹¹

⁹ Nigerian Electricity Regulatory Commission (NERC), *Nigerian Electricity Regulatory Commission Regulations for Embedded Generation 2012* (s:I: NERC, 2012) at 6. See also, South African Local Government Association (SALGA), *Status of Small Scale Embedded Generation (SSEG) in South African Municipalities October 2017* (Pretoria: SALGA, 2017) at 2.

¹⁰ Sampson Quain, "The Definitions of "Upstream" and "Downstream in the Production Process" Chron (February 20, 2019), accessed January 20, 2021 online: <<https://smallbusiness.chron.com/definitions-upstream-downstream-production-process-30971.html>>.

¹¹ Kate Loynes, "Overview of Feed in Tariffs: A Quick Guide" Parliamentary Library Information Analysis Advice (April 1, 2014), accessed January 20, 2021 online: <https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/rp1314/QG/Tariffs>.

Tank Farm

This refers to the area where large tanks containing bulk liquid fuels and compressed gasses are stored.

Locally Constructed, Affordable and Semi-automated Technologies

In this thesis, this means reasonably priced technologies that are developed or designed in the country where they will be used. Such technological solutions will require human interaction and can be used in small communities for easy management of operations. The key characteristic for this type of technologies is that they can be operated manually and mechanically. For instance, manual operations could include an operator loading the biogas digesters (biogas power plant) without mechanical support.¹²

Decentralized Energy Systems

Decentralized energy is energy produced close to the location where it will be used.¹³ Decentralized energy systems are “small-scale energy generation units (structures) that deliver energy to local customers.”¹⁴ This type of energy generation structure could be either stand-alone or connected to others nearby “through a network to share resources, i.e. to share the energy surplus.”¹⁵

¹²Invotec, Manual, Semi-Automated or Automated: What Type of Assembly System is Right for You? Invotec (November 20, 2014), accessed January 20, 2021 online: <<https://www.invotec.com/news/manual-semi-automated-or-automated-what-type-of-assembly-system-is-right-for-you/>>.

¹³Therma mech, “What is Decentralised Energy and Why is it Important?” Therma mech (May 15, 2019), accessed January 20, 2021 online: <<https://www.therma-mech.co.uk/what-is-decentralised-energy-and-why-is-it-important/>>.

¹⁴ Carlo Vezzoli et al. *Distributed/Decentralized Renewable Energy Systems* (Cham: Springer, 2018) online: <https://link.springer.com/chapter/10.1007/978-3-319-70223-0_2>.

¹⁵Ibid

Off-grid Solar Energy System

This refers to a solar system that has no connection to the electric supply grid. Power is mostly stored in a battery bank. However, in Nigeria, appliances run on direct current (DC) and/or alternating current (AC). On the one hand, electronics such as cell phones, flashlights, and appliances such as solar-powered irrigation pumps or solar dryers can use DC electricity i.e., power supplied directly from the battery. This means that a solar panel will convert sunlight into DC electricity to charge the battery. On the other hand, AC appliances such as solar electric water pumps, ceiling fans etc. plugged into a wall socket will require a device called an inverter to convert DC electricity into a higher Volt AC power.¹⁶

Renewable Energy and Clean Energy

For the purposes of this thesis, renewable energy and clean energy will be used interchangeably. Generally, renewable energy can mean clean energy, but clean energy does not always mean renewable energy. For instance, fossil fuels such as natural gas may be considered a clean energy, but it is a non-renewable energy.

Rural Electrification

This refers to the process of supplying and/or delivering electric power to rural areas either by connecting towns and villages to the national electric supply grid, or by providing off grid or stand-alone renewable energy systems that can operate (i.e. to power residential, commercial, industrial, and social activities) independently from the national electric grid.

¹⁶ Solar Online Australia, "Solar System Basic –How Solar Power Works!" (2020), accessed January 20, 2021 online: <https://www.solaronline.com.au/solar_system_basics.html>.

Renewable Energy Policy

Renewable energy policy is a formal document that shows the intention of a given government – what the government does not intend to do, or is going to do in terms of addressing issues of renewable energy production, implementation, and evaluation etc. Although a renewable energy policy is not a law, it can lead to the enactment of a new law.

Unsustainable Energy Resources

Although unsustainable energy resources include fossil fuels: natural gas, oil, coal (which cannot be replaced once they are used up), they also include traditional renewable energy resources specifically, biomass in its crudest forms: animal waste, agricultural residues, and wood. For instance, in addition to health impact, scientific evidence indicates that emissions from methane and black carbon (released during wood combustion) are the second and third largest forcing pollutants that warm the atmosphere and contribute to global anthropogenic climate change.¹⁷

¹⁷ United States Environmental Protection Agency (EPA), *Methane and Black Carbon Impacts on the Arctic: Communicating the Science* (s.I: United States Environmental Protection Agency, 2016) at 6.

Chapter One

1.0 Introduction

1.1 Background and Context

Access to sustainable energy and a healthy environment are essential to life and wealth, central to all areas of development processes and key components of sustainable development. For instance, both access to energy and a clean environment are necessary for us as humans to obtain our basic needs: clean water, quality air, food, shelter, jobs, and an environment for recreation and economic activities.¹⁸ Yet ensuring access to sustainable, reliable and affordable energy for the 1.6 billion people¹⁹ without access to energy services while mitigating and adapting to the impacts of climate change are major global concerns for any progress toward promoting sustainable development.²⁰

Due to gender roles, women particularly those in rural communities are at the centre of these challenges.²¹ More and more the international community is acknowledging the importance of providing sustainable energy for all through renewable energy.²² It also recognizes the significance of rural women's participation in decision-making concerning climate change adaptation and mitigation strategies.²³ For instance, international institutions like the United Nations recognize the need for policies and investments that facilitate the active participation of

¹⁸Access to a modern and affordable energy and a healthy environment are important to promoting livelihoods that are sustainable.

¹⁹ International Energy Agency, *World Energy Outlook* (Paris: International Energy Agency, 2004) at 348. (According to the International Energy Agency, "in the absence of vigorous new policies, 1.4 billion people will still lack energy in 2030").

²⁰ The impact of environmental degradation due to under-consumption of renewable energy in Nigeria particularly in the rural areas is a significant issue for progress toward the attainment of sustainable development.

²¹ Intergovernmental Panel on Climate Change, *Climate Change 2014: Impacts, Adaptation and Vulnerability* (New York: Cambridge University Press, 2014) at 19.

²² United Nations, *The 2030 Agenda for Sustainable Development Goals*, A/RES/70/1 (2015).

²³ Mitigation strategies include the production, deployment, and the utilization of renewable energy sources.

rural women in decision-making.²⁴ Also, the United Nations regard these women as the “backbone of rural communities,”²⁵ the “backbone of sustainable livelihoods,”²⁶ and “powerful catalysts for sustainable development.”²⁷

In Nigeria, the population is estimated at over 170 million people with about 40% having access to the national grid.²⁸ Electricity supply is currently different in urban and rural communities with urban areas essentially connected to the national supply grid and poor rural communities largely off the grid²⁹ and dependent on unsustainable energy. This dependence creates a challenge for Nigeria’s sustainable development performance, described as “disappointing.”³⁰ This is evidenced by the 2014 report of the United Nations which ranks Nigeria 152nd out of 187 countries with respect to its development index.³¹

²⁴ United Nations, “Rural Women’s Empowerment Critical to UN Sustainable Development Agenda - Ban” UN News (October 15, 2016), accessed April 27, 2020, online: <<https://news.un.org/en/story/2016/10/542882-rural-womens-empowerment-critical-un-sustainable-development-agenda-ban>>.

²⁵ *Ibid.*

²⁶ United Nations, “‘Rural Women are the Backbone of Sustainable Livelihoods,’ Ban Declares on International Day,” Africa Renewal, accessed April 27, 2020 online: <<https://www.un.org/africarenewal/news/%E2%80%98rural-women-are-backbone-sustainable-livelihoods%E2%80%99-ban-declares-international-day>>. See also, Nicole Boher, *Rural Women’s Empowerment in the Sustainable Development Era: Priorities, Partnerships, and for Transformational Change* (Brooklyn: Huairou Commission, 2017) at 4. *differe*

²⁷ United Nations, *Rural Women ‘Powerful Catalysts for Sustainable Development,’ Agents against Poverty, Hunger, Women’s Commission Told, as General Debate Concludes* (New York: United Nations, 2014). See also, UN Women, *The World Survey on the Role of Women in Development 2014: Gender Equality and Sustainable Development* (s.I: United Nations Publication, 2014) at 21. See also, Kandeh K. Yumkella, “Sustainable Energy For All: The Gender Dimensions” (April 2013), online: UN Women & United Nations Industrial Development Organization, at 10 <https://www.unido.org/fileadmin/user_media_upgrade/What_we_do/Topics/Women_and_Youth/GUIDANCENOTE_FINAL_WEB.pdf>. See, Karlsson, *supra* note 1. See, Joy Clancy, Sheila Oparaocha & Ulrike Roehr, “Gender Equity and Renewable Energies: Thematic Background Paper February 2004” (2004), online: International Conference for Renewable Energies, Bonn at 3 <<https://ris.utwente.nl/ws/por++talfiles/portal/6164700/Clancy04gender2.pdf>>.

²⁸ National Renewable Energy and Efficiency Policy 2015 (NREEEP 2015) at iv.

²⁹ *Ibid* at viii. See also, Nigeria Vision 2020 Program, *Report of the Vision 2020 National Technical Working Group on Energy Sector* (Abuja: Nigeria Vision 2020, 2009) at 21, 22, 11, 21.

³⁰ United Nations Development Programme, *National Human Development Report, 2015: Human Security and Human Development in Nigeria* (s.I: United Nations Development Programme, 2015) at 20 (UNDP, *HDR 2015*).

³¹ United Nations Development Programme, *Human Development Report 2014-Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience* (New York: United Nations Development Programme, 2014) at 159 (UNDP, *HDR 2014*). See also, *Ibid* (UNDP, *HDR 2015*) at 22.

In terms of natural resources, Nigeria is very rich in renewable energy resources, but is also a massive producer of oil and gas.³² Since 1956 the country relies mainly on the petroleum industry for its own energy supply grid. Ironically, this sector, though linked with economic growth, is also associated with serious pollution and environmental degradation. Environmental issues in the form of rising temperature, poor air quality, decreased soil fertility, deforestation, soil erosion, declining rainfall, drought, and desertification continue to deepen. Moreover, those in the rural areas experience worse pollution largely because of the increasing use of firewood (among others) as a primary source of energy.³³ Millions of open fires in Nigerian homes and businesses “contribute to build-up [of] greenhouse gases that cause climate change.”³⁴ Scientific evidence indicates that emissions from methane and black carbon (released during wood combustion) are the second and third largest forcing pollutants that warm the atmosphere and contribute to global anthropogenic climate change.³⁵ This situation persists despite Nigeria’s commitments under the 2015 Paris Agreement on Climate Change, the international accord to keep the rise in global temperature below 2°C above pre-industrial levels.³⁶

The absence of sustainable energy supply has not only increased the problem of environmental pollution, it has left rural areas environmentally degraded and socially underdeveloped while leaving their economic potentials untapped.³⁷ For example, the 2015

³² Jackson Jack, Better Jack & Odubo Tonbra Robert, “Natural Resource Exploitation and Socio-Economic Development in Nigeria (1981-2015)” (2016), online: 8 Sustainable Human Development Review 77 at 81, 90 (Other natural resources, include agro-allied resources.)

³³ Most of the exploitation and exploration are carried out in the rural areas e.g., the Niger Delta areas of Nigeria.

³⁴ “Firewood Smoke is Third Largest Killer of Women, Children in Nigeria -WHO”, Premium Times (12 March 2013), online <<http://www.premiumtimesng.com/news/124320-firewood-smoke-is-third-largest-killer-of-women-children-in-nigeria-who.html>>.

³⁵ United States Environmental Protection Agency (EPA), *supra* note 17 at 6.

³⁶ United Nations, *The Paris Agreement*, 2015 at Art 2 (a).

³⁷ A Sambo Abubakar, “Strategic Development in Renewable Energy in Nigeria” (2009), online: International Association for Energy Economics at 15 <https://www.researchgate.net/publication/271889780_Renewable_energy_resources_for_distributed_power_generation_in_Nigeria_A_review_of_the_potential/link/5efc49ba4585155050810536/download>.

National Human Development Report reveals that despite changes in the country's social³⁸ and economic³⁹ conditions, Nigeria's human development status has not shown notable improvement.⁴⁰ In terms of basic requirements (such as a health system and primary education level), which highlight the fundamentals for achieving sustainable growth, the country was placed 142nd out of 144.⁴¹

As part of the drive for greater economic development, in Nigeria, rural men tend to migrate to cities, while rural women bear the responsibility of nurturing dependents such as children, the elderly, and livestock while also providing food, water and fuel often in the context of unsustainable livelihoods and poverty.⁴² As a result, rural women are the main users of unsustainable energy (namely firewood) in Nigeria.⁴³ In order to achieve sustainable development, this situation needs to change. One way of achieving sustainable development could be by producing, deploying, and consuming renewable energy sources.

What does renewable energy mean in the Nigerian context? How can rural women's participation influence renewable energy choices and achievements? In the following sub-section, I attempt to examine these questions together, after which I will be discussing in more detail the

³⁸ *Ibid.* As an example, the inadequate health and education sectors.

³⁹ *Ibid.* See also, UNDP, *HDR 2015, supra* note 30 at 15. For instance, worldwide, Nigeria is recognized as one of the fastest growing economies and the largest in Africa due to its recent increase in its income and national output. However, economic growth in Nigeria has not improved unemployment and/or reduced poverty.

⁴⁰ UNDP, *HDR 2015, supra* note 30, at XIII, 22. The report notes that Nigeria's economic growth has not been associated with poverty reduction. See also, Ali I. Naibbi & Richard G. Healey, "Northern Nigeria's Dependence on Fuelwood: Insights from Nationwide Cooking Fuel Distribution Data" (2013) 3 *Intl. J. Humanities and Social Science* 160 at 160. The study attributes Nigeria's development shortfalls to causes, such as poor governance, lack of access, gender inequality, natural resources exploitation, lack of basic social infrastructures among others.

⁴¹ World Economic Forum, *The Global Competitiveness Report 2012-2013* (Geneva: World Economic Forum, 2012) at 17, 43, 279.

⁴² Food and Agriculture Organization of the United Nations (FAO), *Evidence on Internal and International Migration Patterns in Selected African Countries* (s:I: FAO Statistics Division, 2017) at 4.

⁴³ Mark Blackden & Quentin Wodon, *Gender, Time Use, and Poverty in Sub-Saharan Africa* (Washington DC: IBRD/World Bank, 2006). See also, F.E. Ekpo & N.N. Agu "Impact of Climate Change, Vulnerability and Adaptation Opportunities on Gender Livelihoods Activities in Rural Communities of Akwa Ibom State, Nigeria" (2014) 4:1 *Universal J Environmental Research and Technology* 46 at 46. Yunana Mba Abui, et al, "Environmental Implication of Fuelwood Consumption in Gora Area, Kaduna State, Nigeria" (2014) 2 *International J. Advanced Studies in Ecology, Development and Sustainability* 90 at 93. For example, studies suggest that 82.7% of females in Gora Area of Kaduna State, Nigeria harvest firewood regularly.

role of rural women in the renewable energy sector, and how this role could positively impact the country's national sustainability agenda.

1.2 Renewable Energy Options in Nigeria and Rural Women

According to the 2015 *National Renewable Energy and Energy Efficiency Policy* (NREEEP),

[r]ural areas that are remote and have a low demand density will have to depend on off-grid energy solutions as the economies of on-grid deployment do not favour rural electrification. Offgrid areas will have to depend on alternative solutions.⁴⁴

To address the issue of rural electrification, based on the country's renewable energy potentials, the 2015 NREEEP aims at developing the biomass, hydropower, solar, wind, and geothermal subsectors.⁴⁵ To aid progress assessment, the 2015 NREEEP set out targets and timelines⁴⁶ for the implementation process:

- Small hydro: 1,607MW in 2020 and 8,174 by 2030.
- Solar PV: 6,831MW by 2030.
- Biomass electricity: 57MW in 2020 and 292MW by 2030.
- Wind: 3,211 MW for wind energy by 2030.

1.2.1 Biomass Energy

Promoting non-wood fuel biomass through an efficient use of agricultural residues, animal and human waste, municipal wastes, and energy crops, especially in the rural areas is one of the objectives of the 2015 NREEEP.⁴⁷ Biomass energy simply refers to energy derived from animal or plant resources; common materials used for biomass energy are plant, wood, and waste.⁴⁸

⁴⁴ NREEEP 2015, *supra* note 28, at viii.

⁴⁵ *Ibid* (NREEEP 2015) at 2.

⁴⁶ *Ibid* (NREEEP 2015) at 35-36.

⁴⁷ NREEEP 2015, *supra* note 28, at 13.

⁴⁸ Abubakar Sambo, *supra* note 37.

Biomass is considered a renewable energy because it can regrow in a relatively short time, especially when properly managed. Biomass energy may be used as a solid fuel through direct firing; however, it must be dried. Biomass feedstocks can be converted into biogas and is the “only renewable energy source that can be converted into liquid biofuels” such as bioethanol and biodiesel.⁴⁹

With respect to biogas, decaying plant and animal products produce methane, a valuable source of energy that can also be captured from landfills.⁵⁰ “When burned, methane breaks apart into CO₂ and water, releasing heat that's used to generate electricity.”⁵¹ While bioethanol is made through the fermentation of biomass that is high in carbohydrates, such as sugarcane, corn, or wheat; biodiesel is made from combining ethanol with vegetable oil, animal fat, or recycled cooking fat (also known as gutter oil, the practice of re-using oil that has already been fried before).⁵² Thus, biofuels serve mostly to efficiently power vehicles and machinery; however, to date they do not operate as efficiently as gasoline except where they are blended or mixed with gasoline.⁵³

In Nigeria, the total land area is about 92, 376,000 hectares, with empty land area of approximately 91,077,000 hectares of which 71,000,000 hectares is covered by agricultural activities.⁵⁴ The rain forest in the southern region produces the largest quantity of woody biomass;

⁴⁹*Ibid.*

⁵⁰Sara Tanigawa, “Fact Sheet – Biogas: Converting Waste to Energy” Environmental and Strategy Study Institute (October 3, 2017), accessed January 20, 2021 online: <<https://www.eesi.org/papers/view/fact-sheet-biogasconverting-waste-to-energy>>.

⁵¹ Robert F. Service, “Taking a Cue from Plants, New Chemical Approach Converts Carbon Dioxide to Valuable Fuel” Science (January 8, 2020), accessed January 20, 2021 online: <<https://www.sciencemag.org/news/2020/01/taking-cue-plants-new-chemical-approach-converts-carbon-dioxide-valuable-fuel>>.

⁵²Alexa Olesen, “China Sounds Alarm over Filthy Cooking Oil” The San Diego Union Tribune (July 20, 2010), accessed January 20, 2021 online: <<https://www.sandiegouniontribune.com/sdut-china-sounds-alarm-over-filthy-cooking-oil-2010jul20-story.html>>.

⁵³Arijana Busic et al, “Bioethanol Production from Renewable Raw Materials and its Separation and Purification: A Review” Food Technology & Biotechnology 56 (2018) 289 <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6233010/>>.

⁵⁴Elijah I. Ohimain, “Emerging bio-ethanol Projects in Nigeria: Their Opportunities and Challenges” Energy Policy, 38:11 (2010) 7161. See also, Juliet Ben-Iwo, Vasilije Manovic & Philip Longhurst, “Biomass Resources and Biofuels Potentials for the Production of Transportation Fuels in Nigeria” Renewable and Sustainable Energy Reviews 63 (2016) 172 online: <<https://www.sciencedirect.com/science/article/pii/S1364032116301605#bib29>>.

the guinea savannah of the north central region produces more agricultural crop residues compared to the Sudan and Sahel savannah zones.⁵⁵ Also, while the northern part of Nigeria serves as natural habitat for grazing large numbers of livestock, such as donkeys, camels, horses, goats, cattle and sheep; the southern part is known for rearing pigs and chicken production.⁵⁶

As part of its biomass policies, the 2015 NREEEP⁵⁷ plans to “effectively harness biomass resources and integrate them with other energy resources for electricity generation.” However, it ignores or fails to acknowledge the role of rural women in agricultural activities, their ability to make the biomass policy goals a reality as well as their power to influence biomass energy choices. As consumers, rural women have for generations been using biomass such as wood, plant, and animal resources to produce energy; they are also very important producers of agricultural products. With their knowledge as agricultural producers and as consumers of traditional biomass for energy, their expertise is needed for effective renewable biomass policies.

1.2.2 Hydropower

Through the 2015 NREEEP⁵⁸ the Nigerian government aims at extending electricity to rural areas by way of mini- and micro hydropower schemes.⁵⁹ Hydropower (also known as hydroelectric energy) is a type of energy resource that is harnessed from flowing water to produce electricity. Nigeria has rich hydropower potentials because of the country’s large rivers, streams, and natural waterfalls.⁶⁰ Currently, the country’s national electric supply grid is fed by about 15%

⁵⁵ Abubakar Sambo, *supra* note 37.

⁵⁶ Eroarome Martin Aregheore, *Country pasture/forage resource profile: Nigeria* (s:I: FAO, 2009). See also, Mohammed Yekini Suberu, Nouruddeen Bashir & Mohd Wazir Mustafa, “Biogenic waste methane emissions and methane optimization for bioelectricity in Nigeria” *Renewable & Sustainable Energy Reviews* 25 (2013) 643. See also, Ben-Iwo, Manovic & Longhurst, *supra* note 53.

⁵⁷ NREEEP, 2015, *supra* note 28.

⁵⁸ NREEEP, 2015, *supra* note 28.

⁵⁹ NREEEP, 2015, *supra* note 28 at 11.

⁶⁰ Abubakar Sambo, *supra* note 37. See also, International Hydropower Association (IHA), “Country Profile: Nigeria” (June 2018), accessed January 20, 2021 online: <<https://www.hydropower.org/country-profiles/nigeria>>.

of hydro based energy sources.⁶¹ As of 2018, the potential of the country's large-scale hydropower was estimated at more than 14,120 megawatts, which amounts to the production of over 50,800 GWh of electricity annually.⁶² Concerning small hydropower, the country's potential is estimated at 3,500 megawatts of which about 60.58MW (1.7%) has been developed.⁶³

Through hydropower production the Nigerian government plans to extend electricity to rural areas in a sustainable and environmentally friendly manner. For instance, the 2015 NREEEP states that the government will “fully harness the hydropower potential in the country...”⁶⁴ Although the hydropower policy aims at applying a gender mainstreaming approach in the “planning, design and construction of micro, mini and large hydropower stations,” it fails to provide for the active participation of women, especially those in the rural communities.

It is worth noting that it is useful to include these women, because they influence the energy and water choices of their households, and those of their communities. Hence, they have a role in the water-energy nexus. As demonstrated by the Moutse women (discussed in chapter four), women have knowledge about water resources, including their quality and reliability, and the expertise of these women would be very helpful in deciding the location of decentralized small hydropower plants and reservoirs.⁶⁵

⁶¹ GET. Invest, “Nigeria: Renewable Energy Potential” GET. Invest online: <<https://www.get-invest.eu/market-information/nigeria/renewable-energy-potential/>>.

⁶² International Hydropower Association (IHA), *supra* note 60. See also, “Nigeria Country Commercial Guide” export.gov online: <<https://www.export.gov/apex/article2?id=Nigeria-Electrical-Power-Equipment>>.

⁶³ *Ibid* (“Nigeria Country Commercial Guide”). See also, Abubakar Sambo, *supra* note 37, at 18. Sambo notes that “[b]ased on Nigeria’s level of hydropower development, small hydropower station is defined as follows: Small = installed capacity of between 2 MW and 10 MW; Mini ≤ 2 MW; Micro ≤100 kW... studies carried out in twelve states and four (4) river basins [revealed that] over 278 unexploited SHP sites with total potentials of 734.3 MW were identified... SHP potential sites exist in virtually all parts of Nigeria with an estimated capacity of 3,500.”

⁶⁴ NREEEP 2015, *supra* note 28.

⁶⁵ “Facts about Women and Water” GWAnet Central Asia online: <http://www.gender.cawater-info.net/what_is/facts_e.htm>.

1.2.3 Wind Energy

According to the 2015 *NREEEP*⁶⁶ one of the aims of the government is to use wind as a source of power for rural areas not connected to the national electric supply grid.⁶⁷ Wind energy refers to the process of generating electricity using naturally occurring air flows. When compared to the southern part, Nigeria has a higher potential to develop and utilize energy from wind-based energy in the northern part (Sokoto region - Jos Plateau, Kano, Gembu and Maiduguri⁶⁸)⁶⁹ because of the “annual average speeds of about 2.0 m/s at the coastal [southern] region and 4.0 m/s at the far northern region of the country...”⁷⁰ Some authors suggest that wind potential in Nigeria is adequate for wind power integration to the national electric supply grid.⁷¹ Although the national electric supply grid is currently not fed by wind energy,⁷² it is important to note that there is currently one wind farm with a capacity of 10MW being constructed in Katsina State.⁷³

In Africa generally and Nigeria particularly, literature on the wind energy sector, especially as it relates to the participation of rural women in decision-making appears to be very limited.⁷⁴ However, there is reason to believe that with a growth mind-set i.e., one where talented young people can use their imaginations to solve the energy problem that they face, women in the rural

⁶⁶ NREEEP 2015, *supra* note 28.

⁶⁷ NREEEP 2015, *supra* note 28, at 16.

⁶⁸ GET. Invest, *supra* note 61. See also, Abdullahi Ahmed, “An Evaluation of Wind Energy Potential in the Northern and Southern Regions of Nigeria on the Basis of Weibull and Rayleigh Models” (2013) 1 American J. Energy Engineering online: <https://www.researchgate.net/publication/270708228_An_Evaluation_of_Wind_Energy_Potential_in_the_Northern_and_Southern_Regions_of_Nigeria_on_the_Basis_of_Weibull_and_Rayleigh_Models>.

⁶⁹ M. S Adaramola & O.M Oyewola, “Evaluating the performance of wind turbines in selected locations in Oyo state, Nigeria” (2011) Renewable Energy online: <http://journals1.scholarsportal.info.proxy.bib.uottawa.ca/pdf/09601481/v36i0012/3297_etpowtsliosn.xml>.

⁷⁰ Abubakar Sambo, *supra* note 37.

⁷¹ Dale W. Medugu & D.I Malgwi, “A study of wind energy potential: Remedy for fluctuation of electric power in Mubi, Adamawa State, Nigeria.” (2005) 17 Nigeria. J. Physics 40. See, Abdullahi Abubakar Mas’ud et al, “Wind Power Potentials in Cameroon and Nigeria: Lessons from South Africa” (2016) 10 Energies at 9.

⁷² Oluseyi O. Ajayi & Oluwatoyin O. Ajayi, “Nigeria’s Energy Policy: Inferences, Analysis and Legal Ethics Toward RE Development” (2013) 60 Elsevier 61.

⁷³ “FG to Complete 10MW Katsina Wind Power Soon” Daily Trust (March 4, 2020), accessed January 20, 2021 <<https://energycentral.com/news/fg-complete-10mw-katsina-wind-power-soon>>.

⁷⁴ Elizabeth Cecelski, *The Role of Women in Sustainable Energy Development* (Colorado: National Renewable Energy Laboratory, 2000) at 12. See also, IRENA, “Wind Energy: A Gender Perspective” IRENA (January 2020), accessed January 20, 2021 online: <<https://www.irena.org/publications/2020/Jan/Wind-energy-A-gender-perspective>>.

areas could begin the development of low-capacity wind turbines. This means that as the wind energy sector develops in Nigeria, it would be useful to include those talented young minds in policy making and implementation. For instance, and as discussed in chapter five, talented minds could include the Nigerian student who developed a solar and wind-powered zero emissions electric car using scrap materials.⁷⁵ Also, in Malawi, William Kamkwamba, who was forced to drop out of school at the age of 14 due to financial constraints was able to build a wind turbine using scrap materials like bicycle parts found in landfills by reading a book entitled “Using Energy.”⁷⁶

1.2.4 Geothermal Energy

Geothermal energy refers to heat within the earth.⁷⁷ According to the 2015 *NREEEP*, geothermal energy resource is available in Nigeria. Studies speculate that “Ikogosi warm spring in Southwestern Nigeria is a good geological evidence of potential geothermal energy.” However, the country has yet to develop its geothermal energy resources.⁷⁸

1.2.5 Solar Energy

Nigeria has an enormous potential for solar energy, especially because the country lies within a high sunshine belt.⁷⁹ Thus, solar radiation is fairly distributed within the country’s 36 states and its capital.⁸⁰ According to Sambo, the

annual average of total solar radiation varies from about 3.5 kWhm⁻²day⁻¹ in the coastal latitudes to about 7 kWhm⁻²day⁻¹ along the semi arid areas in the far North. On the average, the country receives solar radiation at the level of about 19.8 MJm⁻² day⁻¹. Average sunshine hours are estimated at 6hrs per day. Solar radiation is fairly well distributed. The minimum average is about

⁷⁵ Rudi Bressa, “An African Student Develops a Solar and Wind-Powered Car” Lifegate (September 29, 2014), Accessed April 7, 2019 online: <<https://www.lifegate.com/people/lifestyle/african-student-solar-and-wind-powered-car>>.

⁷⁶ Asempa Asiamah Bin Hussein, “William Kamkwamba an African Inventor, Engineer and Author” (October 9, 2017), accessed January 20, 2021 online: <<https://www.wired.com/2009/10/kamkwamba-windmill/>>.

⁷⁷ Energy Information Administration (EIA), “Geothermal Explained” eia (November 19, 2020), accessed January 20, 2021 online: <<https://www.eia.gov/energyexplained/geothermal/>>.

⁷⁸ Dorcas Sekemi Eyinla et al, “An overview of Geothermal Energy Resources in Nigeria” (2016) 12&13 *Environtropica* 61 at 61.

⁷⁹ Abubakar Sambo, *supra* note 37, at 18.

⁸⁰ GET. Invest, *supra* note 61.

3.55 kWhm–2day-1 in Katsina in January and 3.4 kWhm–2day-1 for Calabar in August and the maximum average is 8.0 kWhm–2day-1 for Nguru in May.⁸¹

Sambo further notes that,

Given an average solar radiation level of about 5.5 kWhm–2day-1, and the prevailing efficiencies of commercial solar-electric generators, then if solar collectors or modules were used to cover 1% of Nigeria’s land area of 923,773km², it is possible to generate 1850x10³ GWh of solar electricity per year. This is over one hundred times the current grid electricity consumption level in the country.⁸²

There are studies on increasing rural women’s knowledge about building, installing, and maintaining solar panels and batteries etc., which show that rural women could deliver clean energy to their villages.⁸³ According to Cecelski, women are interested in building, operating, and maintaining renewable energy technologies. In most cases, attending workshops and technical trainings are necessary for enhancing these skills.⁸⁴ For instance, through these measures, rural women like Habiba Ali, a local entrepreneur funded by the Rockefeller Foundation, has provided off-grid solar solutions such as a 10-kilowatt solar micro-grid (providing electricity to over 800 individuals) as well as solar powered dryers to villages in northern Nigeria.⁸⁵ Similarly, in the South African example discussed below in more detail, rural women have also designed a solar-powered pump that is mobile, easily transported between fields and stored when not in use.

Women are also interested in consuming energy from solar technologies because it would improve the quality of life in their homes, including pumping potable water and lighting.⁸⁶ With

⁸¹ Abubakar Sambo, *supra* note 37, at 18. See also, GET. Invest, *supra* note 61.

⁸² Abubakar Sambo, *supra* note 37, at 18.

⁸³ Cecelski, *The Role of Women in Sustainable Energy Development*, *supra* note 74, at 12, 23. See also, Amy C. Roma, “Doing Business Better: Empowering Women through Solar Energy” Renewable Energy World (May 14, 2019), accessed January 20, 2021 online: <<https://www.renewableenergyworld.com/2019/05/14/doing-business-better-empowering-women-through-solar-energy/#gref>>. See, “Nigerian Women’s Perspectives Light the Way in the Renewable Energy Sector” Human Impact (September 10, 2020), accessed January 21, 2020 online: <<https://www.rockefellerfoundation.org/case-study/nigerian-womens-perspectives-light-the-way-in-the-renewable-energy-sector/>>.

⁸⁴ IRENA, “Empowering Women in Nigeria with Solar Energy” IRENA (March 8, 2018), accessed January 20, 2021 online: <<https://www.irena.org/newsroom/articles/2018/Feb/Empowering-Women-in-Nigeria-with-Solar-Energy>>.

⁸⁵ “Nigerian Women’s Perspectives Light the Way in the Renewable Energy Sector” *supra* note 83. See also, *Ibid* (IRENA).

⁸⁶ *Ibid* (“Nigerian Women’s Perspectives Light”). See also, Cecelski, *The Role of Women in Sustainable Energy Development*, *supra* note 74, at 23.

such knowledge and interest, one wonders why rural women have not been allowed to express their voices at the decision-making table. This is key to the success of policies and programmes on the development of solar energy resources. It is also important because as I show next, certain distinctive features connect the participation of rural women in decisions about renewable energy with the promotion of sustainable development goals.

1.3 The Key Role of Rural Women in Promoting Renewable Energy and Sustainable Development

As stated above, women are the main beneficiaries of rural electrification, and the closest to the needs and capacities of the population in rural communities. Rural women also play key roles in Nigeria's economic growth, poverty reduction and food security. These women are involved in productive activities, including seed selection processes and crop gardening; they have the traditional knowledge to be effective and efficient stewards of agro-biodiversity.⁸⁷ Agriculture has a role to play in the renewable energy sector. According to the Food and Agricultural Organization (FAO), “[t]he role of agriculture as a major energy supply sector is rarely recognized or put into practice.”⁸⁸

Where rural women are put at the forefront of rural energy development through their participation in decision-making, they can foster affordable and modern energy (SDG 7) needed to promote sustainable development. As an example, these women have the expertise to generate the raw materials needed for biomass energy as well as to demonstrate the relationship between agriculture and energy. Biomass such as sugar and oils from plant and crop-based resources (including but not limited to sugarcane, sugarbeet, corn, cassava, sorghum, palm, jatropha,

⁸⁷ Julie Dekens & Vivek Voora “Rural Women, Partner in the Development Process” (2014) International Institute for Sustainable Development (IISD) Commentary at 2.

⁸⁸ Food and Agriculture Organization (FAO), *The Energy and Agriculture Nexus* (Rome: Environment and Natural Resources, 2000) at 49.

rapeseed, sunflower, soybean, canola etc. and animal fats; agricultural waste such as straw, wood, corncobs, corn stover etc.) can be used as raw materials for the production of liquid fuels such as bioethanol, biodiesel, and biogas, types of modern biofuels. There is no evidence to show that rural women are the main producers of biomass for the biofuels industry in Nigeria, and this needs to change for progress to be made. Due to rural women's interconnectedness with agriculture and forest resources, and their knowledge of innovative technologies such as the urine-based and other small-scale energy technologies, they have the capacity to promote sustainable development as off-grid energy producers in other ways.

If rural women are seen as active stakeholder participants in legal interventions, it could result in poor rural areas generating renewable energy sources like biofuels, and producing decentralized renewable energy technology options such as solar dryers, solar irrigation pumps, and biogas digesters (biogas power plant), etc. For instance, and as stated above, rural women in South Africa have designed a solar-powered pump that is mobile, easily transported between fields and stored when not in use. The solar-powered pump is capable of irrigating one acre for 6-12 hours a day. Such solar-powered pumps are needed for agricultural activities, processing, and manufacturing.

By using such renewable energy technologies, these women could help end poverty – SDG 1. New threats brought on by food insecurity mean even more work is needed to bring people out of poverty. This means that with technologies like solar dryers (discussed above) and solar-powered pumps, women's participation in policy formulation and implementation could help bring about zero hunger – SDG 2 (including giving their families and communities the opportunity to consume food with adequate nutrients).

In addition to producing solar-powered pumps, rural women’s involvement in the development of technologies like the urine-based energy system is useful to promote other sustainable development goals, including those contained in Nigeria’s 2020 Voluntary National Review (VNR),⁸⁹ and clean water and sanitation - SDG 6. For instance, in the wake of COVID 19, the Nigerian government has recognized that it has some “poor health outcomes, such as high rates of maternal mortality.”⁹⁰ The country further recognizes that in times of the pandemic, “hygiene and the need to prioritize universal access to clean water and soap”⁹¹ is critical. To this end, technologies like the urine-based energy system can provide access to affordable, reliable, sustainable, and modern clean energy- SDG 7 for families and communities, including businesses. It is also useful to power hospitals, schools etc., for fostering healthy lives and promoting well-being – SDG 3, quality education – SDG 4, and for decent work and promoting sustainable economic growth - SDG 8. Moreover, such off grid renewable energy technologies could aid in the reduction of inequality between rural and urban communities – SDG 10 while mitigating the impacts of climate change – SDG 13 both locally and globally. This means that these women can positively impact the achievement of the country’s national sustainability agenda, including the 2020 VNR. In chapters three, four and five, I will further demonstrate how rural women’s participation (or lack thereof) could impact renewable energy outcomes.

⁸⁹ United Nations, “Nigeria: Voluntary National Review 2020” Sustainable Development Goals Knowledge Platform (2020) online: <<https://sustainabledevelopment.un.org/memberstates/nigeria>>. The VNR focuses on key issues of poverty (SDG-1), health and wellbeing (SDG-3), education (SDG-4), gender equality (SDG-5), an inclusive economy (SDG-8), an enabling environment of peace and security (SDG-16), and partnerships (SDG-17).

⁹⁰*Ibid*

⁹¹*Ibid*

1.4 Problem Statement

Research indicates that renewable energy policies and laws in Nigeria are seldom successful in promoting sustainable development.⁹² Scholars like Ajayi and Ajayi,⁹³ Adebayo Charles,⁹⁴ Udochukwu B. Akuru and Ogbonnaya I. Okoro,⁹⁵ and E.L Efurumibe,⁹⁶ reveal that certain barriers⁹⁷ impede the Nigerian government from its long-stated sustainable development targets. Amulya K.N. Reddy also asserts that “[h]owever well-crafted the rural energy [legal] strategies, they will not succeed unless the barriers that they face are identified and specific policies designed to overcome them.”⁹⁸ According to Reddy these obstacles include market (such as subsidies) and non-market barriers (such as limited access to information and a non-transparent, non-accountable and non-democratic institutional arrangements).⁹⁹

Hence, the underlying phenomenon to be addressed in this thesis is how to bridge the gap between renewable energy policy and law, and sustainable development results in Nigeria. However, this problem is too broad for a single dissertation given that numerous barriers cause a gap between renewable energy law and sustainable development. In order to narrow the focus while remaining relevant to the bigger underlying problem, this thesis examines whether and how

⁹²Euene C.X. Ikejemba, et al, “The Empirical Reality & Sustainable Management Failures of Renewable Energy Projects in Sub-Saharan Africa (Part 1 of 2)” (2017) 102 *Renewable Energy* 234. See also, Nobert Edomah, “On the Path to Sustainability: Key Issues on Nigeria’s Sustainable Energy Development” (2016) 2 *Energy Reports* 28. See, Chris Newsom, *Renewable Energy Potential in Nigeria: Low-Carbon Approaches to Tackling Energy Poverty* (London: International Institute for Environment and Development (IIED), 2012) at 7. See, Sisay Asefa, “The Concept of Sustainable Development: An Introduction” in Sisay Asefa, ed, *The Economics of Sustainable Development*, (Kalamazoo, Michigan: W.E. Upjohn Institute for Employment Research, 2005). See, Onyenekenwa Cyprian Eneh, “Failed Development Vision, Political Leadership and Nigeria’s Underdevelopment: A Critique” (2011)1:1 *Asian J Rural Development* 63.

⁹³ Ajayi & Ajayi, *supra* note 72.

⁹⁴ Adebayo Charles, *How is 100% Renewable Energy Possible for Nigeria?* (2014) online: Global Energy Network Institute 1 at 16 <<http://geni.org/globalenergy/research/renewable-energy-potential-of-nigeria/100-percent-renewable-energy-Nigeria.pdf>>.

⁹⁵ Udochukwu B. Akuru & Ogbonnaya I. Okoro, “Renewable Energy Investment in Nigeria: A Review of the Renewable Energy Master Plan” (2014) 25 *Journal Energy in South Africa* 67 at 71.

⁹⁶ Efurumibe, E.L, “Barriers to the Development of Renewable Energy in Nigeria” (2013) 2:1 *Scholarly J Biotechnology* 11 at 11-12.

⁹⁷ Some of these barriers are discussed in the following subsection - literature review, specifically, 1.3.1.

⁹⁸ Amulya K.N. Reddy, “Goals, Strategies and Policies for Rural Energy” (1999) 34 *Economic and Political Weekly* 3435 at 3442.

⁹⁹ *Ibid* at 3443, 3444.

renewable energy legal and institutional frameworks could be made more effective by including rural women in their development and implementation?

The focus of the thesis is therefore on ensuring that renewable energy gets to rural women. The participation of rural women in law- and policy making is just one tool to achieve this goal. While this tool could also be used in improving many other sectors such as education, health care and economic opportunities for rural women, this thesis focuses on renewable energy because inadequate and unsustainable energy affects women more than men in general and in rural areas in Nigeria in particular, and because renewable energy is essential to solving this problem. Adequate energy supply could then also help to improve health, education, economic and other outcomes for rural Nigerian women as well. The goal is for this analysis to develop recommendations that inform both law and practice on why and how rural women could effectively participate as crucial stakeholders, to help renewable energy policies and laws to be more just and effective.

1.5 Literature Review

1.5.1 Renewable Energy Legal Framework and Sustainable Development

To address the gap between renewable energy policy and sustainable development in Nigeria, Oluseyi O. Ajayi and Oluwatoyin O. Ajayi's study raises two questions: 1) how has Nigerian energy policy¹⁰⁰ "led to sustainable energy development and power generation?" and 2) to what extent does the "policy and vision statement deliver on promoting grid electricity from...renewable energy sources?"¹⁰¹ Ajayi and Ajayi conclude that the Nigerian energy policy has yet to succeed in promoting sustainable energy development and power (electricity grid)

¹⁰⁰Ajayi & Ajayi, *supra* note 72. (Their study specifically examined the Nigeria Energy Policy 2003 (NEP 2003), and the Nigeria Vision 2020 Program, *supra* note 29.

¹⁰¹Ajayi & Ajayi, *supra* note 72, at 63.

generation from renewable energy sources.¹⁰² They,¹⁰³ as well as Adebayo Charles,¹⁰⁴ Udochukwu B. Akuru and Ogonnaya I. Okoro,¹⁰⁵ E.L Efurumibe,¹⁰⁶ and Amulya K.N. Reddy¹⁰⁷ recognize that policy gaps, such as market barriers limiting the attraction of foreign investors into Nigeria, need to be overcome by policy design. For instance, these authors recommend that to succeed in the development, deployment, and utilization of renewable energy, and to create a lucrative industry, the Nigerian government needs to include fiscal incentives such as tax reliefs, suitable feed-in-tariffs, and low or no interest rates for loans and investments.¹⁰⁸ That said, renewable energy policies such as the *Nigeria Energy Policy (NEP)*, 2003,¹⁰⁹ *Nigerian Biofuels Policy Incentives*,¹¹⁰ 2007, and the 2015 *National Renewable Energy and Efficiency Policy (NREEEP)*, 2015,¹¹¹ (among others examined in detail in Chapter five) do make provision for market incentives, but to no avail. Satisfaction of basic human needs (health centres, schools, water etc.), economic growth and a benign environment are still problematic in Nigeria, particularly in the rural communities.

In addition to market barriers, Ajayi and Ajayi, and Efurumibe,¹¹² mention the absence of a policy framework to regulate the renewable energy industry as a challenge impeding the government's effort to facilitate the adoption and growth of renewable energy in Nigeria.¹¹³ In 2015, the *National Renewable Energy and Energy Efficiency Policy (NREEEP)* was formulated

¹⁰² *Ibid* at 63.

¹⁰³ *Ibid*.

¹⁰⁴ Charles, *supra* note 37, at 16.

¹⁰⁵ Akuru & Okoro, *supra* note 95, at 71.

¹⁰⁶ Efurumibe E.L, *supra* note 96, at 11-12.

¹⁰⁷ Reddy, *supra* note 98, at 3442.

¹⁰⁸ Ajayi & Ajayi, *supra* note 72, at 64.

¹⁰⁹ NEP 2003, *supra* note 100.

¹¹⁰ *Nigerian Biofuels Policy Incentives* 2007 at 6.

¹¹¹ NREEEP, 2015, *supra* note 28.

¹¹² Efurumibe E.L, *supra* note 96, at 11-12.

¹¹³ Ajayi & Ajayi, *supra* note 72, at 64.

specifically for the industry.¹¹⁴ Hopefully, the government will accelerate achieving its sustainable development targets within its self-imposed timeframe, 2015-2030. That said, Temitope Onifade,¹¹⁵ Adebayo Charles, Muhammed Tawfiq Ladan,¹¹⁶ and Yemi Oke¹¹⁷ attribute the failure of renewable energy policy to the practice of having a single policy for all renewable energy sources rather than independent policies for each renewable energy source.¹¹⁸ However, having independent policies for each renewable energy source may not be a sufficient solution to addressing the gap between renewable energy policies and laws, and sustainable development. For example, the Federal Executive Council (FEC) in 2007 approved and gazetted the National Biofuels Policy.¹¹⁹ Under this Policy, the Nigerian National Petroleum Corporation (NNPC) has the mandate to create the necessary environment for the biofuels policy to take-off; yet “the country has not been able to muster the necessary will to properly articulate and implement it.”¹²⁰ Segun Oshewolo¹²¹ argues that the Nigerian biofuels policy and its objective to promote sustainable development may remain on the path to failure unless the Nigerian government is able to effectively address issues such as the environmental crisis and food insecurity,¹²² phenomena associated with rural women.

¹¹⁴NREEEP, 2015, *supra* note 28.

¹¹⁵ Temitope Tunbi Onifade, “Renewable Energy in Nigeria: A Peep into Science, A Conclusion on Policy” (2015) 1:1 Intl J Innovations in Science, Business & Technology 58 at 49.

¹¹⁶ Ladan, *supra* note 18.

¹¹⁷ Yemi Oke, *Nigerian Electricity Law and Regulation* (Lagos: Lawlords Publications, 2013).

¹¹⁸ Charles, *supra* note 94, at 16. See also, Ladan, *supra* note 18, at 108.

¹¹⁹The National Biofuels Policy is an independent policy framework for bio-energy.

¹²⁰ Daniel Adugbo, “Issues ahead of Biofuels Policy Review” Daily Trust (14 February, 2017). Accessed June 7, 2017, online: <<https://www.pressreader.com/nigeria/daily-trust/20170214/281771333942783>>.

¹²¹ Segun Oshewolo, “Designed to Fail? Nigeria’s Quest for Biofuel” (2012) 3 Afro Asian J. Social Sciences at 1, 3.

¹²² *Ibid* at 9, 11. See also, Phanankosi Moyo et al, “Biofuel Policy as a Key Driver for Sustainable Development in Biofuel Sector: The Missing Ingredient in Zimbabwe’s Biofuel Pursuit” (2014) 3 Canadian Centre of Science and Education at 5. Moyo notes that one of the reasons for the failure of the biofuel policy in Zimbabwe was because the policy failed to address the issue of production which is related to the issue of land.

Furthermore, K.R Ajao et al,¹²³ Temitope Onifade,¹²⁴ Udochukwu B. Akuru and Ogbonnaya I. Okoro,¹²⁵ Stephen Karekezi, and Waeni Kithyoma¹²⁶ note that renewable energy policies and institutional frameworks in Nigeria are inadequate because they fail to create measures to encourage the large-scale dissemination of renewable energy technologies to poor communities. The first measure identified relates to creating timelines for the “implementation of long-term renewable energy policy programmes.”¹²⁷ In 2005 and 2012, the Renewable Energy Master Plans set out long-term timelines for implementation: 2016-2025¹²⁸ and 2021-2030¹²⁹ respectively. Although these implementation periods are ongoing, rural energy development has not significantly improved to date. The second measure identified relates to initiating “long-term renewable energy training and capacity building programmes,”¹³⁰ a critical piece in a successful policy formulation and implementation processes. Studies like Karekezi’s define the category of people requiring energy training and capacity building as stakeholders such as “senior decision-makers in both Government and private sector.”¹³¹ Karekezi’s study therefore, fails to recognize other crucial stakeholder groups affected by renewable energy issues. Efurumibe notes that closing the policy gap requires the inclusion of a broad spectrum of stakeholders and a clear understanding of the “roles and responsibilities of various stakeholders along every stage of energy flow from supply to end-use.”¹³²

¹²³ K.R Ajao et al, “Electric Energy Supply in Nigeria, Decentralized Energy Approach” (2009) 24 *Cogeneration & Distribution Generation J* 34 at 39.

¹²⁴ Onifade, *supra* note 115, at 49.

¹²⁵ Akuru & Okoro, *supra* note 95, at 68.

¹²⁶ Stephen Karekezi, “Renewable in Africa – Meeting the Energy needs of the Poor” (2002) 30 *Energy Policy* 1059. See also, Stephen Karekezi & Waeni Kithyoma, “Renewable Energy Strategies for Rural Africa: is a PV-Led Renewable Energy Strategy the Right Approach for Providing Modern Energy to the Rural Poor of Sub-Saharan Africa” (2002) 30 *Energy Policy* 1071.

¹²⁷ *Ibid* at 1065.

¹²⁸ Renewable Energy Master Plan, 2005 at 27.

¹²⁹ Renewable Energy Master Plan, 2012 at viii, 6.

¹³⁰ Karekezi, *supra* note 126, at 1065.

¹³¹ *Ibid* at 1066.

¹³² Efurumibe, *supra* note 96, at 11-12

These authors suggest that an inadequate policy and law may impede any form of renewable energy initiative.¹³³ However, they do not investigate the possibility that the current process of making policies and laws (requiring more than just “senior decision-makers in both Government and private sector”) could be a foundational barrier requiring attention. They fail to recognize that addressing the low participation of affected stakeholders like rural women could be a critical first step to closing the long-standing gap between renewable energy legal frameworks and effective sustainable development.

While the analysis in the existing literature helps us to understand the bigger problem as to why policy and law about renewable energy have not succeeded in promoting sustainable development, it has yet to fill a void this thesis considers important – the place of rural women in the process of policy and law-making on renewable energy. As a contribution to this underdeveloped area in the literature, this thesis seeks to expand our understanding of this important issue.

1.5.2 Renewable Energy Legal Frameworks, Women’s Participation, and Sustainable Development

One premise which has influenced this study is the assertion by researchers that there is a need to develop sustainable development solutions out of the experiences of rural women.¹³⁴ Studies are increasingly acknowledging that rural women’s participation in policy making processes is important because as earlier stated, they are the “backbone of rural communities,”¹³⁵

¹³³ Yinka Omorogbe, “The Role of Law in Promoting Renewable Energy in Africa” Paper delivered at the International Conference on Renewable Energy in Africa 16-18 April 2008. Dakar Senegal), [unpublished]. See also, Reddy, *supra* note 98, at 3442.

¹³⁴ Corrine Wacker, “Sustainable Development through Women’s Groups: A Cultural Approach to Sustainable Development” in Wendy Harcourt, ed, *Feminist Perspective on Sustainable Development* (London: Zed Book Limited, 1994) at 129. See also, Sabine Hausler, “Women and the Politics of Sustainable Development” in Wendy Harcourt, ed, *Feminist Perspective on Sustainable Development* (London: Zed Book Limited, 1994). See, Cecilia Andersen, *Sustainable Development: Women and Rural Progress* (Bruxelles: King Baudouin Foundation, 1994). See, Lori Noguchi & Shahla Ali, “Women, Decision Making and Sustainability: Exploring the Experience of the Badi Foundation in Rural China” (2011) 22:2 Hasting Women’s Law Journal 295 at 295.

¹³⁵ United Nations, “Rural Women’s Empowerment” *supra* note 24.

the “backbone of sustainable livelihoods,”¹³⁶ and “powerful catalysts for sustainable development.”¹³⁷ These studies suggest that not paying attention to rural women’s importance and ensuring their direct participation in policy design and law-making has a high cost in terms of project failure.¹³⁸ Also, various authors like Kandeh K. Yumkella,¹³⁹ Gail Karlsson, Chike Chikwendu,¹⁴⁰ and Joy Clancy, Sheila Oparaocha and Ulrike Roehr¹⁴¹ suggest that the lack of participation of women is a shortcoming for renewable energy policies and programs.

While Yumkella notes that gender sensitive policies need to strengthen women’s leadership and participation in sustainable energy solutions by engaging them directly in policy making and project design;¹⁴² Chikwendu states that Nigerian women mostly do not participate at the decision-making level in the energy sector.¹⁴³ Also, Arja Vainio,¹⁴⁴ Bina Agarwal,¹⁴⁵ Yumkella,¹⁴⁶ Lori Noguchi and Shahla Ali¹⁴⁷ indicate that policy and law need to make women’s participation in decision-making an explicit objective, while specifying country-specific mechanisms for doing this.¹⁴⁸ For instance, Noguchi and Ali¹⁴⁹ state that governments and private organizations could build women’s capacity to participate in decision-making by providing leadership and

¹³⁶ United Nations, “Rural Women are the Backbone” *supra* note 26. See also, Boher, *Rural Women’s Empowerment supra* note 26, at 4.

¹³⁷ United Nations, *Rural Women ‘Powerful Catalysts supra* note 27. See also, UN Women, *The World Survey, supra* note 27 at 21. See, Yumkella, *supra* note 27 at 10. See also, Karlsson, *supra* note 1. See, Clancy, Oparaocha & Roehr, *supra* note 27, at 3.

¹³⁸ Chika Ezeanya-Esiobu, “Africa’s Indigenous Technology for Rural Women Economic Empowerment” (May 2017), online: The Chronicle of Education <<http://thechronicleofeducation.com/2017/05/02/africas-indigenous-technology-rural-women-economic-empowerment/>>. See also, Charles Takoyoh Eyong, “Indigenous Knowledge and Sustainable Development in Africa: Case Study on Central Africa” (2007) 1 Tribes and Tribals 121 at 122. See, Sally Baden, *Practical Strategies for Involving Women as well as Men in water and Sanitation Activities* (Sussex: Swedish International Development Cooperation Agency (SIDA), 1999) at 1. See the Bishop Kodji Village example in Chapter three.

¹³⁹ Yumkella, *supra* note 27, at 10.

¹⁴⁰ Karlsson *supra* note 1.

¹⁴¹ Clancy, Oparaocha & Roehr, *supra* note 27, at 3.

¹⁴² Yumkella, *supra* note 27, at 10.

¹⁴³ Chike Chikwendu, “Engendering Nigerian Energy Policy” in Karlsson, *supra* note 1, at 57.

¹⁴⁴ Arja Vainio-Mattila, *Navigating Gender: A Framework and a Tool for Participatory Development* (Helsinki: Ministry for Foreign Affairs, Department for International Development Cooperation, 2001) at 17.

¹⁴⁵ Bina Agarwal, “Participatory Exclusion, Community Forestry, and Gender: An Analysis for South Asia and a Conceptual Framework” (2001) 29 *World Development* 1623 at 1626.

¹⁴⁶ Yumkella, *supra* note 27 at 10.

¹⁴⁷ Noguchi & Ali, *supra* note 134, at 295.

¹⁴⁸ *Ibid* at 295.

¹⁴⁹ *Ibid* at 295.

empowerment trainings for women and girls, especially in areas such as self-expression and self-assertion. This is in line with the strategic objective of the Beijing Declaration and Platform for Action to increase women's capacity to participate in decision-making and leadership.¹⁵⁰ These authors note that although women are rarely considered key stakeholders, there is a link between sustainable energy policies, women's participation, and sustainable development.¹⁵¹

Despite this recognition, many of these scholars (Kandeh K. Yumkella,¹⁵² Chike Chikwendu,¹⁵³ Joy Clancy, Sheila Oparaocha and Ulrike Roehr,¹⁵⁴ and the International Renewable Energy Agency (IRENA)¹⁵⁵) assert that women in both the South and North continue to be marginalized and underrepresented in decision-making processes relating to renewable energy.¹⁵⁶ Most national renewable energy legal frameworks and policy debates pretend to take a gender-neutral approach,¹⁵⁷ an approach that superficially appears to benefit women and men equally.¹⁵⁸ However, gender and energy scholars like R. Mensah-Kutin, Joy S. Clancy et al, and IRENA, assert that energy laws and policies are gender biased because in reality, the differences in energy experience between men and women in both the Southern and the Northern countries are not recognised by energy policy and planning.¹⁵⁹ While “[m]ale-dominated structures result in

¹⁵⁰ Fourth World Conference on Women, Beijing, China, Sept. 4-15, 1995, *Beijing Declaration and Platform for Action*, U.N. Doc. A/CONF.177/20/Rev.1 (Sept. 15, 1995) Article 195 (c) at 83.

¹⁵¹ Yumkella, *supra* note 27, at 10.

¹⁵² Yumkella, *supra* note 27, at 11

¹⁵³ Chikwendu, *supra* note 143, at 57.

¹⁵⁴ Clancy, Oparaocha & Roehr, *supra* note 27.

¹⁵⁵ International Renewable Energy Agency (IRENA), *Renewable Energy: A Gender Perspective* (Abu Dhabi: International Renewable Energy Agency, 2019) at 19

¹⁵⁶ Yumkella, *supra* note 27, at 11,

¹⁵⁷ Barbara Bamberger, “Gender and its Place in the Energy Sector” (2006) 3 *Women's Policy. J 1* at 1, 3. See also, Clancy, Oparaocha & Roehr, *supra* note 27, at 3

¹⁵⁸ Joy Clancy & Marielle Feenstra, *How to Engender Energy Policy* (Twente: Centre for Clean Technology and Environmental Policy, 2006) at 7. See also, Joy S. Clancy et al, “The Predicament of Women” in Lakshman Guruswamy, ed, *International Energy and Poverty: The Emerging Contours* (London: Routledge, 2015) 24 at 32. See, Gail V. Karlsson, *Generating Opportunities: Case Studies on Energy and Women* (New York: United Nations Development Programme, 2001) at 10.

¹⁵⁹ Rose Mensah-Kutin, *Gender and Energy in Africa: Regional Initiatives and Challenges in Promoting Gender and Energy* (2006) in Clancy et al, *supra* note 158, at 31. Beatrice Khamati-Njenga & Joy Clancy, *Concepts and Issues in Gender and Energy* (s:I: Energia, 2003) at 9. See, Clancy, Oparaocha & Roehr, *supra* note 27, at 1, 3. At a first glance, the energy differences between women and men may not be as clearly visible in the North as they are in the South. The reason may be because a large population of the Southern countries depend on traditional fuels like biomass unlike the Northern societies who mostly rely on modern fuels.)

men talking to men about energy issues,”¹⁶⁰ women’s underrepresentation in energy policy plans and law making processes lead to policies that are gender-insensitive or worse.¹⁶¹ As a result, women’s energy needs seem to be marginalized during policy formulation.¹⁶²

According to Joy Clancy, Sheila Oparaocha and Ulrike Roehr, and Yumkella,¹⁶³ due to lack of participation, women’s contact with renewable energy appears to be as passive beneficiaries.¹⁶⁴ They assert that “policy makers have to date ignored the relationship between gender and energy in promoting sustainable development.”¹⁶⁵ Thus, integrating a gender perspective¹⁶⁶ in energy policy making will lead to “greater empowerment for women.”¹⁶⁷ Barbara Bamberger supports this view by stating that gender-driven energy policies are important because women’s lives are at the centre of social and economic activities,¹⁶⁸ requiring access to energy to function effectively.¹⁶⁹ She further asserts that a critical starting point for national energy policy drafters is recognizing the “role women play in energy consumption and production.”¹⁷⁰ Accordingly, Joy Clancy and Marielle Feenstra note that “[a]n increased participation of women in the energy sector and an improvement in their status...can also be regarded as a dimension of an engendered energy policy.”¹⁷¹

See, Soma Dutta, *Mainstreaming Gender in Energy Planning and policies* (s:I UNESCAP, 2003) at 4. See, IRENA, *supra* note 155, at 75.

¹⁶⁰ Lakshman Guruswamy, *International Energy and Poverty: Emerging Contours* (New York: Routledge, 2016).

¹⁶¹ UN Women, *Gender and Energy in the Pacific* (Suva: UN Women Multi-Country Office, 2014). See, IRENA, *supra* note 155, at 19.

¹⁶² Mensah-Kutin, *supra* note 159, at 31. See also, Khamati-Njenga & Clancy, *supra* note 102, at 9. See, Clancy, Oparaocha & Roehr, *supra* note 27, at 3. See, Dutta, *supra* note 159, at 4. See, IRENA, *supra* note 155, at 75.

¹⁶³ Yumkella, *supra* note 27, at 11.

¹⁶⁴ Clancy, Oparaocha & Roehr, *supra* note 27, at 3.

¹⁶⁵ Bamberger, *supra* note 157, at 4.

¹⁶⁶ Khamati-Njenga & Clancy, *supra* note 159, at 11. According to Beatrice Khamati-Njenga & Joy Clancy “what is meant by a ‘gender approach’ is that all energy programmes and projects, of whatever kind - from local fuelwood programmes up to the construction of hydroelectric power stations - should be analysed for the impact they are likely to have on men and women.”

¹⁶⁷ Bamberger, *supra* note 157, at 13.

¹⁶⁸ Such as education, health care, pumping water, cooking, small scale enterprise etc.

¹⁶⁹ Bamberger, *supra* note 157, at 3.

¹⁷⁰ *Ibid* at 3.

¹⁷¹ Clancy & Feenstra, *supra* note 158, at 12. See, Fiona Beveridge, Sue Nott & Kylie Stephen, “Mainstreaming and the Engendering of Policy-Making: A Means to an End?” (2000) 7:3 J European Public Policy 385 at 386.

Through an equality strategy known as gender mainstreaming, gender and energy studies have advocated for the integration of a gender perspective into energy policies and laws.¹⁷² For most of these scholars, this means that policymakers need to promote an active and visible plan for mainstreaming a “gender perspective in all policies and programmes, so that before decisions are taken, an analysis is made of the effects on women and men respectively.”¹⁷³ To promote gender mainstreaming, inform gender analysis, and facilitate the policies and processes needed to address gender-energy issues, these studies note that a gender-aware energy policy should be aided by the generation and dissemination of gender-disaggregated statistics and information.¹⁷⁴ In most cases, the national statistical office collects data through quantitative methods such as surveys. For instance, most of the gender data in Nigeria are produced through surveys.¹⁷⁵

L. Thy, M. Miletto and V. Pangare argue that “quantitative methods alone can at times perform meagerly in capturing the nuances of gender power relations and established (unequal) power structures.”¹⁷⁶ Thus, to understand and explain social phenomena or solutions on specific dimensions of gender, such nuances, especially in the case of renewable energy, rural women, and sustainable development, “can indeed only be captured through the use of qualitative methods”¹⁷⁷

¹⁷² United Nations Economic Commission for Africa, *Synthesis Report of E-discussion: “Gender Mainstreaming in National Policies and Programmes”* (Addis Ababa: African Centre for Gender and Social Development, 2012) at 5. See also, *Ibid* (Beveridge, Nott & Stephen) at 385. See, IRENA, *supra* note 155, at 57. See, United Nations, *Gender, Water and Sanitation Case Studies on Best Practices* (New York: United Nations, 2006) at iii. See, Dutta, *supra* note 159, at 19. See, Clancy & Feenstra, *supra* note 158, at 3, 12. See also, Ines Havet, “Linking Women and Energy at the Local Level to Global Goals and Targets” 7:3 *J Energy for Sustainable Development* 75.

¹⁷³ Fourth World Conference on Women, *supra* note 150, at 116. See also, Yianna Lambrou & Grazia Piana *Energy and Gender Issues in Rural Sustainable Development* (Rome: Food and Agriculture Organization of the United Nations, 2006) at 8. See also, UN Women, *Gender and Energy*, *supra* note 161, at 3.

¹⁷⁴ Jacqui True, “Mainstreaming Gender in International Institutions” in Laura Shepherd, ed, *Global Politics: A Feminist Introduction to International Relations* (New York: Routledge, 2015) at 57.

¹⁷⁵ Open Data Watch, *Bridging the Gap: Mapping Gender Data Availability in Africa, Nigeria Country Profile* (s:I Open Data Watch, 2019). Surveys include General Household Survey 2008, Harmonized Nigeria Living Standards Survey 2009, Malaria Indicator Survey 2010, General Household Survey, Panel 1010-2011, Multiple Indicator Cluster Survey 2011, General Household Survey, Panel 2012-2013, General Household Survey, Panel 2015-2016, Malaria Indicator Survey 2015-2016, Multiple Indicator Cluster Survey 2016-2017.

¹⁷⁶ L. Thy, M. Miletto, & V. Pangare, *Methodology for the Collection of Sex-disaggregated Water Data* (Paris: UNESCO, 2019) at 17. See also, United Nations Department of Economic and Social Affairs (UNDESA), *Achieving Gender Equality, Women’s Empowerment and Strengthening Development Cooperation. Dialogues at the Economic and Social Council*. (New York: United Nations, 2010).

¹⁷⁷ *Ibid* (Miletto) at 17. See also, *Ibid* (UNDESA).

such as participatory approaches that allow for “dialogue, participation, cultural identity, and empowerment.”¹⁷⁸ While focusing on community forest institutions in South Asia, Bina Agarwal affirms this position by stating that women’s *presence*¹⁷⁹ in decision-making could guarantee them a representative voice, and this has intrinsic worth — in the form of empowerment, recognition as citizens, and an inclusive and democratic legislative institution.¹⁸⁰

However, often gender mainstreaming as an approach is “represented as the mere inclusion of women’s issues”¹⁸¹ in energy policies rather than a model that should open up opportunities for greater visibility and participation of women in policy- and law-making.¹⁸² Some advocates of the gender mainstreaming approach like Njeri Wamukonya, and Penny Griffin suggest that it is a good first step for gender-sensitive renewable energy laws and policies to simply contain concepts like women or gender.¹⁸³ By contrast, a 2016 United Nations study notes that the mere addition of the “women component” or a “gender equality component” into an existing or planned activity, whether legislation, policies, or programmes, is not sufficient because it does not allow for a transformational social, economic, and institutional structure that empowers women.¹⁸⁴

Although gender mainstreaming as a concept rides on the principle of equality, it is likely to underestimate the issue of voice – “whose voice is present and which agents are silent in the policymaking process.”¹⁸⁵ In this vein, Elizabeth Cecelski points out that “[g]iven the importance

¹⁷⁸ Elizabeth Klopper & Lynnette Fourie, “Principles of Participatory Communication Reconceptualised for Instructional Corporate Social Responsibility Communication” (2018) 44:1 South African Journal for Communication Theory and Research 89.

¹⁷⁹ Emphasis added.

¹⁸⁰ Bina Agarwal, *Gender and Green Governance: The Political Economy of Women’s Presence within and Beyond Community Forestry* (Oxford: Oxford Scholarship, 2010) at 10.

¹⁸¹ True, *supra* note 174, at 237.

¹⁸² *Ibid* at 228.

¹⁸³ Njeri Wamukonya, “A Critical Look at Gender and Energy Mainstreaming in Africa (2002) online: UNDESA/DAW and WEDO <<http://www.fao.org/sustainable-forest-management/toolbox/tools/tool-detail/en/c/1051223/>>. See also, Penny Griffin, “Development Institutions and Neoliberal Globalization” in Shepherd, *supra* note 114, at 219

¹⁸⁴ Yannick Glemarec, Seemin Qayum & Marina Olshanskaya, *Leveraging Co-Benefits between Gender Equality and Climate Action for Sustainable Development: Mainstreaming Gender Considerations Climate Change Projects* (New York: UN Women, 2016) at 8.

¹⁸⁵ True, *supra* note 174, at 236.

of energy end use in determining impact, women's energy needs will not be met until they have a 'voice' in determining options and priorities."¹⁸⁶ This is even more true for rural women. Thus, of utmost importance to a successful process is the identity or representativeness, and not simply the quantity of women participating. This also means that rural women need to be given an active voice to speak for themselves, listen and be listened to before decisions on renewable energy laws and policies are taken. According to Jacqui True, the active participation and advocacy of women and men is critical to the success of gender mainstreaming.

Nevertheless, "one cannot assume that all women have the same [energy] problems."¹⁸⁷ Although a systematic review of the gender and energy literature establishes that women and men are not homogeneous groups, many studies do tend to consider women as a homogeneous group.¹⁸⁸ They appear to be oblivious to certain intersecting and interacting identities (such as class and location) that create differences among women.¹⁸⁹ Consequently, little to no studies have yet to focus on how the energy differences among women make rural women an independent category worthy of a participatory voice. For instance, recognizing that rural women rarely participate, Soma Dutta notes that

Energy [law-making and] implementing agencies find it difficult to involve rural women in energy policies and programmes because of a variety of reasons, including social constraints like lack of women having ownership rights over productive resources, restrictions on their decision-making, educational barriers and constraints on women's access to information.¹⁹⁰

Ownership rights over productive resources like land could enable rural women to implement renewable energy policies and laws more effectively. If rural women had a legal right to participate in policy- and law-making they can be empowered to raise such an issue with the

¹⁸⁶ Elizabeth Cecelski, *Re-thinking Gender and Energy: Old and New Directions* (s:I: Gender and Sustainable Energy, 2004) at 28.

¹⁸⁷ Khamati-Njenga & Clancy, *supra* note, 159, at 8.

¹⁸⁸ IRENA, *supra* note 155, at 17, 18, 57. See also, UN Women, *supra* note 102. See also, Clancy & Feenstra, *supra* note 158, at 3. See, Havet, *supra* note 172, at 75-79. See also, Clancy et al, *supra* note 158, at 24. See, Lambrou & Piana *supra* note 173, at 9.

¹⁸⁹ Gendered difference means the differences among women.

¹⁹⁰ Dutta, *supra* note 159, at 4.

possibility of contributing to the solution. Hence, the need to investigate how renewable energy legal and institutional frameworks could effectively include this category of women.

15.2.1 Why Rural Women?

According to Irene Dankelman and Joan Davidson,

It is difficult to talk about women as a whole without ignoring the vast economic, cultural and social differences between them. Even if we were to consider only women in the Third World, we would find it difficult to generalise. . . Nevertheless, it is possible to outline the general shape of women's living conditions in the rural areas of the Third World. They share, first of all, their poverty: roughly 75 percent of the world's population are among the poorest, and women make up the majority of the poor. Secondly, wherever they live, they are bound together by the common fact of their tremendous work burden.¹⁹¹

In Nigeria, 70% of people live in poverty,¹⁹² 80% of women are mostly poor,¹⁹³ and about an estimated 78 million live in rural households.¹⁹⁴ Moreover, 73.36% of the 77% Nigerian households led by women¹⁹⁵ depend on unsustainable energy.¹⁹⁶ Since rural women are left with few energy options, they are highly involved in burning large quantities of wood to meet their daily energy needs.¹⁹⁷ Although firewood utilization is a problem (and oppressive in the sense of work requirements and health risks), these women and their families need some form of energy to survive. Thus, energy poverty¹⁹⁸ has profound impacts on the capacity of Nigerian society to develop sustainably and equitably.

¹⁹¹ Irene Dankelman & Joan Davidson, *Women and Environment in the Third World: Alliance for the Future* (London: Earthscan Publications Limited, 1998).

¹⁹² Levinus Nwabughio, "Over 100m Nigerians living below poverty line – Osinbajo", Vanguard (August 20, 2015), online: <<http://www.vanguardngr.com/2015/08/over-1-million-nigerians-living-below-poverty-line-osinbajo/>>.

¹⁹³ Abbas Jimoh, "55 percent Women Households Head Landless-Oxfam", Daily Trust (March 9, 2017), Online: <<https://dailytrust.com/55-percent-women-households-head-landless-oxfam>>.

¹⁹⁴ *Ibid.*

¹⁹⁵ International Fund for Agricultural Development (IFAD), *Country Programme Evaluation: Federal Republic of Nigeria* (s.I, IFAD, 2009) at 8.

¹⁹⁶ For instance, the use of human energy and firewood.

¹⁹⁷ Abubakar, *supra* note 28, at 15. Sambo observes that daily energy needs of the rural populace in the distance future will continue to be firewood because they remain unserved with modern and sustainable energy.

¹⁹⁸ United Nations Development Programme (UNDP), *Towards and 'Energy Plus' Approach for the Poor: A Review of Good Practices and Lessons Learned from Asia and the Pacific* (Bangkok: UNDP, 2011) at 19. Energy poverty is defined as a "lack of access to resources, denial of opportunities and choice in access to energy that is adequate, safe, and reliable for economic and human development".

Given the disproportionate effects on rural women, this group is a critical stakeholder worthy of assuming a *leading role in their own change*, and of participating actively in the events and laws that shape their lives.¹⁹⁹ Their lack of participation remains a major obstacle to achieving equitable and sustainable development.²⁰⁰ Marc Fleurbaey and Sivan Kartha, in their analysis of sustainable development and equity assert that both over-consumption²⁰¹ and under-consumption²⁰² energy patterns are primary concerns for sustainable development.²⁰³ Thus, finding ways of overcoming overconsumption of firewood resources and under-consumption of renewable energy sources “while maintaining and advancing human well-being is a fundamental dimension of sustainable development.”²⁰⁴

Through participation, rural women can be empowered to transition from overconsumption of firewood resources to sustainable producers and users of renewable energy sources. This is so because sustainable development requires “deliberate and effective public action that enables [affected] people to participate in, and benefit from the process of development.”²⁰⁵ Affected people like rural women should be free to exercise their choices and should have a “decisive voice in shaping their [legal and] political frameworks.”²⁰⁶ This means

¹⁹⁹UNDP, *Human Development Report 2016: Human Development for Everyone* (New York: UNDP, 2016), (UNDP, HDR 2016). See also, Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2014: Mitigation of Climate Change Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge: Cambridge University Press, 2014), (IPCC 2014). See, United Nations Development Programme (UNDP), *Human Development Reports 1993* (New York: Oxford University Press, 1993) at 1. With female-headed households at the receiving end, poor rural areas in need of development are more vulnerable and disproportionately affected by the impacts of climate change. [Emphasis added].

²⁰⁰ *Ibid* (UNDP, HDR 2016), at 11. See also, *Ibid* (IPCC 2014).

²⁰¹ Where consumption level is high, majorly in industrialized countries, it takes a toll on the environment while increasing greenhouse gas emissions.

²⁰² Where consumption level is low, it impacts on the well-being of humans and it undermines the capacity to have an effective mitigation and adaptation climate response.

²⁰³ Marc Fleurbaey & Sivan Kartha, “Sustainable Development and Equity” in IPCC, *supra* note 139, at 290.

²⁰⁴ *Ibid*.

²⁰⁵ United Nations Development Programme (UNDP), *Human Development Reports 1990* (New York: Oxford University Press, 1990) at 83, 84.

²⁰⁶ *Ibid* (UNDP, HDR 1990) at 1, 10. See also United Nations Development Programme (UNDP), *Human Development Reports 2010, The Real Wealth of Nations: Pathways to Human Development* (New York: Palgrave Macmillan, 2010) at 12. See also, Parliament of the Republic of South Africa, “A People’s Government, The People Voice” (2001) online: <<https://www.parliament.gov.za/peoples-government-peoples-voice>>.

that the effective participation of affected citizens in policy and law design is foundational to the implementation and evaluation of governmental policies, laws, and programmes.²⁰⁷ Moreover, the World Commission on Environment and Development (WCED) states that participation by affected groups like rural women is one of the internationally recognized guiding principles for achieving sustainable development.²⁰⁸

Participation can transform rural women's vulnerability and powerlessness into empowerment.²⁰⁹ That is, it can help them climb the energy ladder from victims of the energy crisis to crucial agents in the solution. Muhammed Tawfiq Ladan notes that for renewable energy policies, legislation, and regulations to succeed and contribute to sustainable development, they should "[f]acilitate and encourage effective competition, education, training, and public participation,"²¹⁰ and I argue that this is particularly true for rural women.

1.6 Research Questions

Five research questions guide this thesis:

- 1) Why and how do critical legal feminists suggest that rural women should be regarded as important stakeholder participants in the development of renewable energy policy and law-making?

²⁰⁷ UNDP, (*HDR 1990*), *supra* note 205, at 64.

²⁰⁸ The World Commission on Environment and Development (WCED), *Our Common Future* (Oxford: Oxford University Press, 1987). See also, United Nations, *Rio Declaration on Environment and Development 1992* at Principle 10 online: <<http://www.jus.uio.no/lm/environmental.development.rio.declaration.1992/portrait.a4.pdf>>.

²⁰⁹ John Lord & Peggy Hutchison, "The Process of Empowerment: Implications for Theory and Practice" (1993) 12:1 Canadian J. Community Mental Health at 3. See also, UNDP (*HDR 2016*), *supra* note 199, at 10.

²¹⁰ Muhammed Tawfiq Ladan, Promoting Efficient and Renewable Energy for Sustainable Development and Climate Change Mitigation in Nigeria: Policy, Legislative and Regulatory Challenges online: (2009) SSRN Electronic Journal at 12 <https://www.researchgate.net/publication/272301382_Promoting_Efficient_and_Renewable_Energy_for_Sustainable_Development_and_Climate_Change_Mitigation_in_Nigeria_Policy_Legislative_and_Regulatory_Challenges>.

- 2) (a) What historic period(s) of institutional decision-making is/are impacting the legal development of renewable energy systems in Nigeria?
(b) How has the Nigerian legislature systematically recognized or subordinated rural women's participatory status in law-making about renewable energy?
(c) What barriers can hinder rural women's effective participation?
- 3) What lessons can be learned from historic fights for voice and power by women in comparable African countries? How can these be applied to the legal development of renewable energy systems in Nigeria?
- 4) How effective have the Nigerian renewable energy legal frameworks been at making real changes to the participation of rural women in both policy and law-making?
 - a) How is participation occurring in the context of the Nigerian renewable energy legal frameworks?
- 5) How can rural women's participation in Nigeria be increased?

1.7 Theoretical Perspectives

This thesis relies on four key principles of feminist legal theory which support the argument that rural women should be regarded as important participants in the development and implementation of renewable energy laws and policies in Nigeria. These principles, which are discussed in detail in Chapter two, are: (a) "the personal is political,"²¹¹ (b) the politics of

²¹¹ Anna Yeatman, "The personal and the Political: A Feminist Critique" in Paul James, ed, *Critical Politics: From the Personal to the Global* (Melbourne: Arena Publications, 1994) at 51. See also, Judith Squires, *Gender in Political Theory* (Cambridge: Polity Press, 2000).

difference – gender and gendered differences,²¹² (c) representation,²¹³ and (d) stakeholder participation.²¹⁴ Again, these principles will be elaborated in Chapter two.

1.8 Research Methodology

This research is mainly qualitative. To critically analyze the questions guiding this thesis, I have gathered data mostly by relying on a combination of methodologies: feminist historical research, document or doctrinal analysis as well as analysis by specific illustrative examples. I chose multiple approaches to illuminate experiences that have previously been insufficiently examined (e.g., how rural women’s active participation could help to bridge the gap between renewable energy policy and law, and sustainable development in Nigeria, and how these women could effectively be included) or misunderstood (e.g., the misunderstanding that women have always been victims). In addition, multiple methodologies enabled me to investigate and link past and present events and actions such as those relating to the energy situation in Nigeria, decision-making institutions concerned with the legal development of the renewable energy system, and women’s participation. Multiple methodologies further allowed me to move beyond the sole analysis of renewable energy legislation and legal texts to include *inter alia* literature in social science, history, African and cultural studies, gender, sociology, political science, and critical legal feminism.²¹⁵

²¹² Martha L. Fineman, “Feminist Theory and Law” (1995) 18:2 Harvard Journal of Law & Public Policy. See also, *Ibid* (Squires). See, Gisela Bock & Susan James, *Beyond Equality and Difference: Citizenship, Feminist Politics and Female Subjectivity* (London: Routledge, 1992).

²¹³ Nicola Lacey, “Feminist Legal Theory” (1989) 9 Oxford University Press 383.

²¹⁴ Kellye Y. Testy, “Capitalism and Freedom: For Whom?: Feminist Legal Theory and Progressive Corporate Law” (2004) 67 Duke University School of Law 87.

²¹⁵ Chris Ashford, “Socio-Legal Perspectives on Gender, Sexuality and Law: Editorial” (2010) 31 Liverpool L. Rev. at 2.

1.8.1 Document or Doctrinal Analysis

1.8.1.1 Types of Data Collected using Document Analysis

This thesis employed both documentary and doctrinal analysis. While doctrinal analysis is specific to law, documentary analysis encompasses other materials outside of law. For this reason, I used the term document analysis (which includes the doctrinal method) in this thesis. I relied on primary documents (laws in Nigeria relating to renewable energy) such as the *National Energy Policy* (NEP) 2003; *Renewable Energy Master Plan* 2005 (reviewed in 2012); the *Electric Power Sector Reform Act* (EPSRA, 2005); the *Renewable Electricity Policy Guidelines* 2006; the *Nigerian Biofuels Policy Incentives* 2007; and the 2015 *National Renewable Energy and Energy Efficiency Policy*.

I was able to analyze some of these legal frameworks by adopting an investigative method used by feminist legal theorists known simply as “asking the woman question.”²¹⁶ This method allowed me to deconstruct existing renewable energy legal frameworks, and to also ask questions that reveal the place of rural women in the process of policy- and law-making. I analyzed and referred to delegated legislation, case law and other public documents. Some of these documents were obtained from the website of the Energy Commission of Nigeria, the Nigerian Electricity Regulatory Commission, and libraries including the National Institute of Advanced Legal Studies (NIALS) in Nigeria. I also searched several online databases.

In addition, I collected data from South Africa online archives and relied on the country’s primary policies and laws on renewable energy such as the *White Paper on Energy Policy*,²¹⁷ and the *White Paper on Renewable Energy Policy*.²¹⁸ Furthermore, I made extensive use of, relied on,

²¹⁶ Katherine T. Bartlett, “Feminist Legal Methods” (1990) 103 *Harvard Law Review* 829 at 837.

²¹⁷ Department of Minerals and Energy (DME), *White paper on Energy Policy of the Republic of South Africa*, 1998.

²¹⁸ Department of Minerals and Energy (DME), *White Paper on Renewable Energy*, 2003.

analysed, and evaluated organizational and institutional documentary sources and official publications such as proceedings of the Senate Committee session on Power, Steel Development and Metallurgy.²¹⁹ In terms of gender, my research also relied on the collection and analysis of publications produced by women, about women and sometimes for women to examine the participatory status of rural women as a social group and ways of increasing their participation. In addition, I made efforts to use studies by African and Nigerian women writers.

1.8.2 Feminist Historical Methodology

Feminism represents a repudiation of the *status quo*.²²⁰ Thus, the feminist historical methodology is concerned with reclaiming the past lives of women. By analyzing the past to present lives of women, the methodology can expose the part that law plays in limiting women's participatory status.²²¹ Furthermore, it suggests the "role that law would play in the project of engineering a more" gender-equitable society.²²²

1.8.2.1 Type of Data Collected using a Feminist Historical Approach

Using this approach, I was able to locate, study and uncover authoritative literature on the different eras of history as they concern patterns of women's involvement in institutions, policy- and law-making in both Nigeria and South Africa. Through this literature, I exposed when in Nigerian history women began to experience silence, were muted, excised from history, and made invisible in official documents such as Constitutions. I relied on artifacts such as primary sources (Pass Laws, Ordinance Acts etc.) and secondary sources (magazines, newspapers and historical

²¹⁹ 8th National Assembly Second Session No. 97, *Senate of the Federal Republic of Nigeria: Votes and Proceedings* (Abuja: National Assembly Press, 2017).

²²⁰ Shulamit Reinharz, *Feminist method in Social Research* (New York: Oxford University Press, 1992) at 175.

²²¹ *Ibid.*

²²² Fineman, *supra* note 212, at 15.

documents including journals, articles and books, online websites and search engines, public documents about women etc.). I learned about, understood, described, and analyzed the history of renewable energy development as well as the participatory place of rural women. In addition, through historical materials from Nigeria (and South Africa) I was able to analyze the “energy lives” of women in rural areas, thus illuminating the connection between renewable energy, rural women, and sustainable development. Also, I was able to use historical records to place women as developers of renewable energy, who require the backing of the law to change their current status.²²³

I examined renewable energy decision-making institutions and delegated legislation developed through institutions such as the Nigerian Electricity Regulatory Commission (NERC), and the Rural Electrification Agency (REA). The historical trajectory of the past provided a background that explained energy transitions, institutional decision-making, historic fights for voice and power by women, and measures through which women in Nigeria and South Africa have been able to participate. Also, it explained the impact of women’s participation on the development of renewable energy and sustainable development. These materials allowed me to examine rural women’s participatory experience in public decision-making in the renewable energy field.

1.8.3 Analysis by Specific Illustrative Examples

In analyzing the Nigerian experience (and comparing it with South Africa), I have used specific illustrative examples to understand a class of women and the dynamic ways they have contributed to the renewable energy systems and sustainable development, despite being

²²³ By demonstrating how rural women’s current status can be changed from dormant voters to active stakeholder participants in legal decision-making.

systematically marginalized. I provided readers with specific examples that illustrate how rural women have and could participate in renewable energy policies and laws.

To provide my thesis with a firm foundation and to avoid generalizations, I have used “quotations, facts, narratives, statistics, details, analogies, opinions, and observations.”²²⁴ As an example, I analyzed the change in rural women’s participation over time, from pre-colonial, to colonial and post-colonial Nigeria, and from Apartheid to post-Apartheid South Africa. Using the Nigeria Kodji Village example, the urine-power technology example; the South Africa energy, water and land examples, and the Guatemala example among others, I demonstrated the significance of rural women’s participation in closing the gap between renewable energy policies and laws and sustainable development.

Hence, in selecting examples for this thesis, I used sources such as already existing interviews, surveys, documents, archival research etc. to gather necessary data.²²⁵ Insights gleaned from these examples were beneficial to giving recommendations that could directly influence policy, practice, and future research. Through the aid of illustrative examples, I was able to put rural women on the map of energy discourse in Nigeria. In addition, this technique helped me defy generalization by focusing on specificity.²²⁶ Put in another way, it helped me move from generally stating that rural women should participate in decision-making to specifically demonstrating ways through which they could participate.

To respond to the concern that in Nigeria “we do not have adequate historical records of the organizations in which women have been involved,”²²⁷ I used energy, land, and water examples

²²⁴ Lincoln University, “Rhetorical Patterns - Exemplification” (2020) online: Lincoln University <<https://www.lincoln.edu/departments/languages-and-literature-department/rhetorical-patterns/rhetorical-patterns>>.

²²⁵ Reinharz, *supra* note 220, at 165.

²²⁶ *Ibid* at 174

²²⁷ *Ibid* at 166

from South Africa to show how effective rural women organizations have been in organizing women for active participation, and how this could be replicated in Nigeria. I adopted the analysis by specific illustrative examples for a variety of reasons, including: to illustrate how women have participated in sectors including renewable energy policy- and law-making, and the significance of rural women's participation to the success or failure of renewable energy decision-making strategies. The criteria for selection of examples were:

- 1) The participation arose out of natural resources (energy, water, and land) issues affecting women directly.
- 2) Women were key participants in both policy-and law-making processes.
- 3) Insights gathered from the examples directly influenced the transformation of policy, law, and practice.
- 4) Women had interest in the struggle for sustainable development.
- 5) The example sheds light on the importance of rural women's participation in the formulation and implementation of renewable energy policies and laws, and the broader project of sustainable development.

1.9 Scope of study

The thesis is primarily concerned with policy- and law-making institutions. In terms of participation, the thesis focuses mainly on participation in legal decision-making. This is particularly because policy- and law-making is foundational to implementation and evaluation of renewable energy efforts. Thus, a successful legal transformation should begin from what John M. Cohen and Norman T. Uphoff describe as “the generation of ideas, formulation and assessment of

options, and making choices about them as well as the formulation of plans for putting selected options into effect.”²²⁸

Although policy- and law-making entails the act or process of formulating laws and policies by government with the goal of ensuring sustainable development, legal decision making may also include the act or process of reaching a particular plan or strategy in such a way that the laws formulated “transcend changes in governments, remaining in force until lawfully changed.”²²⁹ In this vein, the thesis also investigates participation in the renewable energy industry in terms of the implementation process. I am not proposing participation as typically and presently practiced, for instance, in the form of the Environmental Impact Assessment (EIA). This is because as I show below in Chapter two, stakeholder participants have a greater chance of being dissatisfied with the process and outcome where they are merely consulted or simply informed of a decision.

In terms of jurisdictions, my analyses on renewable energy policies and laws were limited to the national level. It does not analyze local, regional, and international legal frameworks except to the extent stated. Regional and international legal frameworks²³⁰ acknowledge that rural women’s participation in decision-making is important in achieving sustainable development. The thesis also does not discuss decision-making at the local government level for reasons including that the 1999 Nigeria Constitution²³¹ does not empower the municipal government to make laws concerning the energy sector. Therefore, in the absence of any municipal mandate, the research

²²⁸ John M. Cohen & Norman T. Uphoff, “Participation’s Place in Rural Development: seeking Clarity through Specificity” (1980) 8 World Development 213 at 220. The authors investigate the place of participation in rural development.

²²⁹ John W. Bruce et al, *Legal Empowerment of the Poor: From Concepts to Assessment* (Burlington: ARD, 2007). See also, Admin, “Difference between Policy Making and Decision-making.” (February 10, 2015) online: Difference Between.com, accessed July 8, 2020.

²³⁰ United Nations, Sustainable Development: United Nations Conference on Environment & Development, Agenda 21 (Rio de Janeiro, Brazil 3-4 June 1992). See also, United Nations, Paris Agreement, 2015. See, United Nations, Abuja Declaration on Participatory Development: The Role of Women in Africa in the 1990s.

²³¹ Constitution of Nigeria (1999), c C23. Part II at Paras13 and 14.

argues for the participation of rural women in both the Federal and State legislative processes related to renewable energy.

The thesis does not focus on women as a homogeneous category but rather those located in the rural communities, largely not connected to the national electric grid. However, findings and recommendations can have an impact on both rural and urban women in Nigeria, and in other countries having similar situations, and seeking ways to increase the participation of women or other social groups in both policy- and law-making on renewable energy, and even in other sectors.

1.10 Thesis Structure/Organization of Chapters

This thesis is divided into six chapters. The present chapter outlines and clarifies the context of this thesis: energy access and the law, rural women's participation, and sustainable development in Nigeria. Chapter two presents the theoretical perspective of the thesis; it explores ideas from key legal feminists' concepts: (a) "the personal is political,"²³² (b) the politics of difference - gender and gendered differences,²³³ (c) representation,²³⁴ and (d) stakeholder participation.²³⁵ Ideas from these key concepts lay down the theoretical foundation for why rural women should be regarded as stakeholder participants in both policy- and law-making in Nigeria. Chapter three begins with a historical examination of institutional decision-making. Specifically, it examines the historic period/s of institutional decision-making that is/are impacting the legal development of renewable energy system in present-day Nigeria. It analyzes the issue of

²³² Yeatman, *supra* note 211, at 51 See also, Squires, *supra* note 211.

²³³ Fineman, *supra* note 212. See also, Squires, *supra* note 211. See, Bock & James, *supra* note 212.

²³⁴ Lacey, *supra* note 213.

²³⁵ Testy, *supra* note 214.

recognition or subordination of the participatory status of rural women by the legislature. Also, it explores challenges that continue to hinder rural women's effective participation.

In Chapter four, I begin with a historical examination of participatory practices of rural women that led to the transformation of laws (including energy and water) in post-Apartheid South Africa. The chapter highlights participatory measures achieved through law and practice with lessons for Nigeria. Also, I explore the similarities and differences between the Nigeria situation and South Africa. Chapter five analyzes how effective renewable energy policies and laws are at making real changes to the participation of rural women in both policy- and law-making, and in the renewable energy industry in terms of the implementation process. It critically analyzes how participation is occurring in the context of the Nigerian renewable energy legal frameworks, and its implication for promoting sustainable development. In Chapter six, I make proposals for reform – ways of increasing rural women's participation, and I identify areas for further research.

Why and how should rural women participate in the law-making of renewable energy in Nigeria? In the next chapter, I lay the foundation to understanding this question which forms an important part of this thesis.

Chapter Two

Laying the Foundation: Why and How Critical Legal Feminist Theory Suggests Rural Women in Nigeria Should Participate in Renewable Energy Decision-Making

2.0 Introduction

This chapter investigates four key theoretical principles of feminist legal theory which ground and support the argument that rural women should be regarded as suitable participants in the development and implementation of renewable energy law and policy in Nigeria. These principles are: (a) “the personal is political,”²³⁶ (b) the politics of difference - gender and gendered differences,²³⁷ (c) representation,²³⁸ and (d) stakeholder participation.²³⁹

The principle “the personal is political” reveals that there is a need for the legislature to establish women’s participatory rights in the renewable energy sector; the politics of difference demonstrates why a gender and gendered-differentiated approach to law- and policy-making is a necessary first step to establishing equity, and in increasing rural women’s participation in decision-making about renewable energy; the concept of representation explains the intersecting and interacting identities (“womanness,” poverty, location) of rural women, and why certain women (urban and elite) are given a voice and others (rural and low social class) are silenced, and stakeholder participation discusses rural women as affected persons with differentiated local knowledge.

Ideas from these four principles will help policymakers, scholars, energy experts, NGOs and other institutions understand why it is important and necessary to increase the participation of

²³⁶ Yeatman, *supra* note 211

²³⁷ Fineman, *supra* note 212. See also, Squires, *supra* note 211. See also, Bock & James, *supra* note 212.

²³⁸ Lacey, *supra* note 213.

²³⁹ Testy, *supra* note 214.

rural women in the decision-making about renewable energy, and it will lead to proposals for change. I begin with describing the Feminist Legal Theory.

2.1 Feminist Legal Theory

Feminist legal scholars such as Martha Albertson Fineman, and Katharine T. Bartlett assert that legal decision-making processes have misrepresented, silenced, and disadvantaged women by excluding their experiences, and denying their active participation.²⁴⁰ Documenting how law has been fundamental to the historic exploitation of women²⁴¹ (in Nigeria specifically, see for example, the *Native Ordinances Act* 1901 (NO Act),²⁴² 1946 *Richard Constitution*,²⁴³ and 1954 *Lyttleton Constitution*²⁴⁴ etc.),²⁴⁵ feminist legal theorists (FLT) focus on the issues of power and the place of women in law-making processes. They insist that methodological tools such as “Asking the Woman Question”²⁴⁶ should be used to analyze laws, rules, and institutions that appear to be neutral on their face. As Anne Scales puts it, “we must look for that which we have not been trained to see.”²⁴⁷

The goal is to examine where, when, how, and why women’s systematic subordination has existed,²⁴⁸ and help legal scholars deconstruct laws, policies and structures that are perceived to be gender inclusive.²⁴⁹ For instance, although the Nigerian 1999 *Constitution* is founded on the

²⁴⁰ Bartlett, *supra* note 216, at 834. See also, Patricia Smith, “Introduction to Feminist Jurisprudence” in Patricia Smith, ed, *Feminist Jurisprudence* (Oxford: Oxford University Press; 1993) at 3.

²⁴¹ Fineman, *supra* note 212, at 14. See also, Clare Dalton, “Where We Stand: Observations on the Situation of Feminist Legal Thoughts” (2013) 3:1 Berkeley J Gender, L & Justice at 2. See, Janet E. Ainsworth, “In a Different Register: The Pragmatics of Powerlessness in Police Interrogation” (1993) 103 Yale L J.

²⁴² Native Ordinances Act 1901.

²⁴³ Richard Constitution 1946.

²⁴⁴ Lyttleton Constitution 1954.

²⁴⁵ These laws will be discussed in Chapter three.

²⁴⁶ Bartlett, *supra* note 216, at 837-49. See also, Lori Watson, “The Woman Question” (2016) 3 Transgender Studies Quarterly 246. See Hilary Charlesworth, “The Women Question in International law” (2011) 1:1 Asian J Intl L 33.

²⁴⁷ Anne Scales, “The Emergence of Feminist Jurisprudence: An Essay” (1986) 95:7 1373 Yale L J at 1395.

²⁴⁸ Amy Allen, “Feminist Perspectives on Power,” Stanford encyclopedia of Philosophy. October 19, 2005. Accessed January 6 2019 online: < <https://plato.stanford.edu/entries/feminist-power/>>.

²⁴⁹ Ayodele Atsenuwa, *Constitutionalism and the Legal Feminism: Stepping Stones or Impediments on the Long Road to Freedom for Nigerian Women?* (Lagos: Nigerian Institute of Advanced Legal Studies, 2011) at 4, 17. See also, Dalton, *supra* note 241, at 2. See, Ainsworth, *supra* note 241. See, Fineman, *supra* note 212, at 16.

principle of justice, and provides for the participation of persons in the proceedings of the National Assembly, the participation of rural Nigerian women in this institution particularly as it relates to matters about the renewable energy sector, tells a different story.²⁵⁰ This is evidenced by the energy injustice experienced by rural women, and the small number of rural women (if any) participating in the national assembly.²⁵¹

According to Angela D. Ledford, participation results in a “dignified and meaningful life,”²⁵² measured by indicators such as adequate access to resources including but not limited to health and education centres, and housing, amenities for which adequate energy is needed to effectively operate. Thus, because of women’s subordinate status, inequitable access to resources and decision-making power, a specific focus on gender equity is required along with gender mainstreaming and participation in every level of renewable energy decision making.²⁵³ The hope among many feminist legal theorists is that law can be used to attain gender equity.²⁵⁴ According to Sheila A.M McLean, though law may appear slow, it can achieve gender equity through a strengthened legal process that enables oppressed individuals to “participate fully and freely in the life of society.”²⁵⁵ Yinka Omorogbe, corroborates McLean’s position by suggesting that renewable energy policies and laws can either encourage or impede any increase in participation.²⁵⁶ For instance, law can increase women’s participatory rights by specifically making provisions for their

²⁵⁰ Constitution of Nigeria (1999), C23, at 61.

²⁵¹ The Nigerian National Assembly is the Legislative arm of government. Discussions on this arm of government are made in more detail below.

²⁵² Angela D. Ledford, *Group Representation, Feminist Theory, and the Promise of Justice* (England: Ashgate Publishing Limited, 2012) at 2.

²⁵³ Rosina Wiltshire, “Gender in Development: A Critical Issue for Sustainable Development” in Filomina C. Steady & Remie Toure, eds, *Women and the United Nations: Reflections and New Horizons* (Rochester: Schenkman Books, Inc., 1995) at 129-130.

²⁵⁴ Sheila A.M McLean & Noreen Burrows, *The Legal Relevance of Gender: Some Aspects of Sex-Based Discrimination* (Atlantic Highland: Humanities Press International INC, 1988) at 1. See also, Fineman, *supra* note, 212, at 15.

²⁵⁵ *Ibid* (McLean & Burrows) at 2.

²⁵⁶ Yinka Omorogbe, “Promoting Sustainable Development through the Use of Renewable Energy: The Role of Law” in Don Zillman et al, eds, *Beyond the Carbon Economy: Energy Law in Transition* (Oxford: Oxford Publication, 2008). See also Dankelman & Davidson, *supra* note 191.

participation by making participatory rights justiciable, and/or by making provisions for mandatory affirmative action policies, such as quotas for rural women. This is in line with legal feminists' goal to develop strategies "needed to increase women's confidence and awareness of their rights, in order for them to be more assertive" and speak out when participating in decision-making processes.²⁵⁷ Legal feminists insist that the participation of excluded groups such as rural women in formal processes would make law more responsive to their needs and bring about a reconstructed legal system that reflects rural women's reality.²⁵⁸ Common to legal feminists is their interest in "reform and the role that law would play in the project of engineering a more" gender-equitable society.²⁵⁹

2.1.1 The Private/Public Divide: "The Personal is Political"

Emphasis on the private-public divide is central to feminist legal analysis,²⁶⁰ particularly because crucial decisions affecting the lives of all people are made in the public realm. It is this recognition of the "interconnectedness of the public and private and the subordination of the latter in modern western society that has driven" feminists²⁶¹ to demand legal processes that include the perspectives and experiences of devalued groups,²⁶² not only women but also other marginalized groups. Therefore, feminist legal theorists ask how women can participate in public decision-

²⁵⁷ Andrea Cornwall, "Making a difference? Gender and Participatory Development" (2000) online: Institute of Development Studies Discussions Paper 378 at 12 <<https://www.participatorymethods.org/sites/participatorymethods.org/files/Dp378.pdf>>. See also, Bina Agarwal, "Re-sounding the Alert –Gender, Resources and Community Action," (1997) 25 World Development 1373.

²⁵⁸ Dalton, *supra* note 241, at 6.

²⁵⁹ Fineman, *supra* note 212, at 15.

²⁶⁰ Susan B. Boyd, *Challenging the Public/Private Divide: Feminism, Law, and Public Policy* (London: University of Toronto Press, 1997). See also, Ruth Pierson, "Feminism and the Writing and Teaching of History" (1982) 7 *Atlantis* 37 at 38.

²⁶¹ *Ibid* (Pierson) at 39.

²⁶² Lucinda M. Finley, "The Nature of Domination and the Nature of Women: Reflections of Feminism Unmodified" (1988) 82 *Northwestern University Law Review* at 352. See also, Meg A. Bond & Anne Mulvey, "A History of Women and Feminist Perspectives in Community Psychology" (2000) 28 *American J Community Psychology* 599 at 601.

making, even though they are consistently discouraged from defining their activities as “political.”²⁶³

Legal feminists do not define “political” in its narrow sense of electoral politics, but in the broad sense of power relationships.²⁶⁴ The statement “the personal is political” was made increasingly famous by Carol Hanisch’s 1970 paper.²⁶⁵ According to Martha Fineman, the first wave of American women to attend law school in the 1970s “were explicitly interested in a feminist political agenda.”²⁶⁶ With a view that law could play a role in promoting a gender-inclusive society, they came to school with the mantra that ‘the personal is political.’²⁶⁷ Legal feminists use this concept as a weapon to challenge existing power relations which create the presumption²⁶⁸ that the political/public is only located within the institutional sphere of government. In this regard, Anna Yeatman argues that the slogan “the personal is political” is a strategy of inclusion which appeals to the legislature to establish women’s participatory rights in areas (such as the renewable energy sector) that expose women to subordination.²⁶⁹ Similarly, Catherine MacKinnon opines that the personal becomes political because a woman’s personal and private problems are not hers individually neither do they solely affect her.²⁷⁰

In the case of rural Nigerian women, for example, lack of access to modern energy affects women and by extension their families and communities, and more broadly the economy and sustainable development of Nigeria. In addition to establishing women’s participatory rights, these

²⁶³ Squires, *supra* note 211, at 1, 3. See also, Catherine A. Mackinnon, *Toward A Feminist Theory of the State* (Cambridge: Harvard University Press, 1989) at 95. According to Mackinnon, women have been excluded from actively participating in traditional politics.

²⁶⁴ Carol Hanisch, “The Personal is Political” in Shulamith Firestone & Anne Koedt, ed, *Note from the Second Year: Women’s Liberation Major Writings of the Radical Feminists* (New York: Radical Feminism, 1969) at 76.

²⁶⁵ *Ibid.*

²⁶⁶ Fineman, *supra* note 212, at 15.

²⁶⁷ *Ibid.*

²⁶⁸ Squires, *supra* note 211, at 23.

²⁶⁹ Yeatman, *supra* note 211, at 51. See also, Squires, *supra* note 211, at 50-51.

²⁷⁰ MacKinnon, *supra* note 263.

feminists suggest that existing laws must be reimagined along less gender-exploitative lines.²⁷¹ For example, participation as used in the Nigerian 1999 Constitution should be interpreted to mean not only the right to vote in elections, but the right to actively attend, speak and influence legal and institutional decision-making processes. In Ruth Pierson's words,

Systematic inequality of representation or participation in any field of endeavour is, in the present order of things, diminishing to women. In order to be at least as autonomous and self-determining as men, whether it be in respect to marriage laws, the price of bread or the possibility of nuclear war, *women need to be able to participate in public power ...*²⁷²

Pierson further argues that "...so long as women do not participate or represent themselves directly in the public realm, [they] are not persons in [their] own right."²⁷³ This is even more true about vulnerable and marginalized women. Thus, to increase the effective participation of vulnerable and marginalized women, FLT's advocate for "the politics of difference" – both gender and gendered differences, discussed next.

2.1.2 "The Politics of Difference" - Gender and Gendered Differences

The section is divided into gender differences - the differences between women and men, and gendered differences - the differences among women. It reflects on the understanding that "...equality is not the elimination of difference, and difference does not preclude equality."²⁷⁴

2.1.2.1 "The Politics of Difference": Gender Difference

The "politics of difference" became a key principle of feminist legal theorists when marginalized groups of women in the early 1960s aspired to develop new legal structures that place previously marginalized issues (such as women's legal rights, especially regarding contract and

²⁷¹ Elizabeth Frazer & Nicola Lacey, *The Politics of community: a Feminist Critique of the Liberal-Communitarian Debate* (Toronto: University of Toronto Press, 1993) at 74. See also, Squires, *supra* note 211, at 52. See Mackinnon, *supra* note 263.

²⁷² Pierson *supra* note 260, at 39. [Emphasis added].

²⁷³ *Ibid.*

²⁷⁴ Joan W. Scott, "Deconstructing Equality-Versus-Difference: OR, the Uses of Poststructuralist Theory for Feminism" (1988) 14 *Feminist Studies* 32 at 38.

property, domestic violence, sexuality etc.) on the agenda.²⁷⁵ In the 1980s and 1990s the term became increasingly popular with the “equality-versus-difference debate,”²⁷⁶ and as second-wave difference theorists began to accept and celebrate the biological and socially construed differences between men and women.²⁷⁷ For instance, these legal feminists saw the need for the public sphere to celebrate rather than subordinate emotional qualities (such as being intuitive, nurturing, and peace-loving) exhibited by many women.²⁷⁸ Given women’s biological and socially construed roles, their observations, experiences, and viewpoints arguably make them consider issues, produce knowledge, and ask questions differently from similarly situated men. Martha L. Fineman sums this up by stating that:

The possibility that women's perspectives differ from men's is relevant because, given their perspective and positions, women often may make different observations, ask different questions, and consider different issues from similarly situated men. A difference in perspective often is reflected as a difference in perception... Therefore, legal theory that is uninformed or uninfluenced by these different perspectives and perceptions is incomplete, inequitable, and indefensible.²⁷⁹

These differences also impact the point of view of both men and women, especially in the renewable energy sector. As an illustration, today, in this era of capitalism, in Sub-Saharan Africa (particularly Nigeria), where access to energy remains an issue for many, more men than women are likely to show interest in the centralized energy grid because of its huge commercial benefits. Conversely, more women than men are likely to be interested in decentralized, affordable, reliable, and sustainable energy solutions that can help bring their families and communities out of poverty,

²⁷⁵ Chris Weedon, *Feminism, Theory and the Politics of Difference* (Oxford: Blackwell Publisher Ltd, 1999) at Vii. See also, Fineman, *supra* note, 212, at 2. See also, Sally Ann Drucker, “Betty Friedan: The Three Waves of Feminism” *Ohio Humanities* (April 27, 2018), Accessed January 3, 2020 online: <<http://www.ohiohumanities.org/betty-friedan-the-three-waves-of-feminism/>>.

²⁷⁶ Discussions on the equality-versus-difference debate is beyond the scope of this thesis.

²⁷⁷ Scott, *supra* note 274, at 32. See also, Squires, *supra* note 211, at 115.

²⁷⁸ These emotional qualities are considered to be part of women’s caretaking role. In the energy context, these qualities put women at the forefront as energy producers and users.

²⁷⁹ Martha L. Fineman, “Challenging Law, Establishing Differences: The Future of Feminist Legal Scholarships” (1990) 42 *Florida Law Review* 25 at 36. See also, Robin West, “Jurisprudence and Gender” (1988) 55 *The University of Chicago Law Review* <<https://scholarship.law.georgetown.edu/cgi/viewcontent.cgi?article=1642&context=facpub>>. Discussing the need for a “true” description of women's experience and subjectivity so as to change masculine jurisprudence.

without causing harm to the environment.²⁸⁰ Women are prone to oppose energy generation and infrastructure either because of its form (e.g., nuclear power, fossil fuel etc.) or location,²⁸¹ if they will create harm to their communities and physical environments. For example, in 2010 in Canada, about 250 people, mostly women, marched on Queen's Park to protest the construction of wind turbines near residential areas. They claimed that about 106 people including children were suffering from ailments such as sleeplessness, hypertension, and nosebleeds from the turbines, but their concerns were being dismissed. This is one situation where women would raise their voices *against* a particular form or location of sustainable energy. By raising their voices, these women were able to successfully impact the government's decision to cancel the project.²⁸²

Feminist legal theorists view the existing social order - legal and institutional processes - as patriarchal. They note that "the problem is not only that policies claiming to be neutral are actually partial, it is also that the distinctiveness of women's contribution is not...recognized."²⁸³ Thus, adopting the concept of formal equality without an initial clarification of the fundamental differences between men and women results in devaluing women's perspectives, repressing women's voices, and relying on male-defined norms.²⁸⁴ In this vein, Shulamith Firestone and Anne Koedt argue that:

We [women] regard our personal experience and our feelings about the experience as the basis for an analysis of our common situation. We cannot rely on existing ideologies as they are all products

²⁸⁰ Andreas Goldthau, Micheal F. Keating & Caroline Kuzemko, *Handbook of the International Political Economy of Energy and Natural Resources* (Cheltenham: Edward Elgar Publishing, 2018) at 71.

²⁸¹ This could include locating decentralized renewable energy infrastructure in a position that can cause physical or environmental harm.

²⁸² Tanya Talaga, "Wind Turbines Making Us Sick: Protesters" *The Star* (April 28, 2010), accessed June 28, 2019 online: <https://www.thestar.com/news/ontario/2010/04/28/wind_turbines_making_us_sick_protesters.html>. See also, Emma McIntosh & Alastair Sharp, "Exclusive: Wind Farm Owner Launches Court Challenge against Ontario Government," *Canada's National Observer* (December 20, 2019), accessed January 5 2020 online: <<https://www.nationalobserver.com/2019/12/20/news/exclusive-wind-farm-owner-launches-court-challenge-against-ontario-government>>.

²⁸³ Pamela Grande Jensen, *Finding a New Feminism: Rethinking the Woman Question for Liberal Democracy* (Lanham, Md.: Rowman & Littlefield, 1996) at 3. See also, Squires, *supra* note 211, at 116.

²⁸⁴ *Ibid* (Jensen). See also, *Ibid* (Squires).

of male supremacist culture. We question every generalization and accept none that are not confirmed by our own experience.²⁸⁵

Hence, to achieve equity, law and policy must adopt a gender-differentiated approach. For instance, in an access to energy context, understanding the different perspectives of men and women reduces inequity that may occur in the process of formulating and implementing renewable energy laws and policies. Thus, the task for difference feminist legal theorists is to work toward (through scholarship, workshops, lobbying etc.) transforming existing legal processes into ones that value and privilege women's experiences and perspectives.²⁸⁶ Legal feminists recognize that differences arising from the intersectionality (as I discuss below) of social categorizations such as class, language, sex, gender, religion, and location are central to law making, since they have the tendency of creating unequal power relations.²⁸⁷

Unlike liberal legal feminists who believe that equality²⁸⁸ can be achieved by mainstreaming and accommodating women's needs into law²⁸⁹ by just adding women²⁹⁰ into existing legal structures, feminist legal supporters of the theory of difference concern themselves with the qualities – identity and representativeness – and not the quantity of women to be added. To difference feminist legal theorists, the law as an institution (including its norms, concepts, processes, structures etc.) has its origins in a period when women were systematically excluded

²⁸⁵ Shulamith Firestone & Anne Koedt, "Redstockings Manifesto" in Shulamith Firestone & Anne Koedt, ed, *Note from the Second Year: Women's Liberation Major Writings of the Radical Feminists* (New York: Radical Feminism, 1969) at 113.

²⁸⁶ Squires, *supra* note 211, at 118. See also, Bock & James, *supra* note 212, at 1.

²⁸⁷ Weedon, *supra* note 275, at 5.

²⁸⁸ Bock & James, *supra* note 212, at 1. See also, Wendy McElroy, "The roots of Individualist Feminism in 19th-Century America" Wendy McElroy, ed, in *Freedom, Feminism, and the State* (California: The Independent Institute, 1991). The liberal feminism also known as equality feminism emphatically shaped feminist legal thinking and was the dominant perspective of feminism during the 19th and 20th century. As already mentioned, the 1980s and 90s brought about a focus on difference feminism. The tension between advocates of equality and difference stems from questioning whether the concept of equality is the right strategy for pursuing a commitment to gender neutrality. See also, Squires, *supra* note 211, at 116.

²⁸⁹ Fineman, *supra* note, 212, at 2.

²⁹⁰ Scott, *supra* note 274, at 44.

from participating.²⁹¹ As a result, laws have often failed to address the diverse needs of women, especially marginalized women.

In the area of energy law and policy, reforms must reflect the unique societal, economic, and environmental problems confronted by rural women, and facilitate the formulation and implementation of solutions,²⁹² as I discuss in chapters five and six, respectively. Formal equality is not enough. For instance, the provision for equality of sexes contained in the Nigerian 1999 Constitution²⁹³ can be said to be mere rhetoric as it does not reflect women's reality; the inequitable energy experiences of Nigerian rural women put them on an unequal economic, environmental, and social footing from those connected to the national electric grid.

2.1.2.2 Differences among Women (Gendered Differences)

The idea of “gendered differences” refers to variances among people of one particular gender. The term developed out of the criticism by minority women²⁹⁴ who believed that the first-wave Western feminism was politically driven by heterosexual “white middle-class” women.²⁹⁵ While the biological fact of being a woman allows individuals to have some common experiences, feminist legal scholars posit that other factors such as location (urban and rural), class (social and economic), age etc. create different perspectives and shape how individual women experience the world.²⁹⁶ These differentiated characteristics may hinder the collective power necessary for all women to “push back the barriers excluding most of us and our experiences” from the law-making

²⁹¹ Wendy Brown, *Manhood and Politics: A Feminist Reading in Political Theory* (New Jersey: Rowman & Littlefield, 1988) at 4. See also, Squires, *supra* note 211, at 1. See also, Fineman, *supra* note 212.

²⁹² Fineman, *supra* note 212, at 3.

²⁹³ Sections 15(2) and 42(1) of the Nigerian 1999 Constitution prohibits sex-based discrimination.

²⁹⁴ Women of Colour and non-western women.

²⁹⁵ Marlee Kline, “Race, Racism, and Feminist Legal Theory” (1989) 12 Harv. Women's L.J 115. While equality between genders was advocated by first-wave feminists, they disregarded equality based on issues including race. See also, Elizabeth V. Spelman, *Inessential Woman: Problems of Exclusion in Feminist Thought* (Boston: Beacon Press, 1988). See, Angela P. Harris, “Race and Essentialism in Feminist Legal Theory” (1990) 42 Stanford Law Review 581. See, Fineman, *supra* note 279, at 39, 40.

²⁹⁶ Fineman, *supra* note 279, at 40-41.

process.²⁹⁷ Also, such characteristics create identities legal feminists describe as “intersectional,” a term popularized by law professor Kimberlé Crenshaw in 1989.²⁹⁸

Crenshaw notes that Black women in the United States are faced with intersectional experiences of racism and sexism. Thus, their exclusion from “feminist theory and antiracist policy [and law] discourse”²⁹⁹ cannot be solved simply by “including Black women within an already established analytical structure [Antidiscrimination law].” She notes that for theory and legal discourse to “embrace the experiences and concerns of Black women, the entire framework that has been used as a basis for translating ‘women’s experience’ or ‘the Black experience’ ... must be rethought and recast.”³⁰⁰ This is so because theories, policies and laws that neglect intersectionality between racism and sexism cannot sufficiently address the way Black women are subordinated.³⁰¹

Although Crenshaw’s study on intersectionality is not specific to the renewable energy system, it helps broaden the examination of how specific identities (race, sex, place, class etc.) affect people in intersecting ways. Within the context of this study, intersectional feminism is relevant to understanding the interconnectedness about the issues of sex, gender, place, and class (social and economic status)³⁰² etc.; how these characteristics affect rural women’s struggle for access to modern, affordable, and sustainable energy, and their ability to actively participate in renewable energy policy and law making. According to Joanna Simpson,³⁰³ adopting an intersectional approach enables decision-makers have the visibility to

²⁹⁷ *Ibid* at 41.

²⁹⁸ Kimberlé Crenshaw, “Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics” (1989) 1989:1 University of Chicago Legal Forum. See also Emily Graham “Book Review: Feminism, Law, Inclusion: Intersectionality in Action, by Gayle Macdonald, Rachel L. Osborne and Charles C. Smith (eds)” (2006) 44 Osgoode Hall L.J 753.

²⁹⁹ *Ibid*, (Crenshaw) at 140. Referring to the Title VII of the Civil Rights Act of 1964. See also, Anna Kaijser & Annica Kronsell, “Climate Change through the lens of Intersectionality” (2014) 23:3 J Environmental Politics 417 at 420.

³⁰⁰ *Ibid*, (Crenshaw) at 140.

³⁰¹ *Ibid*, (Crenshaw).

³⁰² Rural women experience sexual discrimination as women; they also experience lower income, gendered roles and social statuses differently.

³⁰³ Joanna Simpson, *Intersectionality Toolkit* (Ottawa: Canadian Research Institute for the Advancement of Women (CRIAOW), 2009).

[r]eflect upon whose voices are heard and valued and whose are silenced and not taken into account.... People with diverse backgrounds should be given space to speak and bring new perspectives...Listening to people's lived experiences makes your activism more inclusive and representative.

Therefore, adopting an intersectional and differentiated approach (between men and women on the one hand, and among differently-situated women on the other hand) to the transformation of law and policy making is significant to locating different voices and promoting equity – increasing women's (especially rural women) participation. In the next sub-section, I show existing energy differences among women arising based on characteristics such as class, location etc.

2.1.2.3 Gendered Differences in Access to Energy in Rural Nigeria

Typically, scholars of the gender and energy literature³⁰⁴ pay more attention to the energy differences between men and women, with little or no focus on the recurring differences existing among women, based on characteristics such as class, location etc., and how resulting difference in experiences and identities impact participation in law making processes. These characteristics create a wide disparity in the energy use pattern among urban and rural women and give rise to what difference legal feminist theorists have termed gendered differences.³⁰⁵ This makes it important to assess which women are chosen to represent rural women in Nigerian renewable energy institutions and law-making processes.

In Nigeria, problems with access to energy are greatest in the rural areas where electrical power is insufficient. Energy infrastructure such as the electrical grid “tends to be provided to areas that are growing quickly (in either demographic or economic terms), are wealthier, are

³⁰⁴IRENA, *supra* note 155. See also, Clancy, Oparaocha & Roehr, *supra* note 27. See, Khamati-Njenga & Clancy, *supra* note, 159. See, Cecelski, *supra* note 186.

³⁰⁵ Fineman, *supra* note 279.

politically favoured, or are already located near other infrastructure (roads in particular).”³⁰⁶ This is particularly the situation in urban areas. Thus, urban users generally benefit much more from modern energy sources (oil and gas, and hydro) generated through the national electric grid than rural and remote communities without access to energy infrastructure: grid electricity, transmission, and distribution.³⁰⁷ This is a significant reason why people in rural communities remain in poverty and find sustainable development a challenge.³⁰⁸

As noted above, due to lack of access to energy most women in rural communities in Nigeria use fuelwood for household energy needs; they must walk long distances or turn to “potentially toxic options like cow dung, agricultural wastes, old plastic containers, which are injurious to their health and could accentuate respiratory illnesses due to persistent exposure to smoke.”³⁰⁹ These women are mostly faced with low financial capability and can rarely invest in productive appliances (such as solar milling and grating machines). They carry the burden of relying on daylight, and at night, lights from inefficient candles etc. Women and girls in rural communities tend to be more responsible for gathering firewood; in most cases firewood gathering keeps rural girls away from school.³¹⁰

³⁰⁶ Rebecca Rewald, *Energy and Women and Girls: Analysing the needs, Uses, and Impacts of Energy on Women and Girls in the Developing World* (Boston: Oxfam Research Backgrounder Series, 2017) at 17.

³⁰⁷ World Access to Modern Energy, “Impact of Energy Access: Differences between Rural and Urban Energy Access.” (April 8 2019), Accessed April 10, 2019 at 5 <https://energypedia.info/wiki/Impacts_of_energy_access:_Differences_between_Rural_and_Urban_Energy_Access>.

³⁰⁸ Adélia de Melo Branco, “A Case Study in the Brazilian Amazon Region: A Gender Approach to Energy Supply” (2002) 5:4 *Gender and Sustainable Energy* 1 at 19. See also, Adélia de Melo Branco, “Gender and Energy Issues in Latin America” Paper prepared for the Energia International Network Gender and Energy Gender and Energy, for the World Summit on Sustainable Development, Johannesburg, South Africa, 26 August – 4 September 2002.

³⁰⁹ Lydia Muchiri, “Gender and Equity in Bioenergy Access and Delivery in Kenya” (2008) online: *Practical Action* at 6 <<https://www.semanticscholar.org/paper/Gender-and-Equity-in-Bioenergy-Access-and-Delivery-Muchiri/76e79792974e6784bda409b5199f22ebf763d48a>>. See also, Women for Science, “Gender and Energy” (2017) online: *Inter American Network of Academies of Sciences* <<https://www.ianas.org/index.php/programs/women-for-science/88-programs/women-for-science/323-gender-and-energy>>.

³¹⁰ *Ibid* (Women for Science).

Urban women and girls on the other hand can easily access modern energy sources such as liquefied natural gas and gasoline, and as such, are rarely burdened with firewood gathering. Access to electricity and modern fuel for cooking creates additional income opportunities in households and spurs growth and employment through enterprises. More urban women have the economic resources to afford energy technologies such as fossil fuel-fired power (off grid) self-generating technologies as a replacement for grid electric power failure. This increased access to energy furthers urban women's development in various ways.

Without access to energy for cooking, for example, "rural children are more likely to be underweight than their urban counterparts."³¹¹ Also, women in rural communities of Nigeria are more likely to experience maternal malnutrition, lack of access to amenities (such as water, and sanitation, lack of health services etc.),³¹² because these require constant supplies of energy to operate efficiently and effectively.

Despite the above, urban/elite women tend to represent all women (including rural/grassroots women) in energy decision-making, even though they do not themselves experience rural women's energy challenges. This is so because in Nigeria, it is often believed by policy-makers, scholars, NGOs, and many women (both urban and rural³¹³) that a woman can legitimately represent her gender simply because she is a woman, thereby ignoring characteristics such as class (social and economic), and location which brings about a difference in perspectives among women.³¹⁴ As feminist legal scholars have argued, women are very diverse, and it should

³¹¹ UN Women Watch, "Facts & Figures: Rural Women and the Millennium Development Goals" (2012) online: Inter-Agency Task Force on Rural Women at 4 < <https://www.un.org/womenwatch/feature/ruralwomen/facts-figures.html>>.

³¹² *Ibid.*

³¹³ Women in the rural communities are mostly ignorant of the reality that the intersecting nature of their struggle both as women and as mostly poor people with situated knowledge is significant to renewable energy law making and strategies.

³¹⁴ Adedayo Oluwaseun Adefemi & Ayodeji Temitope Agunbiade, "Women's Political Participation and Representation in State Legislatures, Southwest, Nigeria" (2019) 7:1 J. Political Science & Public Affairs. See also, Linus Unah, "The Battle to Create More Space for Women in Nigeria Politics" TRT World (February 14, 2019), accessed March 3, 2020 online:

be clear that not all women in Nigeria experience energy in the same way.³¹⁵ In this regard, Wendy Jill Annecke further asserts that up until recently women have not been represented in the energy sector in Africa; worse still, where they have been, it is by women who have little knowledge of, and experience with gender energy issues.³¹⁶

Rural women's observations, experiences and viewpoints make them consider issues, produce knowledge, and ask questions differently from women with different backgrounds, class, location etc.³¹⁷ This means that rural women themselves should be involved in policy- and law-making about rural renewable energy. The following sub-section examines the concept of representation in more detail.

2.1.3 The Concept of Representation: Who Represents Whom in Renewable Energy Decision-Making?

The ability of any group of women to speak for others is a critical subject in feminist legal scholarship.³¹⁸ As an example, in addressing questions of “representation and differences, and possible dimensions of “Otherness”: “‘race’ and ethnicity, class, age, sexual identity, (dis)ability and motherhood status,” Celia Kitzinger and Sue Wilkinson's study on social policy among others³¹⁹ raises the following questions: 1) “...in what ways can representation of Others create social change?” 2) Whether and how should we “represent members of groups to which we do not

<<https://www.trtworld.com/magazine/the-battle-to-create-more-space-for-women-in-nigeria-s-politics-24175>>. See, Fineman, *supra* note 279, at 42.

³¹⁵ *Ibid.*, (Fineman), at 36.

³¹⁶ Wendy Jill Annecke, “From Kitchen to the Boardroom: Reflections on Power Relations in Gender and Energy Practice and Policy” Paper presented at the Workshop on Improving Women's Access to Energy: Policy. Project or the Market? November 2-3, 1999.

³¹⁷ Fineman, *supra* note 279, at 36.

³¹⁸ Fineman, *supra* note 279, at 40. See also, Celia Kitzinger & Sue Wilkinson, “Theorizing Representing the Other” in Sue Wilkinson & Celia Kitzinger, eds, *Representing the Other: A Feminism & Psychology Reader* (London: SAGE Publications Ltd, 1996) at 1.

³¹⁹ Political science, psychology, sociology, women's studies, anthropology as well as linguistics.

ourselves belong – in particular, members of groups oppressed in ways we are not?”³²⁰ 3) “Should we act simply as ‘conduits’ through which the voices of Others can be heard?” 4) “What are the cost and benefit of ‘including’ or of excluding women”³²¹ from decision-making and on what terms? 5) “How do we place people with multiple sources of oppression in relation to others?”³²² Using existing representation of women in renewable energy decision-making institutions in Nigeria as an illustration, this sub-section will investigate whether the mere presence of a woman or group of women (regardless of their backgrounds and perspectives) in law-making processes is sufficient to adequately represent the energy and environmental experiences of other groups of women.

The concept of representation implies a homogeneous category of “woman as Other” because as earlier mentioned, in Nigeria like many other countries, women are generally presumed to be able to represent all other women simply because they share the same sex. Other characteristics³²³ such as literacy, wealth and class further define which woman represents the others when decisions on renewable energy are made. Representation of *all* women by a privileged few render invisible the diverse experiences of differently situated women.³²⁴ Particularly, it renders invisible rural women who are experiencing multiple forms of discrimination, including simultaneous and interacting effects of oppression based on gender, sex, socio-economic class, geographical location etc.

Scholars of intersectionality have drawn our attention to a “powerful critique of mutually exclusive categories such as ‘woman’ or ‘Black,’ that serve to mask intersecting and interacting

³²⁰Kitzinger & Wilkinson, *supra* note 318, at 1.

³²¹*Ibid.*

³²² Fineman, *supra* note 279, at 40.

³²³ *Ibid* at 42.

³²⁴ Kitzinger & Wilkinson, *supra* note 318, at 5.

relation of domination.”³²⁵ In the context of this thesis, ‘woman,’ or ‘poverty’ (arising from social, economic, and environmental inequity) are often inseparable, intersect, interact, and affect rural women’s participation in renewable energy law-making. Although all women share commonalities based on sex, not all women are poor and live in the rural communities. Thus, the exclusion experienced by women in the rural communities is because of their “womanness,” poverty as well as location, and “therefore [their] struggles on... these fronts are inseparable.”³²⁶ These identities (class, location, sex etc.) are relevant to legal strategies and determine which woman is given a voice (privileged) and which woman is silenced.³²⁷

Referring to existing legal structure, Martha Fineman argues that “a woman chosen to ‘represent’ her gender often is one whose interests and values coincide with those of the normalized male institutions that have deigned to include her.”³²⁸ Thus, the representative woman accommodates the behavioral norms and the professional standards of the institution, not challenging them even if she initially had oppositional ideals.³²⁹ Similar to Annecke’s view above,³³⁰ Fineman argues that the representative woman legitimized within the process of an existing and unchanged institution mostly will not address the issues affecting women with differing characteristics rather, such representation promotes tokenism.

³²⁵ Sojourner Truth, “Sojourner Truth (1797-1883): Ain’t I A Woman” (1851) online: Women’s Convention, Akron, Ohio <<https://www.bhamcityschools.org/cms/lib/AL01001646/Centricity/Domain/5481/English%20Language%20Arts%20Grade%2010%20Curriculum%20Guide/Week%201-%20English%2010%20Resource.pdf>>. In Truth’s famous 1851 speech she demanded her right both as a woman and as a Black. See also, Creshaw, *supra* note 298. See, Kimberle Creshaw, “Mapping the Margins: Intersectionality, Identity Politics, and Violence against Color” (1991) 43 *Stanford Law Review* 1241. See also, Leach Bassel, “Intersectionality” in Emma Samman & José Manuel Roche, eds, *Group Inequality and Intersectionality* (s:I Maitreyee E-Bulletin of the Human Development & Capability Association, 2014).

³²⁶ Audrey Lorde, *I Am Your Sister: Black Women Organizing Across Sexualities* (New York: Kitchen Table: Women of Color Press, 1985) at 4.

³²⁷ Creshaw, *supra* note 298. See also, Fineman, *supra* note 212, at 5. See, Fineman, *supra* note 279, at 41, 6.

³²⁸ Fineman, *supra* note 279, at 42.

³²⁹ *Ibid.*

³³⁰ Annecke, *supra* note 316.

In Nigeria, currently only 7 of the 109 members of the Senate are women.³³¹ In the House of Representatives only 12 of 360 members are women.³³² Differences arising among women have made some rural women assert that some female representatives are not involved with the urgent reality of the people they represent.³³³ For example, these rural women criticize female representatives who propose bills on issues such as indecent dressing (which limit a woman's freedom to dress in certain ways).³³⁴ These critics point out that the focus should instead be on major issues important to Nigerian women and children, especially in the rural communities. These issues include lack of energy-electric infrastructures, lack of clean water, unemployment, poor living conditions, extreme bad roads, inadequate health care etc.³³⁵ Most of the women in the legislature have an upper-middle class background with little or no understanding of the energy experiences of members of groups oppressed in ways they are not.

One exception to the class status of many women legislators seemed to be Patricia Olubunmi Etteh, who obtained her primary education at Baptist Primary School, Ilorin in Kwara State, Nigeria, and her diploma in Law from the University of Abuja, Nigeria. However, she chose to not become qualified to practice law but earned her living as a hairdresser (beauty therapist).³³⁶

³³¹ Stella Oduah, Uche Ekwunife, Oluremi Tinubu, Rose Oko, Aishatu Ahmed Dahiru, Akon Eyakenyi, and Betty Apiafi.

³³² They include Lynda Chuba Ikpeazu, Nkiruka Chiduben Onyejeocha, Onuh Onyeche Blessing, and Zainab Gimba. See, Iyabo Olojede, *Women in Top Management in Nigeria* (Nairobi: African Association for Public Administration and Management, 1996). See also, Olamide Olutoke Ajogbeje, "Women Participation in Nigeria Politics and Its Challenges for Nigeria's Centenary" (2016) XIX Nigerian J. Social Studies 70 at 73. These authors state that most of these women also have powerful political connection by reasons of birth, marriage, education etc. However, this is not to suggest that some women may not have attained their representative position on the merit.

³³³Ure Akuma "Open Letter To Senator Eme Ufot Ekaette" Naijarules. (August 19, 2008). Accessed April 10, 2019 online: < <https://www.naijarules.com/index.php?threads/open-letter-to-senator-eme-ufot-ekaette.29335/>>. See also, Ifedayo Timothy Akomolede & Akomolede Olayinka Bosede, "Legislation as a Tool for Good Governance in Nigeria: Legal Matters Arising" (2012) 1 European Journal of Business and Social Sciences 61 at 66. See also, Ejikeme Jombo Nwagwu, "Legislative Oversight in Nigeria: a Watchdog or a Hunting Dog?" (2014) 22 J.L, Policy & Globalization 16 at 18. See also, Segun Joshua & Samuel Oni, "The Nigerian House of Representatives and Corruption, (1999-2011)" (2014) Vol. 5 Mediterranean Journal of Social Sciences 561 at 561.

³³⁴ *Ibid* (Akuma).

³³⁵ *Ibid*.

³³⁶ Leon Usigbe, "Who is Mrs Patricia Olubunmi Etteh?" Vanguard. (August 28 2007), accessed August 26, 2018 online: <<http://nm.onlinenigeria.com/templates/?a=10580>>. See also, Elor Nkereuwem, "EXCLUSIVE: Etteh Goes to School" Premium Times. (February 3, 2013), accessed March 4, 2020 online: < <https://www.premiumtimesng.com/news/118412-exclusive-etteh-goes-to-school.html>>. In 2013 the former speaker of Nigeria returned to school to study law at the University of Buckingham.

The media refer to her as an “illiterate hairdresser.”³³⁷ In 2007 Etteh was unanimously appointed as the first female Speaker of the House of Representatives. Etteh stated that her goals included women’s and children’s rights, equity and rural development.³³⁸ She resigned in 2007 following an indictment for misappropriation of public funds,³³⁹ even though she denied this accusation.³⁴⁰ In 2011, she was found not guilty and thereafter cleared.³⁴¹ Some authors argue that male counterparts holding similar political positions have been accused of corrupt practices but have not been charged.³⁴² This raises the question of whether Etteh was induced to resign because of her gender, class or inadequate formal education, and her resulting different experience, perspective, values and concerns for a different group of women. While it cannot be concluded with certainty, this case raises the question of whether male legislators were trying to remove a woman who attained leadership and power, to block her influence on decision-making.

To achieve a legal system sensitive to gendered differences and class-based energy inequities,³⁴³ law should increase rural women’s participation by creating opportunities to participate, and by using “recognition politics” which allows for the representation of subordinate social groups in bodies such as parliaments; for example, by using a quota system.³⁴⁴ In the

³³⁷ Katherine Baffour, “Patricia Etteh Goes to School” Legit.ng News (February 5, 2013), accessed June 25, 2019 online: <<https://www.legit.ng/22578.html>>.

³³⁸ Usigbe, *supra* note 336.

³³⁹ Etteh claimed that the sum of NGN628m was spent on cars and renovation etc.

³⁴⁰ Okeke V.O.S, “Legislative Probe and Corruption in Nigeria: A Focus on National Assemble Oversight Function (1999 to 2011)” (2014) International Journal of Global Studies 20 at 30 <<https://www.primejournal.org/IJGS/pdf/2014/jun/Okeke%20pdf.pdf>>.

³⁴¹ Turaki A. Hassan, “Nigeria: n628 Million House Scam – Etteh Not Guilty Representatives” Daily Trust (3 June 2011), online: <<http://allafrica.com/stories/201106031031.html>>.

³⁴² Obi Ngozichukwuka & Bernard Obioma Onyenwe, “Women for Change: A Panacea for National Development-A Case Study of Adamawa State” online: International Journal of Research Development 248 at 253 <<http://www.globalacademicgroup.com/journals/approaches/Women%20for%20Change%20A%20Panacea%20for%20National%20Development-A.pdf>>.

³⁴³ Fineman, *supra* note 212, at 5.

³⁴⁴ Walby, *supra* note 7, at 5504.

following sub-section, I further develop legal feminists' ideas on the concept of stakeholder participation.

2.1.4 Stakeholder Participation

Stakeholder Participation (SP) “involves public authorities genuinely listening to public input and being open to the possibility of being influenced by it.”³⁴⁵ In other words, the final decision must make evident that the public authority took account of and was influenced by the stakeholders' input.³⁴⁶ This allows for a dialogue process that questions the decision-making *status quo*. It is a dialogue process that poses a challenge to established powers with “an overarching purpose to strengthen a democratic governance” structure.³⁴⁷

In the field of renewable energy specifically, SP may take different forms including consultation, information sharing, dialoguing and/or deliberating about decisions.³⁴⁸ However, Gene Rowe and Lynn J. Frewer's study suggests that stakeholder participants have a greater chance of being dissatisfied with the process and outcome where they are merely consulted or simply informed of a decision.³⁴⁹ By contrast, active and meaningful input would allow stakeholders to voice their knowledge, perspectives, experiences and ideas on policy issues and solutions. Also, legal processes that actively and meaningfully involve rural women in a “constructive dialogue” have the tendency of assuring these women that their priorities as

³⁴⁵ United Nations, *The Aarhus Conventions: An Implementation Guide* (Geneva: United Nations Publication, 2014) at 119.

³⁴⁶ National Oceanic and Atmospheric Administration, *Introduction to Stakeholder Participation* (s:I, Office for Coastal Management, 2015) at 7. See also, *Ibid* (United Nations, *The Aarhus*) at 119.

³⁴⁷ Betteye Pruitt & Philip Thomas, *Democratic Dialogue-A Handbook for Practitioners* (New York: United Nations Development Programme, 2007) at 154.

³⁴⁸ Nuclear Energy Agency, *Stakeholder Involvement in Decision-making: A short Guide to Issues, Approaches and Resources* (Boulogne-Billancourt: Organization for Economic Co-operation and Development, 2015) at 12.

³⁴⁹ Gene Rowe & Lynn J. Frewer, “Public Participation Methods: A Framework for Evaluation” (2000) Vol. 25 Science, Technology, & Human Values 3 at 14-15 online: <<http://journals.sagepub.com/doi/pdf/10.1177/016224390002500101>>. See also, Tracey Morin Dalton, “Beyond Biogeography: A Framework For Involving the Public in Planning of U.S. Marine Protected Areas” (2005) *Society for Conservation Biology* 1392 at 1395-1396 <https://journals.scholarsportal.info/pdf/08888892/v19i0005/1392_bbaiffpoumpa.xml> See, National Oceanic and Atmospheric Administration, *supra* note 346, at 7.

perceived by them are inserted into policy and law.³⁵⁰ Moreover, affected stakeholder groups are typically interested, motivated and likely to contribute most effectively to these processes and decisions.³⁵¹

What does stakeholders' "active and meaningful participation" mean? It requires the early involvement, opportunity for input into the planning process, motivated participants, and the ability to have influence over the final decision.³⁵² These requirements would help ensure participatory input that is reflective of the views of those affected in each community and help avoid mistakes of the past - "that is, the errors of representation by which people don't feel represented."³⁵³

Adequate stakeholder participation in the formulation, implementation and evaluation of renewable energy policies and laws has been supported by international legal frameworks such as Agenda 21³⁵⁴ and the Aarhus Convention.³⁵⁵ The Aarhus Convention gives concerned citizens the rights to "access to environmental information", "public participation in environmental decision-making" and "access to justice."³⁵⁶ Concerned citizens' mean "the public affected or likely to be affected by or having an interest in the environmental decision-making."³⁵⁷ To throw more light, Gary K. Meffe et al³⁵⁸ identify the categories of stakeholders that should be invited to participate

³⁵⁰ *Ibid* (Dalton) at 1395-1396. See also, *Ibid* (National Oceanic and Atmospheric Administration), at 7. See also, Pruitt & Thomas, *supra* note 347, at 154. See, Anna –Katrin Heydenreich, "Organizing a Multi-Stakeholder Process: Creating a Paradoxical Collaborative Identity" (2008) Doctoral Dissertation University of St. Gallen at 4. See, Bruce et al, *supra* note 229, at 14.

³⁵¹ National Oceanic and Atmospheric Administration, *supra* note 346, at 7.

³⁵² Dalton, *supra* note 349, at 1395-1396. See also, *Ibid* (National Oceanic and Atmospheric Administration). See, Bruce et al, *supra* note 229.

³⁵³ Pruitt & Thomas, *supra* note 347, at 154.

³⁵⁴ United Nations, (*Agenda 21*) *supra* note 230.

³⁵⁵ Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters Aarhus Denmark, 1998.

³⁵⁶ *Ibid* (Convention on Access to Information). See also, Nuclear Energy Agency, *supra* note 348, at 20.

³⁵⁷ *Ibid* (Convention on Access to Information).

³⁵⁸ Gary K. Meffe et al, are authors of the book entitled *Ecosystem Management: Adaptive, Community-Based Conservation* published in 2002. Their study refers to natural resources management. It states that "scientific and technical knowledge is not enough by itself, to succeed in natural resource management, because science is only one component of a complex world" of environmental policy and management decision-making.

in policy making about subject matters such as renewable energy: (1) individuals whose everyday lives, work and well-being are impacted and directly connected to a resource, issue, or situation; (2) people interested in the issue or resources as users (i.e. not only use but assign values to how the resources are used; they include those who are interested in protecting and conserving the resources as well as those who extract value³⁵⁹ from the resources); (3) those with deep interest in the procedural and legal aspects of a situation (e.g. those users who will be directly or indirectly impacted by the outcome of the decision as well as those whose interest is to ensure that procedures needed to reach a policy decision are observed); (4) those legally responsible for public resources and/or who as a result of legal obligations and authority, represent citizens, and (5) those who pay the bills in form of taxes, fees and funds, since the government is accountable for how monies are spent.³⁶⁰

From the above, Nigerian rural women come under the definition of concerned citizens, and the Gary K. Meffe et al definition of stakeholder participants (except for number 4), and therefore they should be key participants in developing laws and policies relating to renewable energy. Thus, including the knowledge of rural women among other stakeholders³⁶¹ at various levels of natural resources governance will help to achieve energy justice in Nigeria. In the next subsection, I examine legal feminists' ideas on the types of knowledge produced or held by rural energy stakeholders in Nigeria.

2.1.4.1 Stakeholder Knowledges

³⁵⁹ Including those with an interest to extract value from the resources.

³⁶⁰ Gary K. Meffe et al, *Ecosystem Management: Adaptive, Community-Based Conservation* (Washington: Island Press, 2002) at 221-222.

³⁶¹ Including government, commerce, industries, and citizens (particularly affected citizens).

Knowledge³⁶² production through the participation of multiple stakeholders is commonly recommended, for its potential to enhance the legitimacy and quality of decision-making.³⁶³ “Combining different ways of knowing and learning will permit different social actors to work in concert, even with much uncertainty and limited information.”³⁶⁴ This means that, the knowledge that decision-makers take into account should include not only those of Western scientists, but also the knowledge of the full range of social groups outlined above by Meffe et al. Sebastian Linke, Marion Dreyer and Piet Sellke, and Leonard J. S. Tsuji and Elise Ho assert that natural resources (such as energy, fisheries, water, agriculture) management and governance requires a more inclusive, interactive, and participatory mode of governing that integrates local knowledge and scientific knowledge because they are both part of societal processes that employ “observation, logic, and authority to create knowledge.”³⁶⁵

In Nigeria, while rural women’s knowledge of energy is based on daily experiences and expressed in a qualitative manner, Western scientific knowledge of energy produced by lawmakers focus on “quantification and its implementation into existing numerical models by using a highly technical language.”³⁶⁶ As an example, the ECN Act discussed below in Chapter three regards professional members consisting of persons or institutions with elite personnel as bearers of

³⁶² In this thesis, I have used local knowledge, situated knowledge and indigenous knowledge as interchangeable terms. This is so because they all deal with knowledge developed from a particular location or culture. Moreover, the three concepts can be regarded as informal science acquired in an out-of-school context. Thus, these terms go beyond “beliefs transmitted through oral tradition and first-hand observation” to knowledge that is acquired through self-motivation, “voluntary, guided by the learner’s needs and interests, learning that is engaged in throughout his or her life.” Leonard J. S. Tsuji & Elise Ho, “Traditional Environmental Knowledge and Western Science: In search of Common Ground” (2002) XXII:2 Canadian J. Native Studies 327. See also, Lynn D. Dierking et al, “Policy Statement of the “Informal Science Education” Ad Hoc Committee” (2003) 40 J. Research in Science teaching 108.

³⁶³ Michael Gibbons et al, *The New Production of Knowledge: the Dynamics of Science and Research in Contemporary Societies*, (London: SAGE Publications, 1994). Maria Hage, Pieter Leroy & Arthur C. Petersen, “Stakeholder Participation in Environmental Knowledge Production” (2010) 42:3 Futures 254 at 256.

³⁶⁴ *Ibid* (Hage) at 256.

³⁶⁵ Tsuji & Ho, *supra* note 362, at 346.

³⁶⁶ Sebastian Linke, Marion Dreyer & Piet Sellke, “The Regional Advisory Councils: What is their Potential to Incorporate Stakeholder Knowledge into Fisheries Governance?” (2011) 40:2 Royal Swedish Academy of Sciences 133 at 138 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3357786/pdf/13280_2010_Article_125.pdf>.

knowledge – mostly Western science knowledge linked to highly technical language. These institutions include among others, the Ministries of Petroleum Resources; Power and Steel; Science and Technology etc. This means that renewable energy laws in Nigeria predominantly rely on stakeholder knowledge produced through highly technical discourse.

Donna Haraway has developed the concept of “situated knowledge” as a complement to knowledge produced through scientific objectivity.³⁶⁷ This means highly technical and scientific knowledge acquired through formal education,³⁶⁸ translated into a language of expertise and produced as objective. Haraway argues that science-based learning, teaching, and policy-making structures have marginalized women even though women (especially those from an oppressed class) have special access to other kinds of valuable knowledge not available to those from a privileged class. This knowledge puts rural women in the position of understanding their marginalized status and in raising important social phenomena.³⁶⁹ Likewise, Sandra Harding posits that the knowledge of those at the bottom of the social hierarchy is unique and a better starting point for policy-makers dealing with issues affecting them. However, Harding notes that this is not the case as those at the top of the social hierarchy typically lose sight of social reality when making decisions.³⁷⁰ This is in line with the above stated criticism of rural Nigerian women on female representatives proposing bills on issues such as indecent dressing.³⁷¹ Hence, both Haraway

³⁶⁷ Donna Haraway, “Situated Knowledge: The Science Question in Feminism and the Privilege of Partial Perspective” (1988) 14 *Feminist Studies* 575 at 576.

³⁶⁸ Formal education or school where knowledge such as formal systems: statistics, logic, computer science and programming mathematics etc. are acquired

³⁶⁹ Patricia Hill Collins, *Black Feminist Thought: Knowledge, Consciousness, and the politics of Empowerment* (New York: Routledge, 2000).

³⁷⁰ Sandra Harding, *The Science Question in Feminism* (Ithaca: Cornell University Press, 1986). See also, Sandra Harding, ““Strong Objectivity”: A Response to the New Objectivity Question” (1995) 104 *Feminism and Science* 331.

³⁷¹ See section titled “The Concept of Representation: Who Represents Who in Decision-Making?”

and Harding recommend incorporating situated knowledge or knowledge of those at the bottom of the social hierarchy into legal decision-making.

In the same vein, Carol Smart asserts that both “science and law have marginalized and silenced women in the guise of universal truth claims.”³⁷² Similarly, Haraway notes that scientific objectivity is about the search for universality, divorced from the daily livelihoods of the people; aims at a more analytical and abstract representation of the world, and makes use of one language (highly technical) as the standard for all translations and conversions.³⁷³ This explanation may be the reason why projects such as the solar energy technology implemented in Bishop Kodji Village (discussed in Chapter three) failed. This speculation is supported by scholars like Chika Ezeanya-Esiobu, and Charles Takoyoh Eyongwho. They suggest that the absence of local people with differing knowledge systems explains why decisions to import western models and technologies have often failed in Africa.³⁷⁴

Local knowledge often has the advantages of being (i) tested over centuries of use; (ii) adapted to the local culture and environment; (iii) embedded in community practices; and, (iv) the basis for rich information about natural resource management (energy production, soil fertilization, multiple cropping patterns etc.), health care, agriculture, education, food preparation and other domestic and productive activities in rural communities.³⁷⁵ As an example and in the context of this thesis, instead of generalizing women’s energy experience when renewable energy policies

³⁷² Carol Smart, *Feminism and the Power of Law* (London: Routledge, 1989). See also, Annie Bunting, “Feminism, Foucault, and Law as Power/Knowledge” (1992) XXX Alberta Law Review 829 at 832.

³⁷³ Haraway, *supra* note 367. See also, Arun Agarwal, “Dismantling the Divide between Indigenous and scientific Knowledge” (1994) Workshop in Political Theory and Policy Analysis at 15, 19 online: <http://dlc.dlib.indiana.edu/dlc/bitstream/handle/10535/4201/Dismantling_the_Divide.pdf>. See also, Tariq Banuri & Frederique Apffel Marglin, *Who Will Save the Forests? Knowledge, Power and Environmental Destruction* (London: Zed, 1993) at 11, 13.

³⁷⁴ Ezeanya-Esiobu, *supra* note 138. See also, Eyong, *supra* note 138, at 122.

³⁷⁵ Food and Agriculture Organization, “What is Local Knowledge” online: <<http://www.fao.org/3/y5610e/y5610e01.htm>>. See also, Agarwal, *supra* note 373, at 6.

and laws are made by just adding women representatives,³⁷⁶ rural women's situated knowledge can be considered to learn about patterns of energy consumption and conservation, and the energy devices used and their merits and demerits. By explaining the importance of considering local knowledge when developing policies and strategies, David Brokensha, Dennis Warren and Werner Oswald note that:

Development from below is, for many reasons, a more productive approach ...and ...an essential ingredient is indigenous knowledge...To incorporate in developmental planning indigenous knowledge: is a courtesy to the people concerned; is an essential first step to successful development; emphasizes human needs and resources, rather than material ones alone; makes possible the adaptation of technology to local needs; is the most efficient way of using western "Research and Development" in developing countries; preserves valuable local knowledge; encourages community self-diagnosis and heightens awareness; leads to a healthy local pride; can use local skills in monitoring and early warning systems; involves the users in feedbacks systems, for example, on crop varieties. These positive reasons - together with the negative reasons, such as the likelihood of failure without using indigenous knowledge - constitute a strong case for incorporating this knowledge in development programs.³⁷⁷

Rural women receive knowledge passed down from generation to generation by listening to the voices of other women. Haraway argues that feminist objectivity is about the politics and epistemologies of location, positioning and situating "the sciences of the multiple subject with (at least) double vision;³⁷⁸ a critical vision consequent upon a critical positioning in unhomogeneous gendered social space."³⁷⁹ Having multiple perspectives in a policy-making process gives local and individual knowledge value; thus, situated knowledge is "about communities, not about isolated individuals."³⁸⁰ To Haraway, situated knowledge is also about location because "location is about vulnerability; location resists the politics of closure..."³⁸¹

³⁷⁶ Sandra Harding, "Just Add Women and Stir?" in United Nations Development Fund for Women, *Missing Links: Gender Equity in Science and Technology for Development* (Ottawa: International Development Research Centre, 1995).

³⁷⁷ David Brokensha, Dennis Warren & Werner Oswald, *Indigenous Knowledge Systems and Development* (London: Intermediate Technology Publications, 1995) at 7-8. See also, Agarwal, *supra* note 373, at 10.

³⁷⁸ For instance, location allows women and other marginalized groups to possess double vision. Double vision provides women with an epistemic advantage unavailable to others.

³⁷⁹ Haraway, *supra* note 367, at 589.

³⁸⁰ *Ibid* at 583, 590.

³⁸¹ *Ibid* at 590.

Several feminist legal scholars³⁸² suggest that successful development strategies incorporate rural women's local knowledge into development planning. This is also true about the successful development of the renewable energy sector. Thus, "indigenous knowledge has value not only for the culture in which it evolves, but also for scientists and planners striving to improve conditions in rural localities."³⁸³ Such knowledge is crucial if policy-and law-makers about renewable energy wish to reveal and consider multiple angles of an issue, and introduce a cost-effective, participatory, and sustainable development process.³⁸⁴

2.2 Chapter Summary and Conclusion

This chapter investigated four key principles of feminist legal theorists on how and why rural women should participate in the development and implementation of renewable energy law and policy in Nigeria. It found that "the personal is political" is a strategy of inclusion appealing to the legislative arm of government to establish women's participatory rights in areas affecting rural women including the renewable energy sector. Ideas on the politics of difference suggest that there are differences between men and women, and among women; thus, adopting a gender and gendered-differentiated approach to law and policy-making as a first step can help increase rural women's participation in the renewable energy sector. The principle recommends that through "recognition politics"- quota system, subordinate social groups could be represented in bodies such as parliaments. The third feminists' legal principle, the concept of representation, establishes that the mere presence of a woman or group of women (regardless of their backgrounds and perspectives) in law-making processes is not sufficient to adequately represent the energy and environmental experiences of other groups of women. Put in another way, it does not ensure

³⁸² Brokensha, Warren & Werner, *supra* note 377, at 12.

³⁸³ Agarwal, *supra* note 373, at 9.

³⁸⁴ *Ibid* (Agrwal) at 6. See also, Dankelman & Davidson, *supra* note 191, at 6. See also, Corrine Wacker, *supra* note 134, at 128.

effective representation of other groups of women with differing interests, needs and experiences. Stakeholder participation reveals that rural women are a concerned group that should be invited to participate in policy- and law-making about renewable energy, and their situated knowledge complements knowledge produced through scientific objectivity. Finally, the chapter demonstrated that the feminist legal theory has not been sufficiently used by scholars to analyze the renewable energy sector, especially the interconnectedness between renewable energy policies and laws, participation (including rural women's participation), and sustainable development.

How have rural women participated in renewable energy institutional decision-making to date? Why have the Nigerian government's efforts at developing the legal frameworks for renewable energy not yielded their desired goals of promoting sustainable development? In the next chapter I attempt to shed light on these questions.

Chapter Three

Transition in Energy Use, Influencing Decision-Making Institutions and the Participatory Status of Rural Women: From Past to Present

3.0 Introduction

We cannot address today's reality without looking to yesterday's history. As part of understanding the evolution of rural women's social, economic and energy-related problems³⁸⁵ there is certainly the need to examine rural women and energy from past to present to determine what historic period(s) of institutional decision-making is/are impacting the legal development of renewable energy systems in present-day Nigeria. This chapter further analyzes the sub-questions: How has the federal and state legislatures as the primary sources of renewable energy laws and policies in Nigeria either systematically recognized or subordinated rural women's participatory status in law-making? Where opportunities for participation did or do exist, what challenges have historically hindered rural women's effective participation?

This chapter is not meant to provide an exhaustive examination of energy transition (long term structural changes in the energy sector³⁸⁶) and the evolution of energy infrastructure in Nigeria. Rather, it situates rural women within the evolution of renewable energy legal decision-making in Nigeria. While sections 3.1 and 3.2 of this chapter focus on the history of rural women and energy, and rural women's participatory status in pre-colonial and colonial decision-making institutions, section 3.3 critically analyses these issues in the post-colonial era. Using two renewable energy illustrative examples from Nigeria, the chapter illuminates the potential role of women in understanding and tackling the country's energy and energy-related issues. It also exposes why certain renewable energy strategies implicating women in rural communities have

³⁸⁵ Environmental issues include pollution, climate change, loss of biodiversity, natural resources depletion.

³⁸⁶ Jochen Hauff, Anna Bode, Dietrich Neumann & Florian Haslauer, *Global Energy Transitions: A Comparative Analysis of Key Countries and Implications for the International Energy Debate* (Weltenergierat-Deutschland: World Energy Council, 2014) at 2.

failed to promote sustainable development. Lastly, it identifies and assesses possible barriers to rural women's participation. The chapter begins with an examination of the gendered dimensions of energy practice in pre-colonial Nigeria.

3.1 Women and Energy in Pre-Colonial Nigeria

The period from 1500-1800 is the first for which adequate data exist to comprehensively describe energy practice in Nigeria.³⁸⁷ During this period and until the 19th century, the Nigerian energy generation, supply³⁸⁸ and demand sector was driven by renewable forest resources³⁸⁹ (predominantly wood) and human force. Agriculture was the mainstay of the economy for most communities. With emphasis on peasant farming,³⁹⁰ rural women were at the forefront of agricultural practices. Rural women were expected to generate and utilize necessary energy resources both in the form of human force and renewable forest resources for domestic needs,³⁹¹ agricultural production, food processing,³⁹² manufacturing³⁹³ and trade. Using these forms of energy resources, women worked, earned money,³⁹⁴ and contributed to household income, and community development.³⁹⁵

³⁸⁷ O. Oluwaniyi, "Evolution of State and Society in Pre-Colonial Nigeria 1500-1800" online: Creative Common Attribution <<https://run.edu.ng/directory/oermedia/3696103805403.pdf>>. See also, John Thornton, "Precolonial African Industry and the Atlantic Trade, 1500-1800" (1990) online: African Economic History <<file:///C:/Users/hp/AppData/Local/Temp/Thornton,%20Atlantic%20Trade.pdf>>.

³⁸⁸ Energy Supply is the delivery of fuel to the point of consumption. It constitutes the extraction, transmission, generation, distribution and storage of fuel.

³⁸⁹ Norbert Edomah, Chris Foulds & Aled Jones, "Energy Transitions in Nigeria: The Evolution of Energy Infrastructure Provision (1800-2015)" (2016) 9:7 *Energies* online: <<http://www.mdpi.com/1996-1073/9/7/484>>. See also Douglas W. MacCleery, *American Forest: A History of Resiliency and Recovery* (North Carolina: Forest History Society, 2011).

³⁹⁰ Joseph E. Inikori, *The Development of Commercial Agriculture in Pre-Colonial West Africa* (Stockholm: African Economic History Network, 2013).

³⁹¹ For satisfying basic energy needs like cooking, heating, ironing, drying, oil processing, boiling water etc.

³⁹² As an example, grinding grains to make raw materials like flour. Also processing spices, oil from vegetable or animals etc.

³⁹³ Food and Agriculture Organization of the United Nations (FAO), *National Gender Profile of Agriculture and Rural Livelihoods - Nigeria Country Gender Assessment Series* (Abuja: FAO and ECOWAS, 2018). Women were involved in producing, processing and packaging food in commercial quantities.

³⁹⁴ Marjorie Keniston McIntosh, *Yoruba Women, Work, and Social Change* (Bloomington: Indiana University Press, 2009).

³⁹⁵ Women contributed to community development by coming together to take collective action and to generate solutions to their common problems. For instance, marketing was the woman's domain in the traditional Igbo society and women had to make decisions on market concerns affecting them, including but not limited to declaring the market open for transactions, and energy produced, used or sold in marketplaces among others.

Gradually, agricultural practices evolved, and peasant women farmers were able to gain experience and learn innovative ways³⁹⁶ of tilling and cultivating the land to obtain greater yields. This led to the production and use of non-mechanical farm technologies such as hoes, cutlasses, local ploughs, and wheelbarrows.³⁹⁷ During that period, wood, animal waste and renewable forest resources remained the predominant materials used by women for energy generation. For instance, since A.D. 100 energy sources like shea butter oil and oil derived from agricultural by-products (e.g., palm fruit) were used for oil-lamps and satisfied lighting needs.³⁹⁸ Also, human energy was important e.g., - human head portage on land routes. Canoeing through the waterways was also used to transport goods to marketplaces.³⁹⁹ Even though the transportation system was inefficient, metallurgical agricultural tools such as wheelbarrows helped local small industries reasonably satisfy their transportation needs.

When compared to the colonial and post-colonial eras (discussed below), the population at that time⁴⁰⁰ had a relatively small negative impact on environmental resources, in the sense that there was less demand and destruction of live forest resources resulting in less erosion, flooding etc.⁴⁰¹ Smoke and carbon-dioxide produced from burning forest resources (including firewood) rarely had a negative impact on the environment particularly because it was reabsorbed by growing

³⁹⁶Knowledge was gained through daily interactions with environmental resources and passed on orally between generations.

³⁹⁷Edomah, Foulds & Jones, *supra note* 389. (Rural women use manpower (i.e. human energy) for mechanical production and processing of agricultural crops. For example, instead of an adequate and modern equipment for production (e.g., baking, processing agricultural produce etc.) rural women use manual tools usually fed with energy from firewood and/or human energy.)

³⁹⁸ Karlsson *supra* note 1, at 44. See also, Brenda Chalfin, B. *Shea Butter Republic: State Power, Global Markets, and the Making of an Indigenous Commodity* (New York: Routledge, 2004) at 320. See Also, Daphne E. Gallagher, Stephen A. Dueppen, Rory Walsh, "The Archaeology of Shea Butter (*Vitellaria Paradoxa*) in Burkina Faso, West Africa" (2016) 36:1 J. Ethnobiology.

³⁹⁹ Gloria Chukwu, *Igbo Women and Economic Transformation in Southeastern Nigeria, 1900-1960* (London: Routledge Taylor & Francis Group, 2015) at 45.

⁴⁰⁰According to the 2003 Nigeria historical demographical data of the whole country, in 1900, the Nigerian population was estimated at 15, 589,000 and 42,739,000 in 1960. However, there is an absence of public data on the country's population in 1500.

⁴⁰¹Dave Clarke, "Firewood: An Environmentally Responsible Fuel" Ramblingsdc.net (August 23, 2012), Accessed July 11, 2018 online: <<https://ramblingsdc.net/Firewood.html>>.

trees which also produced replacement wood.⁴⁰² During that era, decision-making was predominantly carried out by traditional, community-based institutions as I examine below.

The next sub-section presents a case study of energy decision-making within the socio-political structure of pre-colonial Igbo society⁴⁰³ that allowed rural women to participate and have decision-making institutions that were equivalent with male institutions. The pre-colonial Igbo structure was selected particularly because in the public sphere, it validated an equitable, harmonious, effective, efficient, and equal gender participation⁴⁰⁴ as I demonstrate in sub-section 3.1.1.2. Also, the Igbo ethnic group is most well-studied in the literature.⁴⁰⁵

3.1.1 Influencing Decision-making Institutions in Pre-colonial Times

3.1.1.1 Families

The Igbo society was organized in lineages based on the concepts of *ama/uno* (family of a man: his wife/wives, children and dependents); *obodo/mba* (village-group/town); *umunna* (children of a common forefather) and *Ogbe/onumara* (maximal lineage/village).⁴⁰⁶ Families made energy decisions based on needs and available resources.⁴⁰⁷ Men's role included maintaining the compound and obtaining the family's farmland while women's caretaking roles included childrearing, cooking meals for the family, and farming.⁴⁰⁸ Women's responsibilities⁴⁰⁹ made them

⁴⁰² *Ibid.*

⁴⁰³ Besides the Igbos, other ethnic groups in Nigeria include the Yorubas Hausas, Ijaws, Fulanis, Ibibios, Tivs, Kanuris etc.).

⁴⁰⁴Chukwu, *supra note* 399, at 19. See also, Kamenje Okonjo, "The Dual-Sex Political System in Operation: Igbo Women and Community Politics in Midwestern Nigerian in Nancy J. Hafkin & Edna G. Bay, eds, *Women in Africa: Studies in social and Economic Change* (Stanford: Stanford University Press, 1976) at 48. See, Nkiru Nzegwu, "Gender Equality in a Dual-Sex System: The case of Onitsha" (1994) VII Canadian J.L Jurisprudence 73 at 93.

⁴⁰⁵ Besides the Igbos, there are other ethnic groups in Nigeria such as the Yoruba, Hausa, Ijaw, Fulani, Ibibio, Tiv, Kanuri etc. However, these groups will not be discussed in this thesis because they appear to be less studied.

⁴⁰⁶ Chukwu, *supra note* 399, at 18.

⁴⁰⁷ Tochukwu I. Okeke, "West African Societies since the Pre-colonial Era: Studies in the Socio-Political Structures of the Agulu" (2013) 3 Research on Humanities and Social Sciences 127. See also, Chukwu, *supra note* 399. See, Okonjo, *supra note* 404, at 48.

⁴⁰⁸ McIntosh, *supra note* 394.

⁴⁰⁹Chukwu, *supra note* 399. Women's responsibilities included domestic chores and subsistence peasant farming. Women also engaged in trading, hunting and gathering in the wild for daily food supply, agriculturist, handicraft production etc.)

core energy decision-makers in the constitution of the family organization. Thus, they decided what type of fuel-energy was to be sourced and when and from where to source it.⁴¹⁰

Since energy in the above forms were considered effective and efficient, women had the time and capacity to deal with other critical aspects of community. Marketing was the woman's domain in traditional Igbo society and women had to make decisions on market concerns affecting them including but not limited to declaring the market open for transactions,⁴¹¹ what energy was used or sold in market places, prices fixed for goods sold in the market and market regulations.⁴¹² Also, in the area of environmental protection, their decisions addressed planting and harvesting of trees, clearing forest paths that led to the market place, energy efficiency and use etc.⁴¹³ Women in the pre-colonial Igbo family also participated in an array of energy-related activities ranging from domestic chores, long distance trading, hunting, and gathering in the wild for daily food supply, agriculture, handicraft production, to becoming titled chiefs and politicians.⁴¹⁴ For instance, the political equivalent of the *obi* (for men) was the *Nne Omunnu* (for women).

Sylvia Leith-Ross's study on Igbo women reveals that "Nigerian women, because of their economic importance as mothers, farm cultivators and traders, have been more powerful than is generally thought."⁴¹⁵ This is contrary to the literature⁴¹⁶ that portrays a misleading picture of the "oppressive" pre-colonial African man and the "deprived" pre-colonial African woman. To throw more light on women's decision-making role in the family institution, the following sub-section

⁴¹⁰ *Ibid* (Chukwu). See, Okonjo, *supra* note 404, at 48. See also, Nalini Burn & Laurent Coche, "Multifunctional Platform for Village Power: Mali" in Karlsson, *supra* note 158, at 62. See, Karlsson, *supra* note 1, at 17. See, Rewald, *supra* note 306, at 10.

⁴¹¹ *Ibid* (Okonjo).

⁴¹² *Ibid* at 48.

⁴¹³ *Ibid* at 53-54. Environmental decisions also included cleaning and/or tidying the marketplace, village roads, and village streams. Other decisions made by women included assisting unhealthy and financially or emotionally stressed wives. Also, they decided on ways to discipline lazy or adulterous husbands and other matters relating to the violation of the marriage law.)

⁴¹⁴ McIntosh, *supra* note 394.

⁴¹⁵ Sylvia Leith-Ross, *African women: A study of Igbo in Nigeria* (London: Routledge, 1965) at 21. See also Okonjo, *supra* note 404.

⁴¹⁶ Otu Ekpenyong, Okechukwu Egwu Ibiam & Emmanuel Obiahu Agha, "Politics in Nigeria: To What Extent has the Gender Momentum?" (2015) 20:15 IOSR J. Humanities & Social Science at 1 online: <<http://www.iosrjournals.org/iosr-jhss/papers/Vol20-issue5/Version-1/A020510110.pdf>>.

investigates the dual-sex institutional system practiced in the Igbo society with a focus on women's equivalent participatory status.

3.1.1.2 Dual-Sex Institutional System

The governmental process of the traditional⁴¹⁷ Igbo institutions had no clear separation between legislative, judicial, and executive powers and functions on the one hand, and political and religious bodies on the other.⁴¹⁸ Both men and women of this society exerted political power and influence through the age-grade (*Otu Ogbo*) system. While the junior age-grade did most of the manual jobs, the seniors performed judicial functions, executive roles and were sometimes involved in making governance decisions on societal issues.⁴¹⁹

At that time, Igbo decision-making institutions were characterized by a dual-sex system.⁴²⁰ A dual-sex system is a democratic governance structure that allowed men and women to have equivalent political status, voices and independence. Political authority (the power to make rules and require action) created under the dual-sex system was distributed through age grades, among lineages and kinship institutions, secret and title societies, diviners and other groups.⁴²¹ Decisions about women's issues were made in and by women's institutions including: women's meeting, women's courts, village-wide assemblies, funeral and market meetings, title groups, lineage groups, age grades and secret societies.⁴²² These specialized women's institutions were used to

⁴¹⁷ Pre-colonial, historical.

⁴¹⁸ Okonjo, *supra* note 404, at 47. Chukwu, *supra* note 399, at 22.

⁴¹⁹ Chukwu, *supra* note 399, at 22.

⁴²⁰ Nzegwu, *supra* note 404, at 23.

⁴²¹ Adiele Eberechukwu Afigbo, *The Warrant Chiefs: Indirect Rule in Southeastern Nigeria, 1891-1929* (New York: Humanities Press, 1972). See also, Okonjo, *supra* note 404, at 47. See, Afigbo, A.E., "The Warrant Chief System in Eastern Nigeria: Direct or Indirect Rule?" (1967) 3 J. Historical Society of Nigeria 683.

⁴²² Chukwu, *supra* note 399, at 19. See also, Judith Van Allen, "Aba Riots or Igbo 'Women's War'?" in Nancy J. Hafkin & Edna G. Bay, eds, *Women in Africa: Studies in social and Economic Change* (Stanford: Stanford University Press, 1976) at 48 at 64-65

promote law and order,⁴²³ resolve conflict⁴²⁴ and find solutions to issues affecting the development⁴²⁵ of the entire community. Moreover, through exclusive women's societies and political status such as the *Nne Omunnu* (great mother) women made peace and endorsed pro-women rules that were responsive to women's lived realities.⁴²⁶

To provide innovative solutions to each problem, women made decisions based on debates, disagreements and discussions until mutual agreements were reached.⁴²⁷ Also, based on majority consensus, decisions or judgments were issued. Where there was a deadlock in the approval of any major decisions, mostly, the *Omu* as presiding member carried out intense consultations among community elders and congregations. In doing this, the *Omu* had to seek the cooperation of women in the community and the approval of smaller base institutions such as *Ikporo ani*.⁴²⁸ Although characteristics such as wealth (rich vs. poor) and title-taking⁴²⁹ created certain gendered differences among pre-colonial rural women, whatever the status of the woman was, economic and social differences did not generally prevent adult women from attending decision-making institutions.⁴³⁰ Female attendees were encouraged, and free to actively participate by speaking out.

⁴²³ Okonjo, *supra* note 404. (Since *Omu* and her cabinet reserved the right to levy fines on any man or woman who interrupted the peace of the marketplace, offenders came before the *Omu*'s court of justice presided over by *Omu* and her councillors.)

⁴²⁴ Ngozi Ugo Emeka-Nwobia, "Women's Involvement in Peacebuilding and Conflict Resolution among the Igbo of Southeastern Nigeria" Social Science Research Council – Kujenga Amani (May 28, 2015), Accessed September 26, 2020 online: <<https://kujenga-amani.ssrc.org/2015/05/28/womens-involvement-in-peacebuilding-and-conflict-resolution-among-the-igbo-of-southeastern-nigeria/>>.

⁴²⁵ Such as generating solutions on market concerns affecting women including but not limited to declaring the market open for transaction, energy used or sold etc.

⁴²⁶ Pro-women rules were with respect to environmental protection, including planting and harvesting of trees etc., cleaning and/or tidying village roads, village streams, clearing forest paths that led to the marketplace. However, as already stated, because the type of energy used at that time was sufficient to carry out women's productive and domestic activities, energy was rarely part of women's issues except to the extent that it related to energy used or was sold in marketplaces.

⁴²⁷ Allen, *supra* note 422, at 65. The dual-sex socio-political structure was democratic; it ensured women's active participation in social and political circles.

⁴²⁸ Okonjo, *supra* note 404, at 92. *Ikporo ani* means a representative body of women selected from each town or section of the village. While the selection process was based on previously demonstrated leadership qualities, the representation could be based on a lineage system. In addition to the *Ikporo ani* other women's political institutions included titled women (*Ndi Lolo*); *Ndi Lolo* comprise of various major interest groups like *Umuokpu* (wives of the lineage), *Umuegbede* (young unmarried daughters of the lineage), *Umuada* or (daughters of the lineage) etc.

⁴²⁹ *Ibid* at 54.

⁴³⁰ Adult women belonged to various forums. Forums included Age-grade organizations (*otu umu agboho*) which consisted of girls of the same age group who participated in major dances.

However, a woman's membership was based on her age, marriage and/or lineage. To ensure societal progress, meetings were held once every month by the women's council. Meetings included emergency meetings to discuss issues that needed urgent attention.⁴³¹ These meetings were usually held in an open space in the market or the compound/house of one of the women.⁴³² Information about date, time, and venue of meetings (including urgent meetings) was communicated through the beating of the *ekwe* (the gong) by the *otiekwe* (town crier).⁴³³ At these meetings women set up rules, developed standards⁴³⁴ and solved issues related to energy used or sold in marketplaces, environmental matters (planting and harvesting of trees) and other related matters. In practice, while the *obi*⁴³⁵ represented and concerned himself with the male section of the community, *Nne Omunnu*⁴³⁶ presided over the women's council meeting or general assembly. As the leader of female-centred meetings she had her cabinet (*ilogo*).⁴³⁷ They acted as a pressure group on political matters⁴³⁸ and social issues.⁴³⁹

Within the dual-sex system, women operated powerful decision-making institutions⁴⁴⁰ that carried equal weight with those of men. This egalitarian system⁴⁴¹ allowed women the right to play integral roles in varied decision-making institutions, including those that had a direct bearing on energy-related decision-making. According to anthropologist Sylvia Leith Ross, and Nigerian

⁴³¹ Akachi Odoemene, (*Re*)*Venturing into the Public Sphere: Historical Sociology of "August Meeting" Among Igbo Women in Nigeria* (Yaounde: Codesria, 2008) at 15.

⁴³² *Ibid.*

⁴³³ *Ibid.*

⁴³⁴ Okonjo, *supra* note 404, at 48.

⁴³⁵ In theory the *Obi* is recognized as the head and or ruler of/the whole community, usually the eldest in a particular community or individual household.

⁴³⁶ Bearer of children.

⁴³⁷ Okonjo, *supra* note 404, at 48, 49.

⁴³⁸ Chukwu, *supra* note 399, at 20.

⁴³⁹ Emeka-Nwobia, *supra* note 424. See also, *Ibid* (Chukwu.) This includes the settlement of marital and familial disputes or other conflict resolutions between dominant groups such as, Umuada and Umuokpu.

⁴⁴⁰ *Ibid* (Emeka-Nwobia). See also, Chukwu, *supra* note 399.

⁴⁴¹ Racheal Ordu, "Political Participation in Nigeria: Making Change Happen for Women in Politics in Nigerian" in Judith Barr Bachay & Raúl Fernández-Calienes, eds, *Women Moving Forward Volume Two: An Intersectional Lens for a Tapestry of a Tapestry of Diverse Voices* (Newcastle: Cambridge Scholars Publishing, 2007) at 103. ("The Igbo ethnic group had no kings and maintained an egalitarian style of governance").

novelist Buchi Emecheta, a non-recorded history of gender equality in the Igbo society ended with the dawn of colonization.⁴⁴²

3.2 The End of Rural Women's Participatory Status, the Beginning of the Colonial Era

With the arrival of colonialism, in the 19th century, the British missionaries and colonial rulers imposed euro-centric concepts of family, state, and society.⁴⁴³ These concepts undermined the important socio-political roles of women in leadership positions while favouring men as decision-makers.⁴⁴⁴ For example, colonialism destroyed the dual-sex institutional system and kinship ties. While the *Obi* as an institution was transformed by the colonial administration into a salaried position, the *Obi's* female equivalent, the *Omu* was ignored and no longer seen as a policy maker. This era led to the complete cessation of the political activities of the *Omu* title and other women's institutions.⁴⁴⁵ In addition, women's cultural practices were increasingly marginalized and ultimately displaced. For instance, charms and sacrificial ceremonies performed by the *Omu* to seek the blessings of local deities were replaced by Christian religious ceremonies. Also, traditional herb medicines prepared by the *Omu* to guide the health of the populace were replaced by Western missionary hospitals and medicines.

Colonial missionaries failed to create alternative approaches to safeguard women's empowerment and decision-making rights; rather, they developed a Victorian institutional structure.⁴⁴⁶ This structure treated and situated men and women's participatory status on a completely different scale that ended women's participation in both family and community

⁴⁴² Leith-Ross, *supra* note 415. See also, Buchi Emecheta, *The Slave Girl* (London: Allison and Busby, 1977).

⁴⁴³ Okonjo, *supra* note 404, at 86.

⁴⁴⁴ *Ibid.*

⁴⁴⁵ Chukwu, *supra* note 399, at 86.

⁴⁴⁶ Deborah Gaitskell, "Housewives, maids or mothers: some contradictions of domesticity for Christian women in Johannesburg, 1903-39" (1983) Vol. 24 *Journal of African History*, 241. (The Victorian institution encouraged a hierarchical structure.) See also, Nadja Durbach, *Spectacle of Deformity: Freak Shows and Modern British Culture* (California: University of California Press, 2010).

decision-making. The Victorian system also introduced a “preferred” family structure - “male breadwinner, dependent housekeeping wife and mother, dependent school-going children.”⁴⁴⁷ Gradually, the system produced “gender stereotypes which portrayed African women as victims in need of protection, ‘primitives’ in need of civilization and potential deviants in need of containment.”⁴⁴⁸ With the ideology that the rightful place of a woman is in her home and not the public domain, the system also ingrained in the minds of African men the politics of patriarchy. By Victorian definitions, men were seen as rational, strong, economic providers, and dominant authorities, while women were perceived as the weaker, emotive group with primary responsibilities as homemakers and housewives.⁴⁴⁹ In the public sphere as well as the church, a woman who took on the “masculine role” of participation was considered to have “renounced the feminine virtues of silence, reticence, modesty and most significantly, chastity.”⁴⁵⁰ According to Patrick Uchendu,

...It was the Christian missionaries [who] through...control of educational system [that] transmitted, perhaps [unwittingly and] unconsciously, female inferiority and sexual discrimination in the Nigerian economic and political affairs as part of western civilization, which lowered the social status of women at that time.⁴⁵¹

As the English language and other “book” knowledge became necessary to political life, women were increasingly cut out of policy making.⁴⁵² Also, the colonial educational system was

⁴⁴⁷ *Ibid* at 241.

⁴⁴⁸ Ewah Otu Eleri, *Energising Rural Transformation in Nigeria: Scaling Electricity Access and Renewable Energy Market Development* (Abuja: ICEED Press, 2002) at 162. See also, Lisa Gan, “How did Colonial Rule Restructure the Gender Relations of Colonised People?” *Ezine Articles*, (May 23, 2012), Accessed May 3, 2017 online: <<http://ezinearticles.com/?How-Did-Colonial-Rule-Restructure-the-Gender-Relations-of-Colonised-People?&id=7080362>>.

⁴⁴⁹ McIntosh, *supra* note 394.

⁴⁵⁰ Carrie A. Miles “The Church Versus the Spirit: The Impact of Christianity on the Treatment of Women in Africa” (2009) Paper presented at SSSR/ASREC 2007 ASREC/ARDA Working Paper Series 1 at 6. See also, Longjam Bedana, Sangeeta Laishram & Moirangthem Priyobrata Singh, “Impact of Christianity on Africa Women in Buchi Emecheta’s Novels” online: (2016) preprints.

⁴⁵¹ Patrick Kenechukwu Uchendu, *Education and the Changing Economic Role of Nigerian Women* (Enugu: Fourth Dimension Publishing, 1995) at 14, 25 in Rose Uchem, “Overcoming Women’s Subordination in the Igbo African Culture and in the Catholic Church: Envisioning an Inclusive Theology with Reference to Women” (2001) Doctoral Dissertation, Theological Foundation Indiana at 47.

⁴⁵² Allen, *supra* note 422 at 76-77. *Ibid* (Uchendu), at 14, 25 (Again, Uchendu notes that, “[a]s a vehicle of oppression... the early deprivation of equal educational opportunity to women gave men advantage over women in the economy, which is the deciding factor for active and successful political participation in Nigerian society...”)

gender-biased as it prepared and equipped men to take up positions in the growing bureaucracies. All through the colonial era, the educational system allowed for men to be trained in applied sciences⁴⁵³ and new technologies, while limiting women to domestic science.⁴⁵⁴ Although Western education became a prerequisite to modern employment, women had limited access to education. Socially, early marriage prevented a woman from beginning or completing her education. Culturally, sons were preferred over daughters in matters concerning education because it was believed that male children remained in the household, while women got married into other homes.⁴⁵⁵

Women's political subordination was furthered by the colonial legal system. For instance, through the *Native Ordinances Act 1901* (NO Act), "the British colonial government declared all judicial institutions except the Native Courts illegitimate."⁴⁵⁶ The consequence of this action resulted in the destruction of the *Omu's* court of justice presided over by the *Omu* and her councilors. Ironically, at the same time, economic policy to expand export crop production was developed for which energy resources were needed; rural women contributed substantially to the success of this policy, albeit to their own detriment.⁴⁵⁷

3.2.1 Women and Energy in Colonial Times

In 1896 the Nigerian electrical power plant (operated by imported coal from England) was constructed in Marina Lagos to replace traditional lamps powered by oil from food (shea,

⁴⁵³ Applied science means to develop practical applications such as inventing technology.

⁴⁵⁴ Mostly in the area of home economics. See, Chukwu *supra* note 399, at 83/98.

⁴⁵⁵ Although this cultural and social belief or behaviour is slowly changing, it persists particularly in rural areas of Nigeria

⁴⁵⁶ Chukwu *supra* note 399, at 87.

⁴⁵⁷ Anna Conti, "Capitalist Organization of Production through Non-Capitalist Relations: Women's Role in a Pilot Resettlement in Upper Volta" (1979) 6 *Review of African Political Economy* 75 at 75, 76 <http://journals1.scholarsportal.info.proxy.bib.uottawa.ca/details/03056244/v6i15-16/75_cooptnapriuv.xml>. (Although this incident occurred in Upper Volta Africa, most, if not all countries in the African continent including Nigeria had similar experiences.)

vegetable, and palm) resources.⁴⁵⁸ The power plant was primarily used for lighting the houses, hospitals, and facilities of the colonial government.⁴⁵⁹ However, the development of electricity infrastructure was quite slow in Nigeria because most activities were linked to the agricultural industry, a field already satisfied by women's reproductive⁴⁶⁰ labour and human energy. The notion then was that the agricultural industry alone was not sufficient to justify the development and provision of an economic power supply.⁴⁶¹

Although oil exploration in Nigeria began in 1907, the exploratory operation of the Nigerian Bitumen Corporation ended at the beginning of World War 1 in 1914.⁴⁶² In 1909 coal was discovered. Thereafter, neither D'Arcy Exploration Company nor Whitehall Petroleum found oil in commercial quantity leading to the return of their licenses in 1923. That same year, the first coal-fired power plant (operated through a steam turbine) was commissioned in Lagos. Coal was primarily used to satisfy increased electricity generation⁴⁶³ including train systems and other industrial applications. Hence, the discovery of coal led to a rise in technological and economic activities.⁴⁶⁴ Regardless, between 1944 and 1948 Nigeria started experiencing a gradual decline in the use of coal for electricity generation. This was due to the reduced mining activities impacted by World War II (1939-1945) and the mini-discoveries of crude oil.⁴⁶⁵ In 1937, Shell D'Arcy Petroleum Development Company of Nigeria, a Consortium of Shell and British Petroleum, was issued a new license to resume exploratory work all over the territory of Nigeria. In 1951, drilling

⁴⁵⁸ Claudius A. Awosope, *Nigeria Electricity Industry: Issues, Challenges and Solutions* (Ota: Covenant University Press, 2014) at 5. See also, Edomah, Foulds & Jones, *supra* note 389, at 6.

⁴⁵⁹ *Ibid* (Edomah, Foulds & Jones).

⁴⁶⁰ By reproduction I mean women's ability to be fertile and reproduce the present and future work force.

⁴⁶¹ Edomah, Foulds & Jones, *supra* note 389, at 6.

⁴⁶² Jędrzej Georg Frynas, *Oil in Nigeria: Conflict and litigation between oil companies and village communities* (Münster: LIT VERLAG, 2000). (Thereafter, neither D'Arcy Exploration Company nor Whitehall Petroleum found oil in commercial value leading to the return of their licenses in 1923).

⁴⁶³ Edomah, Foulds & Jones, *supra* note 389, at 7.

⁴⁶⁴ Joseph Adeola Fuwape, "The Impacts of Forest Industries and Wood Utilization on the Environment" (2003) online: Food and Agriculture Organization at 1 <<http://www.fao.org/docrep/ARTICLE/WFC/XII/0122-A2.HTM>>.

⁴⁶⁵ Edomah, Foulds & Jones, *supra* note 389, at 7.

activities began with the first test well drilled in Owerri where oil was found only in non-commercial quantities.⁴⁶⁶

During the early development of industrial energy in Nigeria, rural women were not carried along but were left to depend on human energy from calories and energy extracted from food oil and other resources listed above. For lighting, they continued to produce and use traditional lamp technologies powered by oil from forest resources (shea, vegetable, palm fruit etc.).⁴⁶⁷ Although rural women of that era were crucial to the production and exportation of crops such as palm oil, cotton, peanuts (groundnut) and cocoa etc. that benefited European (British) enterprises, they were without electric energy infrastructures including mechanically powered tools – tractors, appropriate technologies such as solar-powered irrigation pumps, solar dryers, maize shellers, and post-harvest processing equipment such as pit storage bags. Women’s material exclusion from colonial energy infrastructure reflected their socio-political exclusion from decision-making in the colonial state.

3.2.2 Influencing Decision-Making Institutions in Colonial Times

3.2.2.1 The Colonial Institution of Indirect Rule

During the early colonial administration of Nigeria, decision-making was predominantly made by British colonial institutions.⁴⁶⁸ There was practically no separation of power as both legislative and executive powers were vested in Lord Frederick Lugard. While broad policies to advance British interests were derived from Whitehall and the Colonial Office in Britain, Lugard

⁴⁶⁶ Frynas, *supra* note 406.

⁴⁶⁷ Karlsson *supra* note 1, at 44. See also, Edomah, Foulds & Jones, *supra* note 389 at 6.

⁴⁶⁸ C. O. Osueke & C.T. Ezeh, “Assessment of Nigeria Power Sub-sector and Electricity Generation Project” (2011) 2:11 International J. Scientific & Engineering Research (Institutions at that time included Nigerian Electricity Supply Company (NESCO) established in 1922. NESCO was responsible for developing electrical energy generation (supply end) infrastructures. In 1929, the NESCO commenced operations as an electric utility company with the construction of a hydroelectric power station at Kurra near Jos.

and his lieutenants formulated local policies and implemented these through an indirect rule system.⁴⁶⁹ An indirect rule system of administration allowed the colonial officials to govern the Nigerian people through male authorities and formalized institutions such as the Warrant Chief System.⁴⁷⁰ The Warrant Chief System introduced warrant chiefs (Nigerian men) into the Nigerian society; they served as intermediaries between the Nigerian people and the British government.⁴⁷¹

However, the indirect rule system including the Warrant Chief System made no provision for women's participation; rather, women were legally excluded from decision-making.⁴⁷² For instance, the 1922 Sir Hugh Clifford Constitution,⁴⁷³ the 1946 Richard Constitution, and the 1954 Lyttleton Constitutions all denied women the right to vote.⁴⁷⁴ Therefore, colonial policies, laws and institutions introduced the "invisible woman" and silenced/ended rural women's right to make rules on environmental matters such as reforestation, and on the improvement of energy produced and used. This trend continued in the post-colonial era, addressed in the next section. My analysis begins in 1956 when oil was discovered in commercial quantities.

3.3 Women and Energy in Post-Colonial Times

With an increase in globalization and in Nigeria's population,⁴⁷⁵ there was a huge demand for primary energy resources to drive key economic sectors: the industrial, electrical generation, transportation and manufacturing sectors. In 1956, shortly before Nigeria gained its independence,

⁴⁶⁹ Independent, "Public Policy Formulation in Nigeria: Challenges and Prospects" Independent Newspaper (May 26, 2017), Accessed October 9, 2018.

⁴⁷⁰ Afigbo (*The Warrant Chiefs: Indirect*), *supra* note 421.

⁴⁷¹ Chukwu *supra* note 399, at 86.

⁴⁷² Ityavyar, D.A., "Gains of women activism in Nigeria: 1960-2007" Paper presented at the National Conference on Women in Governance at the Obudu Cattle Ranch, Cross Rivers, October 2nd-6th 2007 at 2 in Leke Oke, "Democracy, Women's Political Participation and the Policy Environment in Nigeria" (2015) 5 *Developing Country Studies* at 3.

⁴⁷³ Damilola Taiye Agbalajobi, "Women's Participation and the Political Process in Nigeria: Problems and Prospect" (2010) 2 *African J. Political Science and International Relations* 075 at 076.

⁴⁷⁴ Funmi Soetan & Bola Akanji, *Through the Gender Lens: A Century of Social and Political Development in Nigeria* (Lanham: Lexington Books, 2019) at 33-34.

⁴⁷⁵ The Nigerian population began to see an increase because women had to reproduce children to enable the successful operation of European enterprises, this continued into the post-colonial era.

crude oil was discovered in commercial quantities.⁴⁷⁶ This discovery by Shell D'Arcy Petroleum Development Company of Nigeria added a different dynamic in energy infrastructure, technology, production and utilization. After 1960, foreign companies other than Shell-BP were also granted exploration rights in onshore and offshore areas adjoining the Niger Delta region.⁴⁷⁷ During the 1960s, renewable hydropower generation for electricity was already at the core of Nigeria's national electricity production grid.⁴⁷⁸ While fossil fuels and some hydropower generation was used to feed the national electric grid, relatively cheap non-wood fuel options such as kerosene started to penetrate rural Nigeria.⁴⁷⁹

In the 1970s, there was a global energy crisis that coincided with the end of the Nigerian civil war (commonly referred to as the Biafran war).⁴⁸⁰ For this and other reasons,⁴⁸¹ many households reverted to the use of wood fuels in both rural and urban settings. Following the 1973 energy crisis, the focus in developing countries like Nigeria turned not only to oil and electricity supply, but slowly to issues relating to fuel substitution, energy efficiency and demand management, energy pricing, and alternative energy sources.⁴⁸² Also, the energy crisis called for

⁴⁷⁶ E. K Agbaeze, S. N Udeh & I. O. Onwuka, "Resolving Nigeria's Dependency on Oil – Derivation Model" (2015) 7 J African Studies and Development at 1 online: <<https://academicjournals.org/journal/JASD/article-full-text-pdf/D12F4AA49306>>.

⁴⁷⁷ Nigerian National Petroleum Corporation, "History of the Nigeria Petroleum Industry" (November 07, 2018), Accessed October 06, 2018 online: <<http://www.nnpcgroup.com/NNPCBusiness/BusinessInformation/OilGasInNigeria/IndustryHistory.aspx>>.

⁴⁷⁸ Newsom, *supra* note 92, at 7. <<http://pubs.iied.org/pdfs/G03512.pdf>>. See also, Ismaila Haliru Zarma, "Hydro Power Resources in Nigeria" Country Position Paper Presented at 2nd Hydro Power for today Conference International Centre on Small Hydro Power (IC-SHP), Hangzhou, China, 2006 at 3 online: <https://www.researchgate.net/publication/321184693_HYDRO_POWER_RESOURCES_IN_NIGERIA>. (For instance, the construction of the Kainji Dam hydro-electric energy started in 1964.)

⁴⁷⁹ Eleri, *supra* note 392, at 162. See also, Emmanuel Unah, "C'River Resident Panic as Multiple Kerosene Explosion Wreak Havoc" Vanguard (June 5, 2018), Accessed November 14, 2018 online: <<https://www.vanguardngr.com/2018/06/criver-residents-panic-multiple-kerosene-explosions-wreak-havoc/>>. ("kerosene is heavily adulterated with petrol and other highly flammable hydrocarbon products by unscrupulous dealers, thus exposing women and children to kerosene explosions" as witnessed in different parts of the country with one of the most recent in Calabar, Cross River.)

⁴⁸⁰ Nigerian National Petroleum Corporation, *supra* note 421.

⁴⁸¹ For instance, traditional beliefs make some women believe that meals cooked using firewood have an even more delicious taste.

⁴⁸² Cecelski, *supra* note 186, at 6. See also, Food and Agriculture Organization, *Wood Energy Development: Planning, Policies and Strategies* (Bangkok: Food and Agriculture Organization of the United Nations, 1993) at 52 <<http://www.fao.org/docrep/006/AD542E/ad542e00.pdf>>.

the preparation of national energy balances.⁴⁸³ The purpose was to decide what sector of the economy consumed the most energy. Elizabeth Cecelski notes that during that time, energy in developing countries, particularly Nigeria:

[c]onsisted not of fossil fuels but rather of what became known as “non-commercial energy” or “traditional fuels” – wood, charcoal, animal dung, and crop residues freely collected and used by rural households for cooking and heating.⁴⁸⁴

Overpopulation and more pressure on wood for commercial uses⁴⁸⁵ led to a shortage of firewood. Unfortunately, firewood – the chief fuel available to nine-tenths of the people in most Sub-Saharan countries – became alarmingly scarce,⁴⁸⁶ resulting in what was known as “the other energy crisis.”⁴⁸⁷ The other energy crisis (or firewood crisis) became a major development concern of the 1970s and 80s.⁴⁸⁸ It began to be accepted that the use of traditional biomass fuels by over a billion people in developing regions in sub-Saharan African, Latin America, and Asia was a significant factor in ever greater desertification and deforestation.⁴⁸⁹ At the same time, women’s unique needs and contributions in the energy sector were beginning to gain recognition.

Between the 1970s and 1980s, the Women-in-Development (WID) movement sought for women’s integration in existing development strategies including the energy sector.⁴⁹⁰ The assumption was that women were not participating in the process of development; as a result, their existing roles in the development of the national economy was concealed and devalued. The WID

⁴⁸³ Eniscuola “The National Energy Balance,” Eniscuola energy & environment online: <<http://www.eniscuola.net/en/argomento/the-energy-system/the-energy-balance/the-national-energy-balance/>> (“The national energy balance is a collection of information on how energy is produced and used within a Country during the year.”)

⁴⁸⁴Cecelski, *supra* note 186, at 6.

⁴⁸⁵ Men fell wood for furniture and exportations. Wood was also used for timber and wood chips for paper pulp.

⁴⁸⁶ Erik P. Eckholm, “The Poor Man’s Energy Crisis” in *A Halt to Desert Advance* (Paris: The United Nations Educational, Scientific and Cultural Organization, 1977) at 29.

⁴⁸⁷ Erik P. Eckholm, *The Other Energy Crisis: Firewood* (Washington: Worldwatch Institute, 1975).

⁴⁸⁸ Terrence Bense, “Fuelwood, Deforestation, and Land Degradation: 10 years of Evidence from CEBU Province, the Philippines” (2008) 19:6 Land Degradation & Development.

⁴⁸⁹ Eckholm, *supra* note 430, at 29-30. See also, *Ibid* (Bense), See, Akin L Mabogunje, “The Environmental Challenges in Sub-Saharan Africa” (2010) 37:4 Environment: Science and Policy for Sustainable Development African Technology Forum online: <<https://www.tandfonline.com/doi/abs/10.1080/00139157.1995.9929233?journalCode=venv20> >.

⁴⁹⁰ Eleri, *supra* note 392, at 164.

movement posited that by including women in formal economic and political structures, issues particularly affecting women would become politically relevant and their status in society and households enhanced.⁴⁹¹ Hence, the interest of the WID movement was in reform and the role that law would play in bringing women and the challenges they face to the political sphere. The justification for women's integration was based on both equity and efficiency;⁴⁹² for example, to bring household energy needs and biomass fuel generation and utilization into energy sector thinking. Investigations by energy analysts and researchers on household energy revealed that most household energy generation in the African continent was done by unpaid household labour (consisting of women and children); women comprised half of the world's population cooking with biomass, and 90% of total energy consumption was by households and household energy use consisted of traditional biomass fuels.⁴⁹³ With these findings on biomass energy, the household energy sector was recognized and women's role in the energy sector became more visible.

Over time, some gender-energy scholars like Elizabeth Cecelski, Joy S. Clancy and Margret Skutsch, Sheila Oparaocha, Ulrike Roehr etc. started to document women's interests and knowledge in the management of renewable energy resources. As an example, their interests and knowledge include their creative skills in technological design such as building efficient stoves, building, installing, operating and maintaining renewable energy technologies (e.g., solar panels and batteries etc.),⁴⁹⁴ and conservation of forests (such as tree planting). Scholars argue that women are important managers of natural resources, producers of energy and have been able to cope with

⁴⁹¹ Gina Koczberski, "Women in Development: A Critical Analysis" (1998) 19:3 *Third World Quarterly* 395 at 399.

⁴⁹² Günseli Berik, *Efficiency Argument for Gender Equality: An Introduction* (2017) 38 *Canadian Journal of Development Studies* 542. See also, Cecelski, *supra* note 186, at 5.

⁴⁹³ Elizabeth Cecelski, Joy Dunkerley & Williams Ramsey *Household Energy and the Poor in the Third World* (Washington: Resources for the Future, 1979). See also, Andrew Barnett, Martin Bell, & Kurt Hoffman, *Rural energy and the Third World: A review of social science research and technology policy problems*. (Oxford: Pergamon Press, 1982.) . See *Ibid* (Cecelski) at 6 (energy analysts and/or specialists are people who are highly skilled and knowledgeable in the energy field either as researchers, consultants or professionals).

⁴⁹⁴ Cecelski, *The Role of Women in Sustainable Energy Development*, *supra* note 74.

their energy challenges.⁴⁹⁵ They further assert that through rational decision-making, women decide on which energy resources to use and how to use them. For instance, in response to firewood shortages, women have adopted varied management coping strategies to reduce the use of fuel. These strategies include exploring less food processing and less fuel-intensive methods,⁴⁹⁶ changing the types of food eaten, cooking fewer meals, shortening cooking times, serving cold leftovers, purchasing other fuels etc.⁴⁹⁷ Celcelski notes that women's energy burden such as carrying firewood and stooping over smoky stoves provoked much attention from the development community that led to policy and institutional interventions in the biomass energy sub-sector.⁴⁹⁸ However, these interventions have not successfully addressed women's energy challenges, they remain largely unimplemented and have often resulted in failed projects and strategies. Why do policy and institutional interventions on women's energy issues fail?

3.3.1 Policy Interventions on Women's Energy Issues: An Example of Bishop Kodji Village

From a policy viewpoint, solving women's energy burden would likely include, at a minimum: 1) **Reforestation**: planting more trees would mean more wood available for women. 2) **Improved technology**: introducing improved and efficient stoves to conserve firewood utilization.⁴⁹⁹ However, the failure of energy, environmental, forest, and water sector policies to integrate women in projects supposedly designed for their benefit has been criticized by certain authors.⁵⁰⁰ Concerning the energy sector, there are suppositions that improved cook stoves such as

⁴⁹⁵Clancy, Oparaocha & Roehr, *supra* note 27. See also Soma Dutta, "Role of Women in Rural Energy Programmes: Issues, Problem and Opportunities" (1997) ENERGIA News at 1online: < <https://www.energia.org/cm2/wp-content/uploads/2015/06/5-Role-of-Women-in-Rural-Energy-Programmes.pdf>>. See, Yumkella, *supra* note 27 at 12.

⁴⁹⁶ Such as processing energy sources from shea butter.

⁴⁹⁷ Joy S. Clancy, Margret Skutsch & Simon Batchelor, *The Gender-Energy-Poverty Nexus: Finding the Energy to Address Gender Concerns in Development* (s.I, UK Department for International Development (DFID), 2002) at 12. Dankelman & Davidson, *supra* note 191.

⁴⁹⁸ Celcelski, *supra* note 186, at 7.

⁴⁹⁹ *Ibid.* See also, Dutta, *supra* note 159 at 4.

⁵⁰⁰Cathy Green, Susan Joeke & Melissa Leach, "Questionable links: approaches to gender in environmental research and policy" in Cecile Jackson & Ruth Pearson, eds, *Feminist Visions of Development: Gender Analysis and Policy* (London: Routledge, 1998).

solar cookers are superior to traditional cooking methods in terms of, diminishing air pollution released into the environment, shortening walking time required to collect fuel, alleviating local pressure on wood resources etc.⁵⁰¹ Despite these speculations, improved cook stoves and other renewable energy technologies or programmes have not successfully achieved dissemination and target use.⁵⁰² To analyze the significance of this phenomenon, I exemplify using the state-sponsored rural electrification (solar energy) project implemented in Bishop Kodji village.

Feminists assert that strategies and policies implicating women are bound to fail when they exclude them.⁵⁰³ This perhaps was the case of the state-sponsored rural electrification (solar energy) project carried out by the Lagos State Government⁵⁰⁴ in a small fishing and boat-accessible island called Bishop Kodji village. The installation of solar energy marked a new era for the residents of Bishop Kodji village who had never experienced electricity.⁵⁰⁵ The project was implemented to provide energy for services including to power - water pumps, religious centres (mosques and churches), street lamps, community-based schools and maternity centres, economic growth etc.⁵⁰⁶ Although this project was applauded at its inception as a success and for being cost-effective (compared to grid extension), the traditional leader of the village, Azime Anthony, stated that the solar panels installed ceased to function three months after completion of the project. State workers assert that they have tried solving the issues but are unable to sustain such repairs.⁵⁰⁷ However, they blame the residents for poorly maintaining the equipment. Particularly, Tunji

⁵⁰¹ Bina Agarwal, "Diffusion of rural innovations: Some analytical issues and the case of wood-burning stoves" (1983) 11 *World Development* 359 at 365. See also, Cecelski, *supra* note 186, at 8.

⁵⁰² *Ibid.* See also, Dutta, *supra* note 159, at 15-16.

⁵⁰³ Reinharz, *supra* note 220, at 173. See also, Cecelski, *supra* note 74, at 3. See also, Reddy, *supra* note 98.

⁵⁰⁴ Hakeem Adeyemo, "Challenges Facing Solar Energy Projects in Nigeria: A Case Study of Lagos State" Dissertation, University of Applied Sciences, 2013 at 1 [*Unpublished*] (The study recognized the failure of renewable energy, in particular solar projects in Lagos State, Nigeria.). Jan G. Laitos & Lauren Joseph Wolongevicz, "Why Environmental Laws Fail" (2015) 39:1 *William & Mary Environmental L. & Policy Review* at 1 (The study indicates that environmental protection laws have often failed because they are motivated by self-interested economic persons.)

⁵⁰⁵ Toye Olori "Energy-Nigeria: 'Solar Power Brings Reliefs to Villagers'" (2006), online: Inter Press Service News Agency <<http://www.ipsnews.net/2006/08/energy-nigeria-solar-power-brings-relief-to-villagers/>>.

⁵⁰⁶ Adeyemo, *supra* note 448, at 25.

⁵⁰⁷ Olori, *supra* note 449.

Olagunju, a male engineer, stated that “[i]t wasn't something that we could predict... We have gone out several times to fix the issues that we find. But most of the problems come from poor maintenance by the residents.” The residents have in turn blamed the State.⁵⁰⁸

It is noteworthy that if the electrification project was a complete success all residents (male and female) would have benefitted from it. In the same vein, being a failure, all residents bear the brunt. However, in the absence of a sustainable energy strategy, it cannot be ignored that due to gender specific reasons vis-à-vis traditional household roles etc. (such as fetching water, drying fishes, maternity/health issues, cooking etc.), some residents especially women and children, are most impacted by such project failure. The government may list such a project as one of its success stories when in reality it is more of a failure than a success (since it has been unable to meet its goals).⁵⁰⁹ This failure has a significant impact on women’s development and will need their involvement as stakeholders to develop solutions.⁵¹⁰

According to Soma Dutta the reason why policy interventions on improved renewable energy technologies such as cook stoves and biogas have not been successful is because of the “poor level of involvement and lack of ‘stake’” for women in these policies and programmes.⁵¹¹ Thus, the high technology stoves designed in male dominated laboratories⁵¹² have in most cases failed to save women’s time while worsening their social and economic conditions.⁵¹³ Developing

⁵⁰⁸ *Ibid.* (The people in the community claimed that they persistently reported the issue to state official both orally and in writing, to no avail.)

⁵⁰⁹ Emeka Anuforo, “Funding, Policy Inconsistency hurt Nigeria’s Rural Electrification Access” *The Guardian Business* (November 20, 2016), Accessed November 20, 2018 online: <<https://guardian.ng/business-services/funding-policy-inconsistency-hurt-nigerias-rural-electrification-access/>>. (In a different project at the federal level, the acting Director General of the Rural Electrification Agency, Engineer Mohammed Wasaram stated thus: “...as at the end of the year 2015, we have successfully completed 1275 grid extension projects and 101 solar system projects spread across the six geopolitical zones of the country, while we have about 1439 grid extension projects that are still ongoing.”)

⁵¹⁰ Cecelski, *supra* note 74, at 13.

⁵¹¹ Dutta, *supra* note 495, at 2.

⁵¹² This failure brings recognition and necessary awareness of the need for the consultation and participation of women in the energy sector. See also Olatokun Wole. M & Ayanbode O. F, “Use of Indigenous Knowledge by Women in a Nigerian Rural Community” (2009) 8:4 *Indiana J. Traditional Knowledge* 287 at 288.

⁵¹³ Clancy, Oparaocha & Roehr, *supra* note 27. See also, Cecelski, *supra* note 74, at VI, 27. (Improved technologies such as high-tech stoves may not be popular among women because they may simply not be used or replaced when they get broken.)

energy technologies are important; however, it is necessary for decision-makers to encourage locally constructed, affordable and semi-automated technologies where people (especially affected rural women) can be involved and put into use existing local knowledge and/or traditional methods. Perhaps if rural women were involved at the multiple levels of decision-making about the policy design and implementation of the Bishop Kodji village project, they could have predicted what Tunji Olagunju, the male engineer was unable to foresee. With issues such as limited success in implementing renewable energy programmes, there is beginning to be a recognition and awareness of the need to consult and actively include women in energy sector processes.⁵¹⁴ Yet energy policy-making and practice have been slow to absorb this; as a consequence, policy interventions have hardly any impact on rural women.⁵¹⁵ Part of the problem may be the exclusion of rural women from the existing institutional infrastructure for renewable energy in Nigeria. How has the legislature as an institution recognized or subordinated rural women's participatory status?

3.3.2 Institutions Influencing Renewable Energy Decision-Making in Post-Colonial Nigeria

With particular emphasis on the legislature, this sub-section underscores certain of its features to examine how it has either systematically recognized or subordinated rural women's participatory status in law-making about renewable energy.

⁵¹⁴Cecelski, *supra* note 186, at 8.

⁵¹⁵Eleri, *supra* note 392 at 164

3.3.2.1 Legislative and Institutional Frameworks and Rural Women's Participatory Status

As a preliminary observation, there is virtually no democratic participation⁵¹⁶ of rural women in the activities of the Nigerian legislature. Ideally, the legislature (compared to the judiciary and executive branch of government) is the organ of government closest to the people, aware of, and responsive to constituents' interests and needs.⁵¹⁷

However, unlike countries like South Africa where the legislature has initiated the practice of "Taking Parliament to the People,"⁵¹⁸ some argue that in Nigeria legislators only get close to the people they represent before and on the day of the election, in search of votes.⁵¹⁹ According to S. M. Omadia and V. Egwemi, the process of election in Nigeria is characterized by rigging which in turn constitutes an impediment to the right choice of political representation.⁵²⁰ Furthermore, it is argued that legislators tend to take partisan positions rather than the positions of the communities they represent.⁵²¹ Often, financial considerations drive election results to the detriment of the electorates actually affected with the reality of climate change and other environmental issues, lack of access to energy, water, food insecurity etc. For instance, concerning financial capabilities, in the 3rd Republic (1990), a female aspirant for the office of president was

⁵¹⁶ Sidney Verba, "Democratic Participation" (1967) 373 *American Academy of Political & Social Sciences* 53 at 53 online: <<https://www-jstor-org.proxy.bib.uottawa.ca/stable/pdf/1037353.pdf?refreqid=excelsior%3A3f16edb248df43f7c37c3e5b7ed22397>> ("Democratic Participation" refers to acts that are intended to influence the behavior of those empowered to make decisions. In a society where participation is a value, inability to participate represents a severe deprivation.")

⁵¹⁷ John K. Johnson, *The Role of Parliament in Government* (Washington DC: The World Bank Institute, 2005) at 2. See also, Samuel Oni, "The Legislature and Constituency Representation in the Fourth Republic of Nigeria's Democratic Governance" (2013) 21 *Ife Psychologia* at 16 online <<https://www.semanticscholar.org/paper/The-legislature-and-constituency-representation-in-Oni/f315291f11b2fd3fa9206e001ddc563c71951097>>.

⁵¹⁸ Parliamentary Monitoring Group, "ATC080515" *supra* note 8. See also, In session, (*Taking Parliament to the People*) *supra* note 8. See, Parliament of The Republic of South Africa, "National Council of Provinces: Taking Parliament to the People" (November 19-22, 2018) online: <<https://www.parliament.gov.za/project-event-details/39>> (The concept is based on the principle of a people-centred Parliament which is responsive to the needs of its citizens. It creates an important platform for communities and government to engage on issues pertaining to service delivery, and to identify critical areas that require urgent attention. For more details on the term see chapter four of this thesis.)

⁵¹⁹ Oni, *supra* note 461, at 12.

⁵²⁰ S.M. Omadia & V. Egwemi, "Party Politics and the Challenge of Political Representation in Nigeria" (2011) 2 *International J. Business & Social Science* 270 at 273.

⁵²¹ *Ibid.*

disqualified for her inability to pay the required deposit of the sum of NGN 500,000.00 (about 3,500 USD).⁵²²

Nevertheless, the 1999 Constitution⁵²³ empowers the National Assembly to make laws concerning the energy-power sector. In a similar vein, the State House of Assembly of each state has the constitutional mandate to legislate over areas not covered by the national grid system. The Constitution does not empower the municipal government to make laws concerning the energy sector. Taken together, this state of affairs means that important decision-making regarding Nigeria's energy policy is both socio-politically and geographically remote from the lives of rural women.

3.3.2.2 Enabling Renewable Energy Legislation Empowering MDAs

A key statute in the energy-power sector is the 2005 *Electric Power Sector Reform Act* (EPSRA). By providing for renewable energy power generation, the EPSRA is a dual-purpose law intended to address electric energy issues on the one hand, and environmental degradation on the other. The EPSRA provides for the creation of administrative institutions like the Nigerian Electricity Regulatory Commission (NERC), and the Rural Electrification Agency (REA). It gives guidance with regard to the powers and functions of both the NERC, and the REA. For instance, the EPSRA provides that the NERC is responsible for the issuance of licences for renewable energy electricity generation, transmission and distribution, establishing customer rights and obligations etc. Also, the REA as a federal government agency is tasked with providing access to reliable electric power supply for rural people irrespective of where they live and what they do.⁵²⁴

However, the implementation of rural electricity programmes has been a challenge to the

⁵²² Kole Ahmed Shettima, "Engendering Nigeria's Third Republic" (1995) 38 African Studies Review 61 at 18. See also, Ordu *supra* note 441, at 110-111.

⁵²³ Constitution of Nigeria (1999), c C23. Part II at Paras13 and 14.

⁵²⁴ Rural Electrification Agency, "Mission" online: <<http://rea.gov.ng/>>.

government with only about 26% of rural households having access to electricity.⁵²⁵ According to the enabling legislation (EPSRA), the members of the REA shall “consist of seven members, six of whom shall be appointed from the six geo-political zones.”⁵²⁶ The enabling statute does not specifically describe how (in terms of characteristics and qualities etc.) these members should be selected. It also does not state whether members first have to be employed as staff of the REA and thereafter elected or politically appointed. In either case, it is highly unlikely for the membership process not to eliminate affected rural people particularly rural women who are rarely employed in such services as a result of lack of formal education.⁵²⁷

With the headquarters of the REA in Abuja, the REA is only located in six zonal offices⁵²⁸ and one liaison office,⁵²⁹ all far away from the realities of the large majority affected by access to modern energy and energy-related issues. One would have expected this crucial institution and its top management members to live in and have their offices located in the 774 local governments. By positioning this institution and its top management in the 774 local government areas, the REA could increase rural women’s participation and better carry out its function of providing access to reliable electric power supply, based on energy strategies that are compatible with community realities. In addition, the REA would be able to have direct access to the people while observing and experiencing the real energy issues confronted by smaller communities within each local government. This would allow the REA the opportunity to think locally and use local hands and technologies when addressing the energy needs of local people.

⁵²⁵ National Assembly, “House of Representatives Federal Republic of Nigeria Order Paper” (March 15, 2017) Accessed October 16, 2018 at 5 online: <<https://nass.gov.ng/document/download/8474>>.

⁵²⁶ Electric Power Sector Reform Act at s. 88 (2) (a).

⁵²⁷ UN Women Watch, *supra* note 311.

⁵²⁸ The six zonal offices are located in North West (Dutse, Jigawa state), North East (Bauchi, Bauchi state), North Central (Lokoja, Kogi State), South South (Calabar, Cross River State), South East (Enugu, Enugu State), South West (Oshogbo, Osun State).

⁵²⁹ The liaison office is located in Lagos.

With both issues of membership and location at the forefront of the debate, the REA was almost dissolved for its corrupt practices and inability to meet its purpose. For instance, in 2009 the Federal Government suspended the operations of the REA and initiated the process for its dissolution following the allegation of corruption against its management. Specifically, the management of the REA was alleged to have committed criminal breach of trust and fraudulently awarded contracts for grid extension and solar electricity in the sum of NGN 5, 200,000,000.⁵³⁰ Although the REA was not dissolved and continues to operate at the moment, the alleged culprits⁵³¹ were arraigned before a Justice of the Federal Capital Territory, and thereafter sentenced to imprisonment with an option to pay a fine within 30 days. That being said, the agency's action supports the argument that elites may use government policies to favour themselves while failing those most affected by their decisions.⁵³²

The *Energy Commission of Nigeria (ECN)* is another important body, established by the 1979 *Energy Commission of Nigeria Act*.⁵³³ The ECN Act gives the ECN the mandate to develop energy including renewable energy policies, programmes and master plans. For instance, this key institution has formulated the 2003 *National Energy Policy (NEP)*;⁵³⁴ the 2005 *Renewable Energy*

⁵³⁰ "N 5.2bn Electrification Scam: FG Begins Process of Scrapping REA" Vanguard (September 22, 2009), Accessed October 30, 2018 online: < <https://www.vanguardngr.com/2009/09/n5-2bn-electrification-scam-fg-begins-process-of-scrapping-rea/>>. See also, Yunus Abdulhamid, "Nigeria: Contractors List Gains of Rural Electrification Projects" Daily Trust, (May 8, 2012), Accessed October 30, 2018 online: <<https://allafrica.com/stories/201205080068.html>>. See also, "Six Rural Electricity Agency Directors Jailed over N5.2bn Scam" The Cable (February 8, 2018), Accessed May 3, 2019 online: < <https://www.thecable.ng/court-jails-six-n5-2bn-electricity-project-scam>>.

⁵³¹ "Court Jail Electricity Agency MD, 5 other Directors for N5.2bn Scam" News Express, (February 9, 2018) Accessed October 30, 2018 online: <<https://www.newsexpressngr.com/news/49730--Court-jails-Electricity-Agency-MD-5-other-Directors-for-N52bn-scam-46>>.

⁵³² World Bank, *World Development Report 2006: Equity and Development* (New York: The World Bank & Oxford University Press, 2006).

⁵³³ Energy Commission of Nigeria Act.

⁵³⁴ The NEP, 2003 covers aspects of the energy sector including renewable energy and rural electrification. The NEP, 2003 is discussed in more detail in chapter five.

Master Plan (REMP) with a review in 2012, and the recent 2015 *National Renewable Energy and Energy Efficiency Policy (NREEEP)*.⁵³⁵

To effectively formulate policies, master plans and programmes, the ECN Act states that the ECN shall have a key committee, the Technical Advisory Committee. Its membership shall consist of the Director-General as the Chairman⁵³⁶ and “other ‘professionals’ representing the following Ministries, Government Agencies or professional organisations.”⁵³⁷ Although the ECN Act does not define what it means by the term ‘professionals,’ by its listing, professional members include:⁵³⁸ the Ministries of: Environment; Agriculture and Rural Development; Petroleum Resources; Power and Steel; Science and Technology; Water Resources; Education; Defence; Communication, and Finance. They further include organizations such as Nigerian National Petroleum Corporation; the Solar Energy Society of Nigeria; Nigerian Mining and Geosciences; the Nigerian Coal Corporation, and the Nigerian Society of Engineers. Furthermore, they include the Centres for Energy Research and Development at Ahmadu Bello University, Zaria; Obafemi Awolowo University, Ile-Ife; Usmanu Danfodio University, Sokoto, University of Nigeria, Nsukka and new energy centres that may be established from time to time. Section 3(3) of the ECN Act somewhat vaguely states that the Technical Advisory Committee “may co-opt, when necessary, any suitable Nigerian whose contributions may be needed by the Committee.”⁵³⁹

Unfortunately, the Ministry of Women Affairs and Social Development is not included in the list of capable professional members. The mission of this Ministry is “[t]o serve as the national

⁵³⁵ NREEEP, 2015, *supra* note 28. The NREEEP provides an overarching framework for renewable energy and energy efficiency. The Policy is discussed in more detail in chapter five.

⁵³⁶ Energy Commission of Nigeria Act at, s. 3 (1).

⁵³⁷ Energy Commission of Nigeria Act at, s. 3 (2).

⁵³⁸ Energy Commission of Nigeria Act at, s. 3 (2).

⁵³⁹ As demonstrated in Chapter six, this mean financiers like the United Nations Development Programme (UNDP) etc. Moreover, as clearly stated in the 2005 and 2012 Renewable Energy Master Plan (REMP), the REMP was developed by the ECN in corroboration with the UNDP.

vehicle to bring about speedy and healthy development of Nigerian Women...and the *mainstreaming of their rights and privileges in national development process*.⁵⁴⁰ I question the rationale behind such exclusion. Although women are mainstream users and often producers of energy,⁵⁴¹ the ECN Act fails to specifically acknowledge their energy-related influence⁵⁴² and knowledge which necessitates their involvement as a special interest group. In fact, women are not just a special interest group, they are mainstream producers, users and often suppliers of energy.⁵⁴³ By not including the Ministry of Women Affairs (or any women-centred organizations) on the list of professional members, the ECN Act has tacitly removed women from the producer and knowledge-holder category. Therefore, it suggests that women as a group in general and rural women in particular are mere consumers or beneficiaries of improved and modern energy technologies and renewable energy sources. This exclusion is perhaps because “the energy sector has been defined as capital-intensive, large-scale and commercial activities; high tech requiring professional expertise, and inanimate fuels, not human energy.”⁵⁴⁴ As a result of this definition, rural women’s important energy roles in developing local technical knowledge have been largely overlooked or made invisible. The following subsection expands on rural women’s invisible role while making a case for legislative inclusion.

3.3.3 The "Invisible" Role of Rural Women in Decision-Making about Renewable Energy Systems: An Argument for Legislative Inclusion

⁵⁴⁰ Nigeria – Federal Ministry of Women Affairs and Social Development online: < <https://www.womenaffairs.gov.ng/> > [Emphasis Added].

⁵⁴¹ Karlsson, *supra* note 1 at 94. See also, Cecelski, *supra* note 74, at Vii.

⁵⁴² Women influence or make many family purchases related to energy; they are experienced entrepreneurs in energy-related enterprises, and women organizations are more likely to be effective promoters of new technologies and active lobbyists for environmentally benign energy sources.

⁵⁴³ Karlsson, *supra* note 1, at 94. See also, Cecelski, *supra* note 74, at Vii.

⁵⁴⁴ Cecelski, *supra* note 74, at Vii.

Feminist energy researchers like Katrine Danielsen, and Elizabeth Cecelski indicate that until fairly recently, energy planning and policy making have largely ignored women's participation and other socio-economic perspectives such as indigenous knowledge.⁵⁴⁵ As noted by Danielsen, lack of recognition of women's energy needs, knowledge, and contributions are norms that permeate regions like Sub-Saharan Africa, and South Asia's "energy system structures and institutions, including... legal and regulatory frameworks, policies and programmes."⁵⁴⁶ Also, Danielsen notes that social and cultural systems do not give women the privilege of being seen as equal participants in all areas of the energy sector.⁵⁴⁷

Predominantly, the energy sector is seen as a "male sector." For instance, like the colonial era described above, while men are encouraged to get acquainted with the step-by-step of household and public energy-electric facilities (e.g. installation of distribution and transmission poles and wires), it is expected that women are not only kept away from such facilities but also from the power of knowledge.⁵⁴⁸ Therefore, even women considered as professionally qualified tend to apply for non-technical positions and in other cases positions where they are unable to visibly influence outcomes, and their voices rarely heard. This has resulted in the invisibility of women⁵⁴⁹ in policy-making, and in turn, policymakers, formulators and implementers often do not see the value of mainstreaming first-hand perspectives (by meeting and listening) of rural women in energy policies and programmes.⁵⁵⁰ Gail Karlsson asserts that "one critical step is for

⁵⁴⁵ Cecelski, *supra* note 74, at Vii. See also, Katrine Danielsen, *Gender Equality, Women's Rights and Access to Energy Services: An Inspiration Paper in the Run-Up to Rio+20* (s.I: Ministry of Foreign Affairs of Denmark, 2012) at 8.

⁵⁴⁶ *Ibid* (Danielsen).

⁵⁴⁷ Anne-Marie Goetz, *Gender and Accountability: Challenges for Reform in Developing States* (2013) online: Consortium on Gender, Security, and Human Rights at 10 < http://genderandsecurity.org:8080/sites/default/files/anne-marie_goetz_consortium_lecture_4-10-2006.pdf>.

⁵⁴⁸ Ulrike Roehr, "Gender and Energy in the North" Background Paper for the Expert Workshop Gender Perspectives for Earth Summit 2002: Energy, Transportation, Information for Decision-Making Berlin, Germany, 10 – 12 January, 2001 at 2 online: <<https://www.earthsummit2002.org/workshop/Gender%20%26%20Energy%20N%20UR.pdf>>.

⁵⁴⁹ Invisibility in this thesis also means that the number of women that may be selected may be in very negligible number. For instance, former minister for petroleum resources, Diezani Alison-Madueke was among the few women to become a Minister.

⁵⁵⁰ Clancy & Feenstra, *supra* note 158. See also, Clancy, Oparaocha & Roehr, *supra* note 27. See Karlsson, *supra* note 1, at 105.

governments to include more women representatives in discussions about national energy plans and policy formulation.”⁵⁵¹

Although Karlsson’s assertion is a step in the right direction, as stated by feminist legal scholars “[w]e must pay more attention to the quality of representation rather than the quantity.”⁵⁵² Moreover, since women are not a homogeneous category adding more women representatives does not necessarily signify that rural women’s energy issues will be advanced. This is so because representation provides yet another means to decide who is given a voice and who is silenced.⁵⁵³ That said, assertions such as Karlsson’s - to include more women representatives - may be the reason why the Inter-Ministerial Committee on National Renewable Energy and Energy Efficiency (NREEEP) added two women to the panel of 20 members (18 of whom were men) to review the NREEEP.⁵⁵⁴

Also, another reason for rural women’s invisibility in the Nigerian energy policy process could be that women have been viewed as non-technologists, incapable of building, operating, and maintaining sophisticated technologies.⁵⁵⁵ However, this is because sophisticated, innovative, and local technical knowledge and skills held by rural women have not been considered as real science.⁵⁵⁶ In this regard, scholars like Huge Raffles, Haraway, and Harding assert that there is a relationship between scientific and local knowledge.⁵⁵⁷ Hence, to encourage a successful rural energy development strategy in Nigeria, both knowledge are essential. While currently, stakeholder knowledge is mostly produced through a “top-down, science-led transfer technology

⁵⁵¹ *Ibid* (Karlsson), at 14.

⁵⁵² “Women’s Participation in Decision-Making” (1991) 26:48 *Economic and Political Weekly* 2736 at 2737.

⁵⁵³ Fineman, *supra* note 212, at 5. See also, Fineman, *supra* note 279, at 41.

⁵⁵⁴ NREEEP 2015, *supra* note 28.

⁵⁵⁵ Cecelski, *supra* note 74, at 12.

⁵⁵⁶ *Ibid*.

⁵⁵⁷ Hugh Raffles, *Intimate Knowledge* (Oxford: Blackwell Publishers, 2002) 325 at 327. See also, Haraway, *supra* note 367. See, Harding (“The Science Question”), *supra* note 312. See Harding (“Strong Objectivity”), *supra* note 370.

paradigm,”⁵⁵⁸ Raffles states that a “particular desired local knowledge may hold the secret to scientific progress – it may guide us to the deep roots” of addressing practical problems.⁵⁵⁹ Raffles notes that local knowledge is mostly translated into a language of expertise “incorporated into and subsumed by... narratives of natural science⁵⁶⁰... [T]he issue becomes not what is known, but in what language that knowledge is expressed.”⁵⁶¹ For instance, Isabel Wilkerson (winner of the Pulitzer Prize), in her book *Caste: The Origins of Our Discontents*, tells a story of the unspoken caste system that has shaped America.⁵⁶² According to Wilkerson, the knowledge of immunization in America was introduced by onesimus, a slave in Boston, where he saved dozens of lives during the smallpox epidemic of 1721. Wilkerson recounts that the slave described a procedure that he had undergone in Africa to a doctor who decided to try the method that the slave described. Accordingly, Wilkerson states,

People in West Africa had discovered that they could fend off contagions by inoculating themselves with a specimen of fluid from an infected person.⁵⁶³

She notes that thirty years later, vaccinations, based on the method introduced by onesimus became the standard practice in America. In this regard, Raffles asserts that scientific knowledge is no better than local knowledge,⁵⁶⁴ both are needed in policy processes and have political possibilities.⁵⁶⁵ Hence, integrating scientific and local knowledge in particular rural women’s local or situated knowledge can help renewable energy decision-makers develop a more comprehensive understanding of the problem, along with addressing the concerns related to its implementation.

Using the urine-powered technology example, the next sub-section illuminates the

⁵⁵⁸ Mark S. Reed, “Stakeholder Participation for Environmental Management: Literature Review” (2008) Vol. 141 *Biological Conservation* 2417 at 2425.

⁵⁵⁹ Raffles, *supra* note 557, at 327.

⁵⁶⁰ *Ibid* at 326.

⁵⁶¹ *Ibid* at 331.

⁵⁶² Isabel Wilkerson, *Caste the Origins of our Discontents* (New York: Penguin Random House LLC, 2020).

⁵⁶³ *Ibid*, at 231.

⁵⁶⁴ Raffles, *supra* note 557, at 331.

⁵⁶⁵ *Ibid* at 332.

importance of rural women's local knowledge in influencing the development of renewable energy systems in Nigeria.

3.3.3.1 An Example of Urine-Powered Technology



From left; Faleke Oluwatoyin, Duro-Aina Adebola, Akindele Abiola and Bello Eniola
Source: <https://www.nairaland.com/noisemaker1/posts>

Although rural women's knowledge have been largely invisible with their voices silenced when decisions on the legal development of renewable energy are made, the urine-powered technology exemplifies the potential role of rural women in understanding and tackling the country's energy and energy-related issues. Disturbed by the uncertain price of petroleum products, the poor health and death rate of many Nigerians arising from existing environmental degradation and air pollution (carbon-monoxide poisoning) emitted from fossil-fuel self-

generating sets,⁵⁶⁶ in 2012, four Nigerian girls⁵⁶⁷ between the ages of 14 and 15⁵⁶⁸ decided to understand and tackle these phenomena. On how the idea to address the issues came about, Duro-Aina Adebola, the leader of the group, explains:

I read on the internet that a family of five died of carbon monoxide poisoning so I asked myself what could be done to reduce these incessant deaths from carbon monoxide poisoning?... We thought of what we could use to power the generator instead of using the conventional fuel, something that can replace conventional fuels and that will not release any obnoxious substance like carbon monoxide into the environment; something that will also be cheap for Nigerians. You know that when the issue of fuel subsidy removal came up, there was hike in prices of petroleum products.⁵⁶⁹

On the knowledgeable and creative mindset that led to the solution, the girls further stated that:

We started looking at various materials. We looked at water but we felt that the amount of voltage it will take to break the water molecule is large and we wanted something small so we can have a larger output... So we started looking at different materials, one of which was urine. We were looking for something that is liquid, something that has hydrogen molecules in it. We also observed that the amount of voltage it takes to break a urine molecule is less than the amount it takes to break the hydrogen molecule in water. So we opted for urine since we have a higher output.⁵⁷⁰

The above quotations support Carol Gilligan's assertion that women and girls tend to have the capacity to reason in terms of personal responsibility to one another and become involved with the problem. Although the idea of using urine as fuel is not new, Adebola, Abiola, Oluwatoyin, and Eniola came up with a practical way of dealing with what they considered to be the reality of Nigerians.⁵⁷¹ They created a machine-generator in such a way that it was possible to use a litre of urine-fuel to generate electricity for six hours, with an exhaust gas composed of water vapour.

While the girls admit that their machine-generator requires further development, if successful, this

⁵⁶⁶ Afolayan, J.M, Edomwonyi N.P & Esagbedo S.E, "Carbon Monoxide Poisoning in a Nigerian Home: Case Repots" (2014) online: Pub Med < <https://www.ncbi.nlm.nih.gov/pubmed/25167600> >. See also, Roth D, Hubmann et al, "Victims of Carbon Monoxide Poisoning Identified by Carbon Monoxide Oximetry" (2011) online: Pub Med < <https://www.ncbi.nlm.nih.gov/pubmed/19615844> >.

⁵⁶⁷ Duro-Aina Adebola (14 years), Akindele Abiola (14 years), Faleke Oluwatoyin (14 years) and Bello Eniola (15 years).

⁵⁶⁸ Although these girls were in high school at the time of their invention, it should be emphasized that a woman's location does not prevent her from acquiring an education especially as basic as pre-university education.

⁵⁶⁹ Ebele Orakpo, "RESEARCH & DEVT: Four Nigerian students generate electricity from urine" Vanguard (February 14, 2013), Accessed 31 October 2018 online: <<https://www.vanguardngr.com/2013/02/research-devt-four-nigerian-students-generate-electricity-from-urine/>>.

⁵⁷⁰ *Ibid.*

⁵⁷¹ As women, Adebola, Abiola, Oluwatoyin and Eniola recognized the realities of not having energy access as well as the need for an affordable, accessible and sustainable energy source and technology.

innovative technology could transform rural electricity production. The consequences of this will mean, using a free, sustainable and non-polluting fuel to provide electricity to areas that may currently have limited or no access. The potential to feed the energy demand of most households and small to medium scale businesses through such a technology would be hugely significant for the Nigerian community as a whole, and in particular rural or remote areas currently not connected to the national grid.

One might reasonably expect that the relevant decision-makers would invite these girls for an in-depth conversation, and provide them with, or help them to acquire the necessary tools, resources and environment to put their creative minds into use. Yet there is no evidence to show that decision-makers have shown any interest. For example, a 2014 notice of public hearing reveals that the former Chairman/CEO of the NERC, Dr. Sam Amadi, sent regulatory documents for comments “to stakeholders, the distribution and generation companies, and institutions including the World Bank, European Union, and International Monetary Fund.”⁵⁷² Unfortunately, these women (Adebola, Abiola, Oluwatoyin, and Eniola) were neither sent regulatory documents for their input nor listed as participating stakeholders.

Despite the exclusion of women generally and rural women specifically from law-making about renewable energy, the legislature in the post-colonial era has recognized the participation of a handful of elite women. How have women participated in the legislative institution beginning from the democratic rule in 1999?

⁵⁷² Michael Faloseyi & Samuel Ekeh, “NERC Conducts Public Hearing on National Enforcement/ Content Regulations,” (2014) Online: Nigerian Electricity Regulatory Commission < <https://nerc.gov.ng/index.php/media-library/press-releases/204-nerc-conducts-public-hearing-on-national-enforcement-content-regulations>>.

3.3.4 Trends and Status of the Representation of Women in Renewable Energy Issues in the Federal Legislature

3.3.4.1 The Present

Since the return of the democratic rule in 1999, women's participatory status in planning and formulating renewable energy policies and laws remain very low; however, compared to the colonial era, this is slowly improving.

In the Nigerian National Assembly (Senate and House of Representatives), a systematic analysis reveals an increase (though marginal) in the trend and pattern of women's active participation in the legal decision-making about renewable energy. The National Assembly consists of a total of 469 members: 109 in the Senate and 360 in the House of Representatives. However, the growth in the percentage of women in power between 1999 and 2015 has been insignificant.⁵⁷³ That said, former presidents such as President Olusegun Obasanjo, and President Goodluck Ebele Jonathan have appointed women to top ministerial positions: Professor Ndi Okereke-Onyiuke as Minister of Finance, and Diezani Alison Madueke as Petroleum Minister. The move to include Mrs. Madueke and Professor Okereke-Onyiuke in these positions was applauded by many Nigerians. For instance, Mr. Sonala Olumhense said:

I am impressed at how much opportunity [President Obasanjo] has provided in his cabinet for the female constituency. Since 1999, he has had 27 women in assorted ministerial chairs, and many more in significant other top positions. Despite my reservations about him, he deserves to be congratulated for this...⁵⁷⁴

⁵⁷³ In 1999, the National Assembly had 3 (2.8%) female senators and 12 (3.3%) female House of Representatives. In 2003, women occupied 4 seats (3.7%) and 21 seats (5.8%) in the Senate and House of Representatives respectively. In 2007, Nigeria had 9 female Senators (8.3%) and 26 (7.2%) female members of House of Representative. In 2011, 7 (6.4%) female members represented the upper house and 25 (6.9%) represented the lower House. In 2015, the National Assembly had 7 (6.4%) female members in Senate and 19 (5.2%) females in the House of Representatives. During the era of former President Olusegun Obasanjo in 1999, 13.7% of Nigerian women participated in important advisory and ministerial positions, such as the Ministry of Finance. These women include Oby Ezekwesili who served as minister of solid minerals and later as minister of education, Kema Chikwe who served as the aviation minister; Esther Nenadi Usman who also served as finance minister; Ndi Okereke-Onyiuke who headed the Nigerian Stock Exchange; Ngozi Okonjo-Iweala who served as the finance minister under both former presidents Olusegun Obasanjo and Goodluck Jonathan etc.

⁵⁷⁴ Paul I. Adujie, "Gender Equality Agenda & Obasanjo's Presidency" I Nigerian.com (May 4, 2006), Accessed July 1, 2018 online: <<https://www.inigerian.com/gender-equality-agenda-s-presidency/>>. See also, Ruth Aine, "Renewable Energy for Women"

Notwithstanding this commendable increase, relatively little has changed in terms of the majority of Nigerian rural women's energy and energy related environmental experiences, interests and needs. For example, while perhaps outside the strict lines of her portfolio as Petroleum Minister, Mrs. Madueke visited the former governor of Bayelsa State, Mr. Timipre Sylva, and promised that she would make the nation's vast petroleum resources impact positively on the lives of Nigerians.⁵⁷⁵ Yet there is little evidence that she impacted either the development of renewable energy resources or rural women's participation in the energy sector. The question therefore arises – which group of women speak for and on behalf of others?

The female category should be seen as heterogeneous. This means that when a woman leader is chosen to represent the energy and environmental interests of all women simply because she is a woman (or because her husband is a president or governor)⁵⁷⁶ she cannot be assumed to be an adequate representative because of her “womanness.” This is because all women do not have common and shared energy and environmental experiences, and if the representative(s) is/are unaware of the range of women's experiences particularly those in the rural communities, such representation will fail to be effective.⁵⁷⁷ Elite urban women and grassroots rural women do not enjoy equal access to energy. Thus, differences in life experiences and priorities shape the perspective of the representative woman. Therefore, in appointing representatives, it is important to ask whose voices are heard when women speak and whose are silenced. It is clearly problematic

Foresight for Development (March 31, 2014), Accessed May 5, 2019 online: < <http://www.foresightfordevelopment.org/ffd-blog/ruth-aine/renewable-energy-for-women>>.

⁵⁷⁵ Mohammed Shosanya, “How Nigerians will Reap from Oil Resources” Daily Trust (November 7, 2010) Accessed May 5, 2019 online: < <https://www.dailytrust.com.ng/how-nigerians-will-reap-from-oil-resource.html>>.

⁵⁷⁶ For instance, the administrations of former heads of state - General Ibrahim Babaginda and Sani Abacha - created the office of the First Lady, an office still occupied by wives of incumbent heads of state or presidents (depending on the era). First ladies are known to represent the interests of women, including at international conventions.

⁵⁷⁷ Jubril Ibrahim, *Democratic Transition in Anglophone West Africa* (Dakar: Council for the Development of Social Science, 2003) at 34-35.

to assume that a few hand-picked women will have the knowledge, incentive or capacity to adequately represent members of groups to which they do not themselves belong in particular members of groups oppressed in ways they are not.⁵⁷⁸

In addition to assuming that women as a gender are a homogeneous group, another problem is ensuring that economic disparities are considered when choosing representatives. In Nigeria, generally the women who gain political office or power tend to be drawn from the upper/middle class. Generally, these women are unable or unwilling to grant equal voices to rural women at the “bottom of the political, economic, or patriarchal social hierarchy.”⁵⁷⁹ Martha Fineman asserts that representative women legitimized in the process of an existing and unchanged institution will generally not address the issues affecting women with differing characteristics. Rather, such representation promotes “tokenism, empowers individual women while it renders her the most effective weapon to silence the interests and voices of the women she is supposed to represent.”⁵⁸⁰

Moreover, the differences in accessing energy between elite women and grassroots rural women suggest that middle/upper class women representing grassroots women are more than likely going to view their energy concerns as being shared by other women. V. Mazumdar’s study suggests that policy reforms to develop renewable energy and promote sustainable development hardly affect middle/upper class women who do not experience energy shortages⁵⁸¹ because of their financial ability to afford self-generated energy technology operated by diesel, petroleum or even solar energy.

⁵⁷⁸ Kitzinger & Wilkinson, *supra* note 318, at 1. See also, Fineman, *supra* note 279, at 41.

⁵⁷⁹ Sharon K. Hom, “Female Infanticide in China: The Human Rights Specter and Thoughts Toward (An)Other Vision” (1992): 23 *Columbia Human Right Law Review* 249 at 274.

⁵⁸⁰ Fineman, *supra* note 279, at 42.

⁵⁸¹ Mazumdar, V. “The Social Reform Movement in India – From Ranade to Nehru” in Bal Ram Nanda, ed, *Indian Women from Purdah to Modernity* (New Delhi: Radiant Publishers, 1990) at 41–66.

This means that to encourage investments, elite lawmakers are more likely to make laws on the development of those energy resources (such as petroleum resources) needed for commercialization and industrialization in urban cities connected to the national grid than to focus on developing decentralized renewable energy options needed for the population in rural areas largely off the grid.⁵⁸² For instance, the *Petroleum Industry Bill* (PIB) was passed in 2008 for the reform and growth of the country's oil and gas industry.⁵⁸³ However, the Renewable Energy Master plan introduced in 2005 and subsequent renewable energy policies remain at the policy stage. As a result, and as previously stated, some female legislators have been criticized by certain grassroots women for being inefficient and unable to properly represent the interests and needs of their constituents.⁵⁸⁴

Despite the argument for the inclusion of rural women in decision-making about the legal development of the renewable energy systems, certain barriers (social, economic, legal, cultural, religious etc.) impede their participation. What specifically are these barriers that may limit women from participating in the legal development of renewable energy, and how can these barriers be overcome?

⁵⁸² NREEEP 2005, *supra* note 28, at viii.

⁵⁸³ Ayo Salami & Funke Oladoke, "Insight: Nigerian Petroleum Industry Fiscal Bill-Encouraging Investments?" Bloomberg Tax (2019) online: Bloomberg Tax < <https://news.bloombergtax.com/daily-tax-report-international/insight-nigerian-petroleum-industry-fiscal-bill-encouraging-investment>>. See, Julia Payne & Camillus Eboh, "Nigeria Passes Major Oil Reform Bill after 17 Year Struggle," Reuters January 18, 2018. Accessed July 10, 2018 online: < <https://news.bloombergtax.com/daily-tax-report-international/insight-nigerian-petroleum-industry-fiscal-bill-encouraging-investment>>. For the first time, in 2018, both the Senate and the House of Representative of the Nigerian National Assembly have approved the PIB. However, it still needs the president's signature to become a law. The petroleum industry bill was introduced for the first time in 2008. In January 2020, the current Minister of Petroleum Resources, Timpire Sylva said: "full passage of the bill [was] expected mid-2020."

⁵⁸⁴ Akuma, *supra* note 333. See also, Akomolede & Bosede, *supra* note 333, at 66. See also, Nwagwu, *supra* note 333, at 18. See, Joshua & Oni, "*supra* note 333, at 561.

3.4 Barriers to Women's Participation

The following subsection identifies and briefly explains some possible barriers affecting rural women's participation, while proposed solutions to overcoming them are found in Chapter six.

- **Financial Challenges**

Participation requires spending private funds either to campaign for elected positions or to be able to travel to and participate in consultations or other activities. Rural Nigerian women are mainly poor and may perceive participation in decision-making processes as prohibitively expensive. For instance, in Akwa Ibom State, 8.4 million of the 10 million extremely poor people live in rural areas. In the absence of a "godfather" with financial capabilities, women, who constitute 50.74% of this population⁵⁸⁵ will not put participatory matters at the top of their priority list.

In terms of considering running for an elected office, in 1990, in the 3rd Republic, the Presidential Nomination Form cost NGN 500,000.00 (about 3,500 USD), and the inability to pay this sum was the reason why one female candidate was disqualified.⁵⁸⁶ Thus, financial challenges limit rural women's opportunities to, and confidence in their ability to participate in public life. To this end, Soma Dutta notes that "[t]he economic impediments to women's participation are also connected with their social status in rural

⁵⁸⁵ Maurice Akpan Okoji, "Rural Women and Poverty in Akwa Ibom State, Nigeria" (2001) 25:2 *Atlantis* 62 at 62.

⁵⁸⁶ Shettima, *supra* note 522, at 18. See also, Ordu *supra* note 441, at 110-111. This happened during the administration of former head of state, General Ibrahim Babaginda. See, Deolu, "2019 Elections: See How Much Presidential Nomination Forms Would Now Cost" *Information Nigeria* (April 4, 2019), Accessed March 11, 2020 online: <<https://www.informationng.com/2017/04/2019-elections-see-much-presidential-nomination-forms-now-cost.html>> "The Senate has put an end to the abuse by political parties by putting a N10 Million limit on the forms." However, having a uniform financial limit on forms is not sufficient. This is so because, it is not realistic for many competent and well-meaning Nigerians, especially in the rural areas who may be willing to run for elective positions.

areas.”⁵⁸⁷ Hence, to successfully achieve women’s participation, rural women should be financially and socially empowered. Finance is important for a variety of reasons such as their ability to pay for - support services to care for their dependents, transportation to the venue, and other costs. One interesting possibility could be to adopt the South Africa practice of “Taking Parliament to the People,” discussed in Chapter six.

- **The Perception of Women, Gender Roles and Lack of Time**

News of disreputable practices of some representatives (for instance the allegation of corruption against the management of the REA⁵⁸⁸) may make rural women feel that participation in decision-making affecting them is a waste of their valuable time. Time is a critical resource for rural women because of their socially ascribed gender roles that place an overwhelming burden of domestic labour - collecting fuel and water, cooking, washing, and cultivating crops to feed their families - on these women’s shoulders. Hence, participating in the legal decision-making process about renewable energy may be considered an extra burden for these women who do not have enough time and may find it difficult to be away from their homes for long periods.⁵⁸⁹ According to the United Nations, gender roles often lead to women being excluded from energy law and processes; resulting in, gender-blind energy planning, financing, and implementation.⁵⁹⁰

- **Low Self-Confidence**

The continuous subordination of rural women by upper/middle-class representatives may make these women perceive their oppression as normal or see

⁵⁸⁷ Dutta, “*supra* note 495, at 4.

⁵⁸⁸ “N 5.2bn Electrification Scam: FG Begins Process of Scrapping REA” *supra* note 530. See also, Abdulhamid, *supra* note 530. See also, “Six Rural Electricity Agency Directors Jailed over N5.2bn Scam” *supra* note 530.

⁵⁸⁹ Karlsson, *supra* note 158, at 49.

⁵⁹⁰ United Nations Development Programme (UNDP), *Gender & Energy for Sustainable Development: A Toolkit and Resource Guide* (New York: UNDP, 2004) at 22.

themselves as lesser human beings not capable of having or advocating for their own standpoints. Also, patriarchal-cultural factors such as women not possessing the “gift of leadership” result in a lot of rural women believing that they are not expected to sit and make decisions with men.⁵⁹¹ For instance, patriarchal beliefs that women forget easily, have shallow reasoning, are unable to maintain confidentiality, and are suited mainly for domestic activities⁵⁹² are ingrained into the minds of many rural Nigerian women. For instance, in a 2012 interview, a Nigerian male respondent stated:

Women by tradition are subservient to men. Man is head and bread winner for the family, though women contribute as help mate, not in such a manner as to dominate the man. Women are not supposed to take equal status with men. It is so and the folk of women should remain where they are. I am a very traditional Africa man; the status of women should remain as it is now. The clamouring of women to take the driver seat made exclusively for men has contributed high rate of divorce in the society.⁵⁹³

The International Fund for Agricultural Development (IFAD) affirms that rural women lack a voice in decision-making processes because they lack self-confidence and basic education.⁵⁹⁴ Hence, even where opportunities to participate are created, rural women may be unable to assert themselves during meetings, which will affect their engagement and effectiveness.

- **Cultural and Religious Barriers**

Colonial era stereotypes that encourage women to uphold “feminine virtues of silence, reticence, modesty and most significantly, chastity”⁵⁹⁵ have become the prevailing culture in Nigeria, particularly in the rural areas. While women (mostly elite women) are increasingly participating in public policy, cultural stereotypes have greater influence over

⁵⁹¹ Abdulkareem Lawal & Emeka Nwankwo, *Primary Concern: Why Women are not Part of Decision-Making and Local Governance* (Abuja: Actionaid, 2012) at 18.

⁵⁹² *Ibid.*

⁵⁹³ *Ibid* at 18-19.

⁵⁹⁴ IFAD, *supra* note 195, at 12, 23.

⁵⁹⁵ Miles, *supra* note 450, at 6.

the activities of rural women. For instance, women like Mallama Gambo Sawaba, leader of the women's wing of the former Northern Elements Progressive Union (NEPU), who dared to participate in political activities were seen to be deviant and immoral.⁵⁹⁶

Religious barriers also limit rural women from taking the initiative to participate. For example, practices such as “Purdah” or seclusion practiced in Northern Nigeria determine the extent of women's visibility and mobility in public spaces.⁵⁹⁷ Since “[i]n some cultures, women have difficulty participating directly in community decision-making...special efforts will be required to ensure that they have an opportunity to be heard.”⁵⁹⁸

- **Lack of Information**

The inability to gather and disseminate the necessary information is a primary problem confronted by rural women. This is enhanced by the lack of education or low levels of literacy, especially among women in rural areas living in poverty. According to Bruce, “lack of information on law, rules, and procedures in an accessible language can deny access to opportunities.”⁵⁹⁹

⁵⁹⁶ Oloyede Oluyemi, “Monitoring Participation of Women in Politics in Nigeria” () online: National Bureau of Statistics at 5 <https://unstats.un.org/unsd/gender/Finland_Oct2016/Documents/Nigeria_paper.pdf>.

⁵⁹⁷ Fatimah Kelleher, “Women's Voices in Northern Nigeria: Hearing the Broader Narratives” Open Democracy (June 2, 2014) Accessed June 14, 2019 online: <<https://www.opendemocracy.net/en/5050/womens-voices-in-northern-nigeria-hearing-broader-narratives/>>.

⁵⁹⁸ Lambrou & Piana *supra* note 173, at 11.

⁵⁹⁹ Bruce et al, *supra* note 229, at 9. See, “Women's Participation in Decision-Making,” *supra* note 552, at 2736. See also, Amartya K. Sen, *Development as Freedom* (New York: Knopf, 1999).

- **Legal issues**

The Nigerian Constitution is often unclear in matters relating to participation. Section 61⁶⁰⁰ appears to allow citizens participation; however, subsection 6(6)(c)⁶⁰¹ makes participatory matters provided in subsection 14(2)(c)⁶⁰² non-justiciable. These provisions make rural women's participatory rights unclear. In addition, both sections on participation fail to specifically lay down steps to be taken for an active and effective participatory process.

Furthermore, as provided for in section 88(2)(a) of the ESPRA, having six REA offices located in different areas of the country is a step in the right direction for encouraging participation. However, since the Nigerian population is over 170 million with 774 local government areas, having six locations far away from most of the population will not be enough to ensure rural women's presence, active and equitable participation.

Also, licencing fees as provided for in section 62(2) of the ESPRA may limit small actors from participating in the renewable energy field. This could mean that ideas will not be transformed into enterprises, and women will be lacking the necessary economic empowerment to be socially and politically involved in the renewable energy space. More discussions on this can be found in Chapter five.

⁶⁰⁰ Constitution of Nigeria at s. 61. The section provides that,

[t]he Senate or the House of Representatives may act notwithstanding any vacancy in its membership, and the presence or participation of any person not entitled to be present at or to participate in the proceedings of the House shall not invalidate those proceedings.

⁶⁰¹ Constitution of Nigeria at s. 6(6). The section provides that "[t]he judicial powers vested in accordance with the foregoing provisions of this section – shall not except as otherwise provided by this Constitution, extend to any issue or question as to whether any act of omission by any authority or person or as to whether any law or any judicial decision is in conformity with the Fundamental Objectives and Directive Principles of State Policy set out in Chapter II of this Constitution."

⁶⁰² Constitution of Nigeria at s. 14(2)(c). The section provides that "the participation by the people in their government shall be ensured in accordance with the provisions of this Constitution."

Furthermore, developing renewable energy policies in Nigeria is not driven by national interest alone. The development of these policies at the national level is strongly influenced by the events on the world stage, and by multilateral and bilateral development agencies.⁶⁰³ This means that instead of citizens like rural women influencing renewable energy policies and laws to reflect the reality of the country, multinational corporations and international donor agencies such as the World Bank and the International Monetary Fund influence these policies and laws. Again, this situation was demonstrated by the former Chairman/CEO of the NERC in 2014.

On the contrary, international legal frameworks like the 2015 Paris Agreement remind us that climate policies are more likely to be successfully implemented when they are formulated in “a country driven, gender-responsive, participatory and fully transparent” manner.⁶⁰⁴ This is also true about promoting sustainable and implementable renewable energy policies and laws in Nigeria.

- **Western (Formal) Education v. Informal Education**

Western education is in almost all cases a requirement for participating in the policy and law-making processes of most Nigerian renewable energy institutions. Rural women are therefore often silenced. Although some rural women have acquired Western education up to the level of a master’s degree,⁶⁰⁵ making this a requirement for participation is a major disadvantage for most rural women.

⁶⁰³Joy Clancy “Policies, Project and the Market Empowering Women”? Some Initial Reactions to Development in the Energy Sector” (2000) online: Technology and Development Group, University of Twente at 9 <https://pdfs.semanticscholar.org/25d5/0a029aee7ef79c59b4ec99b611b7f4dbaced.pdf?_ga=2.3277811.298309419.1596076726-1308931970.1579926716>.

⁶⁰⁴ United Nations, *Paris Agreement* 2015 at 7 (5).

⁶⁰⁵ Despite university degrees, rural women are sometimes affected by their remote location and the employment to generate the necessary finance to move them from the “bottom of the political, economic, or patriarchal social hierarchy.”

While the barriers to rural women’s participation are many, the essential question is how these barriers can be overcome. This will be addressed in Chapter six – Proposals for Reform.

3.5 Summary and Conclusion

This chapter addressed the research question — how are historic periods of institutional decision-making impacting the legal development of renewable energy systems in post-colonial Nigeria? In addition, how has the legislature systematically recognized or subordinated rural women’s participation in renewable energy policy- and law-making, and where opportunities for participation did or do exist, what barriers hinder their effective participation?

It concludes that to increase rural women’s participation, institutional decision-making processes concerning renewable energy must be seen to be a product of the country’s distinct history⁶⁰⁶ prior to colonization and westernization. Thus, it must be equitable and inclusive of all differences while taking into consideration the intersecting and interacting identities that may arise based on social categorizations such as gender, “womanness,” location, class etc.

Finding suggests that legal models that are not country-specific, gender-inclusive, and influenced by local circumstances may not necessarily suit Nigeria. Finding further suggests that the present legal and institutional frameworks governing renewable energy is founded on a male privileging colonial ideology that empowers men.

⁶⁰⁶ In the precolonial era Nigeria practiced a participatory and inclusive institutional governance structure that allowed all categories of persons to have a voice.

Chapter Four

A Gender-Inclusive Renewable Energy Legal Framework: The South African Example

4.0 Introduction

The chapter examines historic fights for voice and power by women in South Africa, and how these have transformed laws and participatory practices, with possible lessons for Nigeria. It is divided into two sections. The first section focuses on Apartheid energy policy - why and how women's participation occurred, and how the participation of women has led to the transformation of Apartheid laws. In addition, it examines how Constitutional provisions have impacted South African women's participation, and how these women have in turn influenced the country's national sustainability agenda in terms of promoting renewable energy policies and sustainable development.

In the second section, the chapter analyses varied policies and laws which together embody the national renewable energy legal framework. With the aid of three examples on access and right to environmental resources: land, water, and energy, the chapter illuminates and identifies measures through which women made legal changes. This is relevant to understanding why and how women need to actively participate in the process of law making, the impact this has on their daily lives, and on the national sustainability agenda.

I discuss why South Africa was selected as the preferred country; I examine the similarities and differences between the Nigerian example, and the South African example, and I conclude. I begin with a brief history of Apartheid energy policy and rural women's struggle for sustainable human development - why rural women's participation occurred.

4.1 A Brief History of Why and How Rural Women’s Participation Occurred in South Africa

4.1.1 Apartheid Energy Policy and Rural Women’s Struggle for Sustainable Human Development

The Apartheid regime from 1948 to 1994 marks the beginning of modern South African energy policy.⁶⁰⁷ Between those periods the South African energy system progressed from “traditional [renewable] fuels like wood and dung, through transitional fuels like coal, kerosene, LPG and candles, to modern fuels like electricity and piped gas.”⁶⁰⁸ Notwithstanding, the country continues to produce coal-based power. For political and economic reasons, the Apartheid government concentrated on the establishment of the electric and synthetic fuel industries.⁶⁰⁹ Politically, the synthetic fuel industry was used by the Apartheid government in the 1950s to respond to the international threat to place an embargo on the importation of crude oil into South Africa. Economically, electricity and synthetic fuel were needed to drive the mining industries. The government at that time focused primarily on self-sufficiency and securing energy supply.⁶¹⁰ As energy policy planning in that era consisted of informal agreements (between the government, the synthetic fuel industry, and the multinational oil corporations), it delayed the development of a regulatory system and prevented the development of an efficient and affordable energy market for poor households.⁶¹¹

Despite the significance of energy services for small industries and rural households (of which 80% were female-headed), during the Apartheid era⁶¹² such services were not adequately

⁶⁰⁷ Ogunlade Davidson et al, *Energy Policies for Sustainable Development in South Africa: Options for the Future* (Cape Town: Energy Research Centre, 2006) at 5.

⁶⁰⁸ *Ibid* at 58.

⁶⁰⁹ *Ibid* at 6. (Synthetic fuels are made from high-pressure coal).

⁶¹⁰ Nomawethu Qase, “Energy Policy, Informal Sector and Urban Household Livelihoods: A Case Study of Meat Traders in Western Cape” (2001) Master’s Thesis, University of Cape Town at 10. See also, Davidson et al *supra* note 607 at 5.

⁶¹¹ Andrew Marquard, “The Origins and Development of South Africa Energy Policy” (2006) Doctoral Thesis, University of Cape at 248. See also, Lucy Baker & Jon Phillips, “Tensions in the Transition the Politics of Electricity Distribution in South Africa” (2019) 37 *Environmental and Planning C. Politics and Space* 177 at 184.

⁶¹² DME, 2003 *supra* note 218, at 38.

supplied because of the government's priority to develop the industrial sector and meet the needs of the privileged white minority.⁶¹³ Hence, the disempowerment of black women was associated with Apartheid energy policies and strategies⁶¹⁴ which came with the highest level of inequities in the distribution of resources, including wealth and access to basic services.⁶¹⁵ B. James and G. Simmonds⁶¹⁶ assert that in that era, there was no political commitment to provide for the energy needs of the majority black population⁶¹⁷ owing to their inability to afford such energy. Consequently, traditional fuels remained the only source of energy for blacks until the late 1980s and early 1990s⁶¹⁸ when discussions within the international community focused on the importance of women in the biomass energy sector.⁶¹⁹

Participation at that time was exclusionary in nature. For instance, the majority of the population — mostly blacks and women — were excluded from participating in decision-making processes concerning the energy sector.⁶²⁰ Rather than having an approach that encouraged public debate and participation, the energy policy-making processes were largely carried out by Eskom, a public South African electricity utility.⁶²¹ This made “rational and public debate on energy policy

⁶¹³ DME, 1998 *supra* note 217, at 30, 40. See also, Davidson et al, *supra* note 607, at 6.

⁶¹⁴ Themba Kgasi, “Gender and Political Participation in South Africa” Paper Presented at the IDEA Conference Celebrating Ten Years of South African Democracy April at 7 online: < http://archive.idea.int/newsletters/2004/Mar-Apr04/Gender_and_Political_Participation_in_South_Africa.pdf>. See also, Shamim Meer, “Which Workers, Which Women, What Interest? Race, Class, and Gender in Post-Apartheid South Africa” in Boaventura de Sousa Santos, ed, *Democratizing Democracy: Beyond the Liberal Democratic Canon* (London: Verso Books, 2007) at 106.

⁶¹⁵ Mariella Feenstra, “Towards A Gender-Aware Energy Policy: A Case Study from South Africa and Uganda” (2002) Master’s Thesis, University of Twente at 62, 63. See also, Renfrew Christie, *Electricity, Industry and Class in South Africa* (London: The Macmillan Press LTD, 1984). Energy policy was designed based on racial discriminations and/or government introduced hierarchy: white people at the top, Indians in between and black people particularly black women, at the bottom. For example, for economic development, between 1882 and the late 1920s electricity was used mainly for the extraction of natural resources by gold mining industries operated mainly by whites and in the 1930s access to electricity extended to only white households. The Apartheid government did not take interest in the generation and utilization of renewable energy forest resources (wood) linked to poor households, resulting in unequal energy distribution.

⁶¹⁶ James B & Simmonds G, “Energy” in Debbie Budlender, ed, *The Second Women’s Budget* (Cape Town: Idasa, 1997).

⁶¹⁷ Qase, *supra* note 610, at 11.

⁶¹⁸ Marquard, *supra* note 611, at 66.

⁶¹⁹ Cecelski, *supra* note 129.

⁶²⁰ Qase, *supra* note 610, at 10.

⁶²¹ Baker & Phillips *supra* note 611, at 184.

nigh impossible,”⁶²² resulting in a governance structure that lacked transparency and accountability. This was further strengthened by an energy policy planning system cloaked in a veil of secrecy. For instance, the Apartheid government put in place measures in the form of enforceable laws and stiff penalties to restrict information from leaving the shores of South Africa.⁶²³ The *Petroleum Products Act* of 1977⁶²⁴ prohibited the,

publication, releasing, announcement, disclosure or conveyance to any person of information or the making of comment regarding the source, manufacture, transportation, destination, storage, consumption, quantity or stock-level of any petroleum product acquired or manufactured or being acquired or manufactured for or in the Republic.

How did women’s participation occur?

4.1.2 The Role and Impact of Apartheid Energy Policy on Black Women

In Apartheid South Africa, black women’s role in the energy sector began from childhood and continued into marriage. Upon marriage, a woman traditionally took full responsibility for the well-being of her husband, his family, any offspring and the household, and these responsibilities often involved agriculture.⁶²⁵ As explained by Suzanne Williams,

The place of woman has been to remain alongside her man, supporting him in the struggle, participating in the organisations, serving time in detention - but also almost exclusively responsible for the maintenance of the social fabric of home and children in the face of the terrible destructiveness of the Apartheid system.⁶²⁶

With husbands migrating to the city in search of employment, the traditional division of labour disintegrated, and wives and girl children were left to take over responsibility for all aspects

⁶²² DME, 2003 *supra* note 218, at 24.

⁶²³ Petroleum Products Act 120 of 1977 at 4.

⁶²⁴ *Ibid* at 8-9.

⁶²⁵ Melinda Laber, “Women’s Resistance to Apartheid” (1999) 2 *The Review: J. Undergraduate Student Research* 28 at 28. See also, Transvaal Rural Action Committee, *The Rural Women’s Movement: Holding the Knife on the Sharp Side Edge* (s:I: National Land Committee, 1994) at 12.

⁶²⁶ Suzanne Williams, “From “Mothers of the Nation” to women in their own right: South African women in the Transition to Democracy” in Tina Wallace & Candida March, eds, *Changing Perception: Writings on Gender and Development* (Oxford: Oxfam, 1991) at 118.

of the home.⁶²⁷ This included accessing basic services like energy and water for domestic activities (as mothers) and productive activities (as significant producers in agricultural processing). As stated earlier, despite the supply and connection of many households to the electricity grid, the energy demands and needs of most of the people (blacks) were totally disregarded and biomass, especially wood, remained the main source of energy in the rural household sector. Hence, black women and girls in rural households spent most of their time⁶²⁸ collecting firewood and water resources⁶²⁹ from separate lands far away from their abodes. For instance, over 80% of households in South Africa collected firewood for domestic needs,⁶³⁰ and over three-quarters of those collecting wood were black women⁶³¹ residing in the rural and settlement areas. Even though neither firewood nor water collection from far distances enhanced women's productive time, they had no choice but to carry out both tasks daily. In an interview with Mrs Mohlamonyane of the Moutse community, she stated:

This is my everyday work: to go long distances to fetch water and another distance to fetch wood. By the time you arrive home it's late. I start to cook supper. I always eat supper after 9pm never at 6 or 7 o'clock. My children eat their supper in the morning because they sleep before it is ready at night. When my children come back from school they find that I have already made my second trip from where we fetch water. I find life very difficult here.⁶³²

The daily struggle to access energy and water did not improve rural women's self-esteem or social status⁶³³ even though they sustained traditional society and made the practice of migrant labour during the Apartheid regime possible.⁶³⁴ These women stayed behind in rural areas, and they carried the responsibility to provide for, and to reproduce the present and future work force.

⁶²⁷ Transvaal Rural Action Committee, *supra* note 625, at 12. See also, Laber, *supra* note 625, at 28.

⁶²⁸ *Ibid* (Transvaal Rural Action Committee), at 12 (For example, women spent an equivalent of two working days per week).

⁶²⁹ Taryn Dinkelman, "The Effects of Rural Electrification on Employment: New Evidence from South Africa" (2011) 101 *American Economic Review* 3078 at 3079.

⁶³⁰ *Ibid*.

⁶³¹ *Ibid*.

⁶³² Transvaal Rural Action Committee, *supra* note 625, at 13.

⁶³³ Andrew Charman, Cobus de Swardt & Mary Simons, "The Politics of Gender: Negotiating Liberation" (1991) 16 *Transformation* at 44.

⁶³⁴ *Ibid*.

Notwithstanding, the reproductive⁶³⁵ and productive roles played by these women accorded them status but limited (though clearly recognized) authority.⁶³⁶ The differences between men and women was clearly seen through their differing ability to control and access productive resources as well as their authority to participate in decision-making.⁶³⁷ Thus, the unequal power relations experienced by rural women in their personal and public lives were responsible for their subordinate participatory position.⁶³⁸ This stereotype which assigned the private and personal to women and the public and political to men became a well-established cultural practice in South Africa,⁶³⁹ a phenomenon legal feminism seeks ways to correct.⁶⁴⁰ For instance, even though women's engagements in productive activities like traditional agriculture⁶⁴¹ and beer brewing (from which they made extra income)⁶⁴² provided them with employment and livelihoods at subsistence levels, their activities were regarded as personal and private and not sufficient to make them public decision-makers. According to Ellen Kuzwayo, black women were regarded as:

unproductive in industry, as totally dependent on [their] male counterparts, as helpless, unintelligent to the point of being useless and stupid.⁶⁴³

Like many other African countries where patriarchy is a form of oppression, the consequence was the over-representation of men in the formal economy and the over-representation of women in the informal economy.⁶⁴⁴ Black women worked long hours sacrificing

⁶³⁵ Procreative.

⁶³⁶ S. Baden, S. Hassim & S. Meintjies, *Country Gender Profile: South Africa*. (Pretoria: Swedish International Development Co-operation Agency (Sida), 1998) at 6. See also, Cheryl Walker, *Women and Gender in Southern Africa to 1945* (Cape Town: David Philip, 1990) at 8.

⁶³⁷ Geeta. R. Gupta, "Gender, Sexuality, and HIV/AIDS: the What, the Why and the How," (2000) 5:4 *Can HIV AIDS Policy L. Rev* 86 at 87.

⁶³⁸ Vasintha Veeran, "Women in South Africa: Challenges and Aspirations in the New Millennium" (2006) online: *Women in Welfare Education* 55 at 58 <file:///C:/Users/hp/AppData/Local/Temp/WomeninSA062.pdf>.

⁶³⁹ *Ibid* at 58, 57.

⁶⁴⁰ Yeatman, *supra* note 211.

⁶⁴¹ DME 1998, *supra* note 217, at 38, 39.

⁶⁴² Ezekiel Mphahlele, *Down Second Avenue* (London: Faber and Faber Limited, 1985) at 43. See also, Laber, *supra* note 625, at 28.

⁶⁴³ Ellen Kuzwayo, *Call Me Woman* (San Francisco: Aunt Lute Books, 1985) at 12-13.

⁶⁴⁴ Caroline Skinner & Imraan Valodia, "Globalization and Women's Works in South Africa: National and Local Approaches to Economic Transformation" (2001) 16:48 *Agenda: Empowering Women for Gender Equity* 75.

their families for meagre wages and poor prospects of self-enhancement.⁶⁴⁵ As pointed out by Shireen Hassim,

The era of Apartheid served to intensify this oppression, specifically of black rural women who were targeted for their race as well as their gender to become the most disadvantaged group in society.⁶⁴⁶

The implication is that such intersectionality – race and gender in the case of black woman – combine to perpetuate the social and economic exclusion of 50% of black South Africans.⁶⁴⁷ These women were either deprived of, or had poor and inequitable access to, necessities, services and resources including land and natural resources.⁶⁴⁸ Women were also deprived of other basic needs which required energy services to become effectively operational. For instance, energy services such as lighting and refrigerators used to store vaccines and biohazard medical specimens were needed for health care relating to prenatal and postnatal services, and services for the prevention and treatment of HIV/AIDS.⁶⁴⁹

The devastating circumstances of lack of access to resources, hunger, poverty and poor health did not deter these women from using their experience of oppression - suffering, exploitation, marginalization and powerlessness - as a platform for an aggressive attack on Apartheid.⁶⁵⁰ Women's initial approach in reaction to socio-political oppression and economic exploitation⁶⁵¹ was to develop survivalist strategies (such as support from savings groups and women's guilds, walking long distances, hunting and gathering, planting and harvesting in the garden and getting assistance from children, accessing food from family and religious groups

⁶⁴⁵ Veeran, *supra* note 638, at 56.

⁶⁴⁶ Shireen Hassim, "The Gender Pact and Democratic Consolidation: Institutionalizing Gender Equality in the South African State" (2003) 29 *Feminist Studies* 505 at 506.

⁶⁴⁷ Meer, *supra* note 614, at 106.

⁶⁴⁸ Ntokozi Mthembu, "Survival Strategies of Individual and Households Affected by Unemployment in the Ethekwini Municipality" (2005) 1 *RASSP Research Reports* at 2.

⁶⁴⁹ Veeran, *supra* note 638, at 59.

⁶⁵⁰ *Ibid* at 56.

⁶⁵¹ Baden, Hassim & Meintjies, *supra* note 636, at 7.

through bread distribution and soup kitchens,⁶⁵² vending etc.). Hence, survivalist strategies increased household income and created networks of social support.⁶⁵³ Unfortunately survivalist strategies did not address the underlying and structural forces that shaped women's experiences of social, economic, and political subordination due to insufficient resources to sustain them.⁶⁵⁴ How did women fight for power and voice? In the following subsections I attempt to address this question while also demonstrating how women's leadership has impacted the transformation of Apartheid policies and laws including in the water, and most relevant to this thesis, energy sectors.

4.1.3 Women's Leadership and the Transformation of Apartheid Laws

Through grassroots mobilization (as shown below), women gradually became the driving force in community level politics. Anti-Apartheid women activists focused not only on the struggle for equity but also a larger political struggle for freedom.⁶⁵⁵ Women's determination to break out of the cycle of oppression in personal and public arenas categorically placed them at the cutting edge of transformational politics.⁶⁵⁶ For instance, as early as the 1950s the African National Congress (ANC) Women's League participated actively in the campaigns against economic and political oppression through educational and transport boycotts.⁶⁵⁷ Women significantly played a leading role in the 1952 Defiance Campaign against the enactment of repressive and unjust Apartheid laws (such as *Pass Laws Act*⁶⁵⁸ and *Separate Representation of Voters Act*⁶⁵⁹) which

⁶⁵² Mthembu, "*supra* note 593, at 2, 13.

⁶⁵³ Baden, Hassim & Meintjies, *supra* note 636, at 7.

⁶⁵⁴ *Ibid.* See also, Mthembu, "*supra* note 593, at 2, 13. Sinthemba S. Sidloyi, "Survival Strategies of Elderly Women in Female-Headed Households" (2010) University of Pretoria, Master's Thesis at 82.

⁶⁵⁵ M. Ansari, "Gender Equity and Gender Equality: A Brief Overview of these Issues and their Application within NGOs" (2012) online: Council for International Development at 1 <https://www.academia.edu/35428049/Gender_Equity_and_Gender_Equality>.

⁶⁵⁶ Veeran, *supra* note 638, at 56.

⁶⁵⁷ Baden, Hassim & Meintjies, *supra* note 636, at 7. See also, Kgasi, *supra* note 559, at 5.

⁶⁵⁸ *Pass Laws Act*, 1952. Also known as the Natives (Abolition of Passes and Co-ordination of Documents) Act. This discriminatory Act made it compulsory for all black South Africans over the age of 16 to carry the "passbook" at all times within white areas.

⁶⁵⁹ *Separate Representation of Voters Act* No. 46 of 1951. This Apartheid law was enacted to remove the right to vote of coloured people in the Cape Province.

sought to deny political participation and representation of black people at all levels of government.⁶⁶⁰ For instance, women were furious at the *Pass Laws Act* which directly threatened their freedom of movement. When rumours of the *Pass Laws Act* leaked in the press, women leaders in the ANC, Coloured People's Congress, and South African Indian Congress (SAIC) organized through public speeches, forums, and trainings.⁶⁶¹ Through public speeches women called on other black women never to carry passes. While calling for young African volunteers, Dora Tamana, a member of the ANC Women's League, stated:

We women will never carry these passes...I appeal to you young Africans to come forward and fight. These passes make the road even narrower for us. We have seen unemployment, lack of [resources (energy)] accommodation and families broken because of passes. We have seen it with our men. Who will look after our children when we go to jail for a small technical offence - not having a pass?⁶⁶²

Meetings were held in several centres including Cape Town, Uitenhage, Pietermaritzburg, Langa, East London etc. At these meetings, women agreed that what was needed to exert pressure on the Apartheid government was to adopt an aggressive and militant approach. As a result, they committed to publicly defy discriminatory laws. Volunteers were enlisted from the different organizations. They were trained through repeated practice to disobey the unjust Apartheid laws. This resulted in using various radical tactics including violating the curfew on blacks, participating in places such as public facilities that were meant for whites, and refusing to carry passes.⁶⁶³ Women volunteers such as Bertha Mkize, and Florence Matomela, both members of the African National Congress Women's League, led the demonstration during which passes were burnt.⁶⁶⁴

⁶⁶⁰ "Defiance Campaign 1952" South Africa History Online (March 19, 2018), Accessed June 14, 2018 online: <<http://www.sahistory.org.za/topic/defiance-campaign-1952>>.

⁶⁶¹ "The Turbulent 1950s – Women as Defiant Activists" South Africa History Online (March 31, 2011), 14 June 2018 online: <<https://www.sahistory.org.za/article/turbulent-1950s-women-defiant-activists>>.

⁶⁶² *Ibid.*

⁶⁶³ "The Defiance Campaign" online: Cries Against Apartheid <<https://sites.google.com/a/oxy.edu/tes/home/the-struggle/the-anc-anc-youth-league/the-defiance-campaign>>.

⁶⁶⁴ "The Turbulent 1950s..." *supra* note 606.

Women in the Eastern Cape were recorded as 1,067 out of the 2,529 defiers.⁶⁶⁵ Although the Defiance campaign was unable to achieve its goal of overturning Apartheid laws, it was successful in other areas such as the recognition and establishment of a United Nations Commission to investigate South African racial policies.⁶⁶⁶ In view of this, the Congress Alliance, an anti-Apartheid political coalition, saw the need to request the participation of the Women's League in the organization of the 1955 Congress of the People (CoP).⁶⁶⁷ This gave women an opportunity to speak for themselves and to lobby for the incorporation of their demands into the Freedom Charter,⁶⁶⁸ adopted at the CoP.⁶⁶⁹

At the founding conference of the Federation of South African Women (FSAW) in 1954⁶⁷⁰ the Women's Charter (1954 Charter) was also adopted.⁶⁷¹ The FSAW was formed with the objective of uniting women in common actions which included striving for women to achieve access to energy/light, water, transport, sanitation, and other modern amenities needed for the development of,

every child through free compulsory education for all; for the protection of mother and child through maternity homes, welfare clinics, crèches and nursery schools, in countryside and towns; through proper homes for all.⁶⁷²

⁶⁶⁵ "ANC Women's League (ANCWL)" South Africa History Online (July 5, 2018), accessed 14 June 2018 online: <<https://www.sahistory.org.za/topic/anc-womens-league-ancwl>>.

⁶⁶⁶ "Defiance Campaign 1952" *supra* note 605.

⁶⁶⁷ "ANC Women's League (ANCWL)" *supra* note 610.

⁶⁶⁸ *Ibid.*

⁶⁶⁹ "The Freedom Charter" South Africa History Online, (August 4, 2016), accessed 14 June 2018 online: <<http://www.sahistory.org.za/article/freedom-charter>> (The Freedom Charter was adopted at the 1955 Congress of the People, at Kliptown, on the 26th of June.)

⁶⁷⁰ "The Women's Charter," South Africa History Online, (July 31, 2018), accessed July 31, 2018 online: <<https://www.sahistory.org.za/topic/womens-charter>>.

⁶⁷¹ Laber, *supra* note 625, at 31.

⁶⁷² "The Women's Charter," *supra* note 615.

The 1954 Charter gave women the right to fight for their emancipation from the patriarchal Apartheid regime.⁶⁷³ It strived to extend to women complete and unqualified equality in law and practice. According to the Charter,

The law has lagged behind the development of society; it no longer corresponds to the actual social and economic position of women. The law has become an obstacle to the progress of women, and therefore a brake on the whole of society.⁶⁷⁴

As a result, the Charter sought to eliminate Apartheid laws and practices (such as the Pass Laws Act) that restricted free movement and prevented women's right to active participation in democratic organizations,⁶⁷⁵ including their right to political, legal, economic, and social advantages, responsibilities, and opportunities.⁶⁷⁶ In spite of these victories, women continued their fights for voice and power as I show in the following sub-section(s).

4.1.4 Organizing Rural Women toward a Transformative Decision-Making Process

The 1980s saw the emergence of community-based organizations (CBOs) and non-governmental organizations (NGOs) in South Africa. These organizations worked with black rural women to address their practical daily survival needs.⁶⁷⁷ In addition, they provided legal and organizational support to communities under threat of removal from ancestral lands.⁶⁷⁸ Organizing women in the struggle for ancestral lands was important because land not only provided for agricultural or housing opportunities, but it also provided them with a sense of identity, belonging and a base for sustainable human development. Moreover, access to and control over resources such as energy and water are essentially linked to land rights, acquisition, and ownership. Thus, women had to have access to and control over land before acquiring any of the three main energy-

⁶⁷³ Majuta J. Mamogale & Kgabo L Mashela, "Women in Politics: Participation and Representation in the South Africa Legislatures" (2014) 1 South Africa J African Affairs 49 at 53.

⁶⁷⁴ "The Women's Charter" *supra* note 615.

⁶⁷⁵ *Ibid.*

⁶⁷⁶ *Ibid.*

⁶⁷⁷ Kgasi, *supra* note 614, at 5.

⁶⁷⁸ *Ibid.*

carrier options (i.e. firewood, coal, dung) available to them. Amita Makan's affirms this position by asserting that "in seeking to address gender inequality through energy policy, it is critical to ensure integration with other development initiatives, such as ensuring that women own land, and have access to financial resources."⁶⁷⁹

Increasingly, South African based organizations (CBOs & NGOs) began to take up concerns about women's conditions and the lack of women in leadership.⁶⁸⁰ At that time (the 1980s), women began to emerge as powerful forces in South African community level politics. They came together as a network of women's groups with common and shared suffering over Apartheid land policies⁶⁸¹ to form organizations such as the Cape-based United Women's Organization (CUWO), the Natal Organization of Women (NOW),⁶⁸² the Transvaal Rural Action Committee (TRAC), and the Rural Women's Movement (RWM). For instance, through the Rural Women's Movement, women organized against Apartheid-related land struggles affecting them and their community.

The Rural Women's Movement, a land-rights grassroots women's organization, was founded as a response to the demand from poor, indigenous,⁶⁸³ rural black farm dwellers and landless women whose communities were forcibly evicted from their ancestral lands, as a result of the 1913 *Land Act*.⁶⁸⁴ It should however be mentioned that the Rural Women's Movement was intricately bound up with the TRAC, a non-governmental organization working in rural areas and

⁶⁷⁹ Amita Makan, "A gendered perspective of the development context for energy planning in South Africa" (1994) Energy for Development Research Centre at the University of Cape Town. See also, Amita Makan, "Power for Women and Men: Towards a Gendered Approach to Domestic Energy Policy and Planning in South Africa" (1995) 17: 2 Third World Planning Review 183.

⁶⁸⁰ Baden, Hassim & Meintjies, *supra* note 636, at 7.

⁶⁸¹ Meer, *supra* note 614, at 105. See also, Transvaal Rural Action Committee, *supra* note 625, at 38.

⁶⁸² Kgasi, *supra* note 614, at 5, 7.

⁶⁸³ International Work Group for Indigenous Affairs (IWGIA), "Indigenous People in South Africa" IWGIA (September 12, 2011), Accessed November 27, 2018 online: <<https://www.iwgia.org/en/south-africa/722-indigenous-peoples-in-south-africa>>.

⁶⁸⁴ Sizani Ngubane, "The Rural Women's Movement in South Africa: Land Reform and HIV/AIDS" online: <http://www.gift-economy.com/womenand/rural_womens.html>.

established in 1983.⁶⁸⁵ Thus, the TRAC became the catalyst for the formation of the RWM under the initiative of Lydia Kompe, a female rural employee of TRAC, funded through international church links and networks.⁶⁸⁶

After a few years of work, it became apparent that although the women in rural communities were directly affected by Apartheid policies and practices, they were always excluded from deliberations or meetings about struggles and strategies.⁶⁸⁷ For effective measures, rural women from different communities including Kwa Ngema, Oukasie, Bloedfontein, Braklaagte, Mogopa, Huhudi, Mathopestad, Braklaagte, Driefontein and Majakaneng⁶⁸⁸ were organized by Kompe through a separate meeting with the women in the communities to discuss and understand their opinions on how the removal crisis specifically affected them. The agenda was to strengthen the position of rural women so that they could gain confidence. Common to these women and their communities was that they were facing crises concerning forced removal from their ancestral lands and incorporation⁶⁸⁹ into Bantustans (government created racial homelands), which affected their access to and control over resources such as energy and water. By uniting in their shared struggles through repetitive cycles of action and reflection (in the form of meetings and raising consciousness of their common issues), women became encouraged to form groups where they met to talk about their common and shared history of forced removals and incorporation. They also discussed about self-help projects, loss of citizenship and economic insecurity.⁶⁹⁰ According to Kompe,

⁶⁸⁵ Transvaal Rural Action Committee, *supra* note 625, at 2.

⁶⁸⁶ John Abbott, *Sharing the City: Community Participation in Urban Management* (New York: Earthscan, 1996) at 99.

⁶⁸⁷ Meer, *supra* note 614, at 105. See also, Transvaal Rural Action Committee, *supra* note 625, at 3.

⁶⁸⁹ *Ibid* (Transvaal Rural Action Committee).

⁶⁹⁰ *Ibid* at 3, 6, 7.

All the women have the same kind of problems. For example, the women from Brits and Huhudi are fighting against forced removal. The people of Majakaneng, Braklaagte and Bloedfontein are fighting because they don't want their areas to become part of the 'homeland'.⁶⁹¹

To further illustrate how rural women organized to transform decision-making, I use two illustrative examples of land and water resources.

4.1.4.1 An Example of the Land Crisis in Mousté Community

During the late 1980s the Mousté community was confronted with the struggle against forced removal and incorporation of its people into the homeland of KwaNdebele.⁶⁹² At that time, youths who were often at the forefront of anti-Apartheid conflict expressed the need for support from their mothers when they were in hiding, needing food or to be bailed out when arrested by the police or vigilantes who attacked the community.

In view of the above, in 1986 and 1987, the Rural Women's Movement formed women's groups in villages including Mpeleng, Naganeng, Ratanang, and Matlala. It was a politicised form of organization approached from the standpoint of women as wives and mothers of male activists. It was also formed to give women the strength to resist attacks against their community.⁶⁹³ Since women were often present and vulnerable to pressure when the police arrested and vigilantes attacked the community, it was imperative to organize them to help strengthen the resistance against oppressive authorities. Women were usually alone at home when authorities came in search of their activist sons and/or husbands. For example, where it became impossible for authorities to locate husbands and sons, women were usually subjected to beating and interrogation to reveal hideouts of male relatives.⁶⁹⁴

⁶⁹¹ *Ibid* at 3.

⁶⁹² *Ibid* at 26.

⁶⁹³ *Ibid* at 26.

⁶⁹⁴ Transvaal Rural Action Committee, *supra* note 625.

In response, women in the neighbourhood who formed part of the women's group would rush to the house of the woman been beaten and start shouting. By shouting, most times the intruder authorities gave up and left the oppressed woman's house. Women continued to gain the strength to resist and prevent intimidation against them. More and more, they gained the confidence to peep out of their windows, looking for the kinds of vehicles, registration numbers, uniforms and guns used by oppressive authorities.⁶⁹⁵ Women were able to "come together to carve out new identities for themselves, define what matters to them, and develop collective strategies of resistance and struggle."⁶⁹⁶ Key measures used by women to win the bitter struggle included the RWM organizing rural women having common concerns. The RWM recognized that the participation of women in the national struggle was a significant first and essential step toward women's emancipation. Thus, the main task of that women's group was to build individual and collective skills and create awareness by educating all women on their basic human rights, how they could fight for those rights, and what major role they could play⁶⁹⁷ in reconstructing the South African society in general, and the Mousté community in particular.

In addition, the women's group worked to establish a special agitation department for women. The responsibility of the agitation department included meeting the specific problems of the less educated women who had low confidence and felt that they did not have the skills to participate. Through consciousness raising⁶⁹⁸ and trainings on how to assert themselves when

⁶⁹⁵ *Ibid* at 26.

⁶⁹⁶ Naila Kabeer, Ratna M. Sudarshan & Kirsty Milward, *Organizing Women Workers in the Informal Economy: Beyond the Weapons of the Weak* (London: Zed Books, 2013).

⁶⁹⁷ Miranda Davies, "Women in Struggle: An Overview" (1983) 5:4 *Third World Quarterly* at 878.

⁶⁹⁸ National Women's Liberation, "Feminist Consciousness-Raising" online: <<http://www.womensliberation.org/priorities/feminist-consciousness-raising>> ("Through consciousness raising, women answered questions using examples from their personal lives. Their personal testimonies are used to draw conclusions about the political root of women's so-called "personal" problems.")

raising issues of concern, and through effective communication and presentation skills, women were led toward participating in the revolutionary anti-Apartheid struggle.

As part of women's training and educational processes, the agitation department informed them of their rights as well as mobilized them on how to make demands in their capacity as women. This was founded on the radical belief that women alone should be the first to tackle the issues that most directly affect them such as land, energy, and water. Hence, women demanded that the government fulfilled its commitments to address their concerns: lack of political and educational skills (e.g., reading and writing), since even basic education was usually considered a priority for men and boys.⁶⁹⁹ Other demands included maternity and child welfare programmes, the reduction of domestic burdens,⁷⁰⁰ and the development of electricity/energy resources without which their demands cannot be effectively met. Women further demanded that they "must have access to safe water supplies, affordable and secure housing and appropriate energy sources" on their lands.⁷⁰¹

Women's active participation led to the Moutse community winning its struggle against forced removal and incorporation. For instance, in 1991, the government of President Frederik Willem de Klerk began to pass laws that repealed most of the racially discriminatory Apartheid legislation.⁷⁰² Having won the Moutse land crisis, women's new role as active participants loosened the rigidity of the social system where only males, male chiefs and elders previously had the authority to speak and make decisions. Thus, Moutse women's participation during the land struggle forced previously traditional male leaders to include and rely on sectors of the society,

⁶⁹⁹ Davies, *supra* note 642, at 876. See also, Laber, *supra* note 625, at 30.

⁷⁰⁰ *Ibid* (Davies), at 878.

⁷⁰¹ "Women under Apartheid" online: Mayibuye Centre, <[https://www.unog.ch/80256EDD006B8954/\(httpAssets\)/FCE445CF05811208C1256F500048D292/\\$file/sa_women_under_apartheid.pdf](https://www.unog.ch/80256EDD006B8954/(httpAssets)/FCE445CF05811208C1256F500048D292/$file/sa_women_under_apartheid.pdf)>.

⁷⁰² History.com Editors, "Apartheid" A&E Television Networks (March 3, 2020), Accessed September 28, 2020 online: <<https://www.history.com/topics/africa/apartheid>>.

such as black women and youths previously excluded from key community decision-making.⁷⁰³

As women gained more confidence and recognition, they were allowed to attend *pitsos* (community general meetings) where issues concerning political crises were discussed. Women particularly blacks who had been politically active were also able to get involved in campaigns against Apartheid.

4.1.4.2 An Example of the Water Crisis in Moutse Community

Like for many other communities in South Africa, prior to the 1994 elections, the government had a growing problem of providing water to the residents of Moutse community⁷⁰⁴ due to the lack of interest in serving the homelands.⁷⁰⁵ As a result, upon winning the Moutse land crisis, the local women extended their focus beyond a single-issue political matter to broader and interconnected issues affecting their living conditions, such as inadequate access to a portable and clean water supply, an issue which had affected the rural people of Moutse community for years.

H. Barrett and A. Browne found that during the 20th century sub-Saharan African women were responsible for controlling sanitary management, collecting, carrying, providing, and using water in the domestic sector.⁷⁰⁶ It was also discovered that while men dominated the government and the committees involved in water management and decision-making, there was poor participation by women stakeholders.⁷⁰⁷ As a result, women's knowledge regarding water issues or disasters such as droughts, floods etc. was hardly recognized. Even when women were elected

⁷⁰³ Transvaal Rural Action Committee, *supra* note 625, at 27.

⁷⁰⁴ Harri Maki, "Comparing Development in Water Supply, Sanitation and Environmental; Health in Four South Africa Cities, 1840-1920" (2010) 55:1 *Historia* 90 at 92.

⁷⁰⁵ Higham S., "New software to access rural water supply" (1998) 6 *World Water and Engineering* 11-12 at 2 in Kholisa Sigenu, "The Role of Rural Women in Mitigating Water Scarcity": (2006) Master's Thesis, University of the Free State at 32.

⁷⁰⁶ H. Barrett & A. Browne, "Gender, environment and development in sub-Saharan Africa" (1995) in Kholisa Sigenu, "The Role of Rural Women in Mitigating Water Scarcity" (2006) Master's Thesis, University of the Free State at 50.

⁷⁰⁷ Audrey Lubisi, *Women's participation in Water projects* (Durban: Water & Sanitation for All: Partnerships and Innovations) 325 at 325. See also, David Hemson, "Women are Weak when they are Amongst Men': Women's Participation in Rural Water Committees in South Africa" (2002) 52 *Agenda* 24 at 26.

to participate in the committee in the early 1990s, they were often passive or took back seats, as their presence had little impact on decision-making.⁷⁰⁸ Thus, women's participation appeared to be subordinate to male authority.

Also, Apartheid Water Act⁷⁰⁹ provided that those who owned land (farms and other properties) had the permanent right to use water.⁷¹⁰ Thus, under the Apartheid system and the policies it developed, the white minority had access to services such as water while the majority black communities had little to no access to basic services including water.⁷¹¹ Rather, the majority, especially rural women, depended on water sources from springs, rivers and streams.⁷¹² The 1991-1992 drought in the community made the water situation even worse. Women in the rural community were more vulnerable to water-related disasters.⁷¹³ To put it in context, in an interview with Mrs Margaret Mohlamonyane of the Moutse community, she stated:

Since I arrived here in 1970, there has been this problem of shortage of water, and no-one ever worried about it. We go quite a distance to fetch water with buckets (25 litres). When you get home you pour water into a water pitcher. Children use it to bath in the morning to get ready to go to school. After that you're left with little water, enough to make them tea. Our work for the whole day is to fetch water because you take time to and from where we fetch water.⁷¹⁴

In addition to the physical weight that water transportation put on women, they recognized that natural or environmental causes like drought, aridity, desiccation, climate change and variability were increasingly the reasons for water scarcity.⁷¹⁵ According to Harri Maki, it was the growing depletion of environmental resources in South Africa “particularly in the 1990s that paved

⁷⁰⁸ *Ibid* (Hemson). See also, *Ibid* (Lubisi).

⁷⁰⁹ Apartheid Water Acts, No 54 of 1956.

⁷¹⁰ Jean de la Harpe, *Guide to the National Water Act* (Pretoria: Department of Water Affairs and Forestry, 1999) at 9.

⁷¹¹ *Ibid*. See also, Barbara Schreiner & Dhesigen Naidoo, “Water as an Instrument for Social Development in South Africa” presented at the WISA 2000 Biennial Conference, Sun City, South Africa, 28 May – 1 June 2000 at 1.

⁷¹² Sigenu, *supra* note 645, at 34.

⁷¹³ United Nations, *Women and Water* (New York: United Nations Publication, 2005) at 5, 3.

⁷¹⁴ Transvaal Rural Action Committee, *supra* note 625.

⁷¹⁵ G. Tyler Miller, Jr, *Living in the environment: Principles, connections and solutions* (Belmont: Wadsworth Publishing Company, 1996) at 458.

the way for giving increasing attention to issues of water as a natural resource.”⁷¹⁶ For instance, drought led to well drying, and in turn, damaged crops led to food shortages.⁷¹⁷ In addition, drought had its environmental, social, and economic consequences. Environmental impacts included reduced water quantity and quality, lack of clean drinking water, decreased food supply, and more water-borne diseases.⁷¹⁸ Socially, drought affected women’s time management particularly by reducing domestic water supply. Economically, drought led to crop loss and food shortages. Since women and children, especially girls were responsible for collecting water and bore the brunt of the problem; they organized a sub-regional meeting in 1992 where they discussed how to address the longstanding water crisis. Although discussions with local officials were held, they yielded no result.⁷¹⁹

At a subsequent meeting, women resolved to hold a march to the magistrate’s office where their water demands would be further presented.⁷²⁰ Part of the consensus was that they would not leave the magistrate’s office until he had agreed on a date to meet and discuss the water demand presented by the women.⁷²¹ As part of the preparation, a planning committee comprised of two women from each of six different groups was constituted. Their role was to help publicize the march and get women to the magistrate’s office. While certain women were appointed as first aid nurses, some were to provide water for the marchers, and others welcomed people at the venue. The water issue and its consequential effect was raised in the memorandum distributed and posted in conspicuous places of the villages. Different women were given the task of speaking on ways

⁷¹⁶ Maki, *supra* note 644, at 92.

⁷¹⁷ Sigenu, *supra* note 645, at 21, 23, 34.

⁷¹⁸ National Drought Mitigation Centre (NDMC) *Impacts of drought in South Africa* at 1 in Sigenu, *supra* note 645, at 24.

⁷¹⁹ Transvaal Rural Action Committee, *supra* note 625, at 28.

⁷²⁰ *Ibid.*

⁷²¹ *Ibid* at 31.

in which the water issues impacted them. On the day of the march, these women decided to make themselves visible by wearing their traditional attire which made them distinct.⁷²²

Upon arrival at the magistrate's office, Moutse women demanded that a date be scheduled to finalize discussions on addressing their water issues. The magistrate responded to their demand by stating that the meeting would be held one week later. The women considered the meeting a victory in itself,⁷²³ but especially because it led to the transformation of Apartheid water laws (as I show below), and the improvement of the water situation in the community. It should be noted, however, that this transformation and improvement appears to be partly due to the ongoing 1986 Apartheid agreement - Lesotho Highlands Water Project (LHWP) treaty between Lesotho and South Africa, for Lesotho to supply South Africa with water and hydro in exchange for royalty payments.⁷²⁴

4.1.4.2.1 The Effect of Moutse Women's Water Activism

By organizing and contesting their subordinate position in relation to policies and practices on water supply, the Moutse women began to see a shift in thinking. For example, it became the belief that decisions on water should not be made without first recognizing women's knowledge about water issues through their active participation.⁷²⁵ Also, it was accepted that certain planning, design, and implementation issues could be avoided if women participated in matters relating to pumps, and/or location of the well. Furthermore, including women in stakeholder planning allows them the authority to make decisions, become direct beneficiaries of law and policy, and take

⁷²² *Ibid.*

⁷²³ *Ibid.*

⁷²⁴ Refilwe Mabula, "Whose Water is it Anyway?" University of the Witwatersrand (May 18, 2018) online: <<https://www.wits.ac.za/news/latest-news/research-news/2018/2018-05/whose-water-is-it-anyway.html>>.

⁷²⁵ David B. Brooks & Mark Winfield, "Viewpoint: A Lesson in Water Management from the Developing World" (2002) IDRC online: < <https://idl-bnc-idrc.dspacedirect.org/bitstream/handle/10625/28413/117261.pdf?sequence=1&isAllowed=y>> at 1. See also, Sigenu, *supra* note 645, at 57.

responsibility for their own lives.⁷²⁶ The South African government started acknowledging that projects and decision-making which *build* on and extend women's traditional roles may have greater chances of success.⁷²⁷ As an example, the government developed the 1994 *White Paper on Water and Sanitation*⁷²⁸ “which set out the vision for the post-Apartheid era.”⁷²⁹ The 1994 White Paper provided that,

[i]n order to ensure successful and sustainable development, and to give substance to the constitutional prerequisite that women should enjoy a full and proper role in society, all statutory bodies in the water sector, including Local Water Committees, shall be recommended to comprise a minimum of 30% women. This should apply at all levels, particularly in management, and should be instituted within five years.⁷³⁰

Some studies indicate that women were only present to fulfil the policy requirement of 30%, but were unable to influence decisions made by the water committees.⁷³¹ This recalls what feminist legal scholars describe as “just add women and stir.”⁷³² This approach emphasizes the quantity of women added to decision-making processes as opposed to their quality, identity, and representativeness,⁷³³ and this could lead to inadequate outcomes. To mitigate this challenge in water decision-making, the government further formulated other post-Apartheid legal frameworks.⁷³⁴ The bedrock of these frameworks is the South African Constitution of 1996 which provides for the right to water.⁷³⁵ In addition to this right; the *Reconstruction and Development*

⁷²⁶ Lucius Johannes Snyman Botes, “Community Participation in the Upgrading of Informal Settlement: Theoretical and Practical Guidelines” (1999) PhD thesis, Bloemfontein: University of the Free State at 4. See also, Nozibele Mjoli, Raymond Nenzhelele & Esther Njiro, *Assessment of Gender Equity in Water User Associations* (Gezina: Water Research Commission, 2009).

⁷²⁷ *White Paper on a National Water Policy for South Africa*, 1997 at 28. See also, Baden, *supra* note 78.

⁷²⁸ *White Paper on Water and Sanitation*, 1995.

⁷²⁹ Hemson, *supra* note 652, at 26.

⁷³⁰ Department of Water Affairs and Forestry (DWA), *Water Supply and Sanitation Policy White Paper: Water – an indivisible National Asset* (Cape Town, DWA, 1994) at 28.

⁷³¹ The Mvula Trust, *Role of Women in Community Water and Sanitation Supply Projects* (Durban: A DRA – Development Report, 1998). Hemson, *supra* note 652, at 26.

⁷³² Scott, *supra* note 274, at 44.

⁷³³ “Women’s Participation in Decision-Making” *supra* note 552.

⁷³⁴ Brooks & Winfield, *supra* note 666, at 1. See also, Sigenu, *supra* note 645, at 57.

⁷³⁵ Lyla Mehta & Zolile Ntshona, *Dancing to two tunes? Rights and market-based approaches in South Africa’s water domain* (2004) online: Sustainable Livelihood in Southern Africa Research Africa Research Paper 17 at 5 <https://pdfs.semanticscholar.org/c07b/27e6baa7348b19705d3142e497c314693a34.pdf?_ga=2.217805588.32157667.1596393967-1308931970.1579926716>.

Programme, 1994;⁷³⁶ the *Water Service Act*, 1997;⁷³⁷ the *White Paper on a National Water Policy for South Africa*, 1997;⁷³⁸ and *National Water Act 1998*⁷³⁹ encourage the participation of all people (with a particular focus on rural women stakeholders⁷⁴⁰), in water resources decision-making and management.⁷⁴¹ For example, the *Water Service Act*, 1997 and the *National Water Policy*, 1997 facilitate participation through educating all people living in South Africa about healthy living practices as well as the wise use of water and sanitation services. Also, by supporting local efforts to develop and disseminate appropriate programmes for promotion, training, health, and hygiene education. Furthermore, the *National Water Act*, 1998 mandates the inclusion of water users, who mostly are women, in the process of decision-making by appointing persons other than board members to the temporary or standing committee meetings;⁷⁴² thus, it facilitates a gender-sensitive decision-making process.

Studies reveal that “[t]he participation of women in water committees has undoubtedly brought some advance in rural areas.”⁷⁴³ For instance, although women represented 16% of the water committee membership, their participation in key Water User Committees (WUCs) roles is associated with “more effective water management, including regular meetings and revenue collection, and improved functioning of water systems.”⁷⁴⁴ Thus, by attending committee meetings and having the ability to speak for themselves, by getting involved in planning for and managing water resources, and by being in key positions women were able to influence water management

⁷³⁶ *Reconstruction and Development Programme*, 1994 (a South African socio-economic policy framework).

⁷³⁷ *Water Service Act* (Act 108 of 1997).

⁷³⁸ *White Paper on a National Water Policy for South Africa*, 1997.

⁷³⁹ *National Water Act*, 1998.

⁷⁴⁰ de la Harpe, *supra* note 652, at 16.

⁷⁴¹ *Ibid* at 38.

⁷⁴² *National Water Act*, 1998 at s. 8 (5) (g), s. 80 (e), s. 19(1)(b) at 57, 110, 111. See also, Hemson, *supra* note 652, at 26.

⁷⁴³ *Ibid* (Hemson) at 31.

⁷⁴⁴ Mjoli, Nenzhelele & Njiro, *supra* note 670. See also, Brecht Mommen, Karen Humphries-Waa & Stanley Gwavuya, “Does Women’s Participation in Water Committees Affect Management and Water System Performance in Rural Vanuatu?” (Rugby: Practical Action Publishing, 2017).

decisions, and this led to 88% of rural households having access to improved water source.⁷⁴⁵ Consequently, 16% representation of women supports feminists' assertion that the quality (in terms of identities and representativeness) and not the quantity of women participating is of utmost importance to a successful process.⁷⁴⁶ It is also in line with feminists' assertion that including rural women as stakeholder participants can make a difference in the success or failure of policies, programmes or strategies.⁷⁴⁷ Let us now turn to investigate how South Africa has addressed rural women's participation in the law and policy of renewable energy.

4.2 The Legal Framework for Renewable Energy in South Africa in the Context of Participation

Currently, the 2003 White Paper on Renewable Energy Policy⁷⁴⁸ is the only policy initiative that provides an overarching legal framework for renewable energy in South Africa. Thus, no comprehensive umbrella law provides for this subject. Rather, most provisions on renewable energy are contained in a disparate set of laws.⁷⁴⁹ Legal instruments such as the Constitution,⁷⁵⁰ the White Paper on Energy Policy,⁷⁵¹ and the White Paper on Renewable Energy⁷⁵² will be discussed as follows from the perspective of rural women's participation. From its wording, the South African Constitution (discussed next) provides the participatory foundation upon which energy legal frameworks and practices are built.

⁷⁴⁵ Vanuatu National Statistics Office, *Demographic and Health Survey 2013 Final Report* (New Caledonia: Secretariat of Pacific Community, 2013) at 21. See also, *Ibid* (Mommen), at 217.

⁷⁴⁶ "Women's Participation in Decision-Making," *supra* note 552.

⁷⁴⁷ Reinharz, *supra* note 220.

⁷⁴⁸ DME, 2003 *supra* note 218.

⁷⁴⁹ Jan Glazewski, "The Legal Framework for Renewable Energy in South Africa" online: University of Cape Town at 1<https://www.un.org/esa/sustdev/sdissues/energy/op/parliamentarian_forum/glazewski_re_sa.pdf>. See also, Romain Mauger & Michelle Barnard, "Addressing fragmentation in the South African renewable energy governance effort - lessons to be learnt from France" (2018) 29 J. Energy Southern Africa.

⁷⁵⁰ *Constitution of South African*, 1996.

⁷⁵¹ DME, 1998 *supra* note 217.

⁷⁵² DME, 2003 *supra* note 218.

4.2.1 The Constitution of the Republic of South Africa, 1996

Through the efforts of a dominant women's movement in Apartheid, the democratic transition in South Africa has enshrined gender equality within the constitution and has given women 'unprecedented political and legal equality'.⁷⁵³

In this thesis, the democratic Constitution of the Republic of South Africa is relevant from three points of view. First, chapter 2 of the Constitution⁷⁵⁴ makes justiciable the provision for the environmental rights of all citizens. By this provision, the Constitution firmly puts environmental concerns on a legal and socio-political agenda. Specifically, section 24 provides that everyone has the right:

- a) To an environment that is not harmful to their health or well-being; and
- b) To have the environment protected, for the benefit of the present and future generations, through reasonable legislative and other measures that –
 - i) prevent pollution and ecological degradation
 - ii) promote conservation; and
 - iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.⁷⁵⁵

This section provides the basis for the enactment of several environmental laws as well as renewable energy-related legal frameworks outlined below. Accordingly, it firmly puts environmental issues in general and energy-related environmental concerns onto the agenda of the judiciary while promoting clean energy from renewable energy options. In addition to securing ecologically sustainable development for the benefit and well-being of the present and future generations, the Constitution provides for justiciable measures to facilitate legislative process such

⁷⁵³ Catherine Albertyn, "Contesting Democracy: HIV/AIDS and the Achievement of Gender Equality in South Africa" (2003) 29:3 *Feminist Studies* 595 at 604. See also, Lucy Doyle, "What has been the impact of the democratic transformation on the position of women within South African society?" online: South African History Online < <https://www.sahistory.org.za/article/what-has-been-impact-democratic-transformation-position-women-within-south-african-society-l>>.

⁷⁵⁴ Constitution of South Africa, 1996 at s. 24.

⁷⁵⁵ *Ibid.*

as public education⁷⁵⁶ and information dissemination.⁷⁵⁷ This is so because education and information will mentally prepare citizens and help make participation in legislative processes efficient, effective and a lot easier for both citizens and lawmakers.

Second, in sections 55, 68 and 152 respectively, the Constitution determines the roles of the national, provincial, and local spheres of government which are distinctive, interdependent, and interrelated. Schedule 4 provides for the concurrent list i.e. the functional areas to be legislated by the national and provincial legislature. While Parts A and B of Schedule 4 and Parts A and B of Schedule 5 include a number of items relevant to environmental preservation and management, Part B of Schedule 4 makes reference to energy especially in the context of “electricity and gas reticulation.”⁷⁵⁸ Furthermore, while Parts A and B of schedule 4 are within the functional areas of the concurrent legislative list and to be legislated by the National and Provincial legislatures; Parts A and B of Schedule 5 are within the functional areas of exclusive provincial legislative competence. That said, the local government can also legislate on matters contained in Part B of Schedule 5⁷⁵⁹ to the extent set out in section 155(6)(a) and (7) of the Constitution.⁷⁶⁰

Also, by virtue of chapter 7 of the Constitution, municipal councils are also vested with both legislative and executive authorities, and the rights to govern on their own initiative the affairs of their communities, including in energy matters. However, such authorities, rights and/or

⁷⁵⁶ *Ibid* at s. 29 (According to the section, “everyone has a right to receive education in the official language or languages of their choice in the public educational institutions where that education is reasonably practicable.”)

⁷⁵⁷ *Ibid* at s. 32.

⁷⁵⁸ *Ibid* at Schedule 4. See also, Parliament of the Republic of South Africa, “How a Law is Made” online: <<https://www.parliament.gov.za/how-law-made>>.

⁷⁵⁹ *Ibid* at Schedule 4 & 5 of Part B.

⁷⁶⁰ *Ibid* at s.155 (6) (a) and (7) (The Constitution provides thus:

155 (6) Each provincial government must establish municipalities in its province in a manner consistent with legislation enacted in terms of subsections (2) and (3) and, by legislative or other measures, must –

(a) provide for the monitoring and support of local government in the province)

155 (7) The national government, subject to section 44, and the provincial governments have the legislative and executive authority to see the effective performance by municipalities of their functions in respect of matters listed in Schedules 4 and 5, by regulating the exercise by municipalities of their executive authority referred to in s.156 (1).

initiative are subject to national and provincial legislation, as constitutionally provided.⁷⁶¹ This means that the South African government at all levels has a constitutional obligation to deliberate and provide laws on basic services (e.g., energy, water, health, and educational facilities), for all citizens wherever they reside. Currently, the Department of Minerals and Energy takes overall responsibility for renewable energy policy in South Africa, including ensuring through policies and laws that activities are undertaken effectively.⁷⁶²

Third, a holistic look at the Constitution shows that the state must establish an energy legal framework that ensures that the country's energy resources are adequately tapped and developed to cater for the needs of the nation.⁷⁶³ This means that energy should be accessible to all citizens and at an affordable cost to enable the sustainable development and growth of the country's economy. For this to become a reality in the renewable energy industry in particular, the Constitution makes provision for a participatory framework for all sectors. As a democratic state, there are several sections in the Constitution that directly charge the government, especially the National Assembly and the provincial legislatures, with the responsibility of facilitating public participation. For instance, sections 59(1), 70(b), 72 (1) (a), 115(a), 152 (a) and (e) of the Constitution mandate decision-making institutions to "facilitate public involvement in the legislative and other processes of the Assembly and its Committees."⁷⁶⁴ In line with the

⁷⁶¹ *Ibid* at s.151 (2) and (3).

⁷⁶² DME, 2003 *supra* note 218, at xii. See also, Global Legal Insights, "Energy 2020: South Africa" online: <<https://www.globallegalinsights.com/practice-areas/energy-laws-and-regulations/south-africa>> (President Ramaphosa on the 29th of May 2019 announced that the "Department of Mineral Resources and the Department of Energy are to be merged into a single department named the Department of Mineral Resources and Energy (DMRE).")

⁷⁶³ United Nations, "Energy" (2011) online: Sustainable Development Goals Knowledge Platform <<https://sustainabledevelopment.un.org/index.php?page=view&nr=651&type=504&menu=139>>. See also, DME, 1998 *supra* note 217, at 3. See, Helmo Preuss, "Eskom Finally gets Ahead of the New Build Delivery Curve" *The Nerve Africa*, (March 14 2016), Accessed April 22 2019 online: <<https://thenerveafrica.com/4526/eskom-finally-gets-ahead-new-build-delivery-curve/>>.

⁷⁶⁴ *Constitution of South Africa*, 1996 at s.59 (1).

constitutional provision empowering municipalities with the right to administer gas and electricity reticulation;⁷⁶⁵ section 16 of the Municipal Systems Act 2000⁷⁶⁶ also obliges municipalities to:

develop a culture of municipal governance that complements formal representative government with a system of participatory governance, and must for this purpose (a) encourage, and create conditions for, the local community to participate in the affairs of the municipality, including in—(I) integrated development planning; (ii) the performance management system; (iii) performance, (iv) the budget (v) and strategic decisions relating to services.⁷⁶⁷

That said, there has been judicial recognition of the right to participate. For instance, in *Doctors for Life International v Speaker of the National Assembly & Ors*⁷⁶⁸ the Applicant challenged the constitutional validity of four health legislation⁷⁶⁹ on the basis that the Parliament failed to fulfil its constitutional obligation⁷⁷⁰ to facilitate public involvement during its legislative processes (including those of its committees), and before enactment. Ngcobo J. held that the obligation to facilitate public involvement is a material part of the law-making process, and failure to comply with it renders the resulting legislation invalid. Accordingly, he declared the *Traditional Health Practitioners Act* (THP Act)⁷⁷¹ and the *Choice on Termination of Pregnancy Amendment Act* (CTOPA Act)⁷⁷² inconsistent with the provisions of the Constitution, and as such invalid.

For proper functioning of the legislature, the Constitution states that the National Assembly and the National Council of Provinces respectively may make rules and orders⁷⁷³ concerning their activities particularly with respect to a representative and participatory democracy, public

⁷⁶⁵ DME, 2003 *supra* note 218, at 22.

⁷⁶⁶ Republic of South Africa Local Government: Municipal System Act, 2000 at s.16.

⁷⁶⁷ *Ibid* at 16 (1) (a) (i-v). See also, Imraan Buccus, “Civil Society and Participatory Policy Making in South Africa: Gaps and Opportunities” (2011) online: Trust Africa at 7 <<http://africanphilanthropy.issuelab.org/resources/19672/19672.pdf>>.

⁷⁶⁸ *Doctors for Life International v Speaker of the National Assembly & Ors*. [2005] Case CCT 12/05, (South Africa).

⁷⁶⁹ The Choice on Termination of Pregnancy Amendment Act 38 of 2004 (“the CTOP Amendment Act”); the Sterilisation Amendment Act 3 of 2005; the Traditional Health Practitioners Act 35 of 2004 (“the THP Act”); and, the Dental Technicians Amendment Act 24 of 2004.

⁷⁷⁰ *Constitution of South Africa*, 1996 at s.188 (1)(a) & s. 72(1)(a).

⁷⁷¹ *Traditional Health Practitioners* (Act 35 of 2004).

⁷⁷² *Choice on Termination of Pregnancy Amendment* (Act 38 of 2004).

⁷⁷³ For instance, *the Western Cape Petitions Act, 2006* (Act 3 of 2006) which expresses the framework for the receipt and processing of petitions. See also, Sharna Fernandez, *Strategic Plan 2015/16 – 2019/20* (Cape Town: Western Cape Provincial Parliament, 2015) at 17: the Western Cape Provincial Parliament, Strategic Plan 2015/16 – 2019/20 outlines provincial mechanisms and strategic goals to ensure that the public has the ability to engage in law making.

involvement, transparency and accountability.⁷⁷⁴ To affirm this position the Supreme Court in *King and Other v Attorneys Fidelity Fund Board of Control & Another*⁷⁷⁵ held that it is a constitutional requirement that the rules and orders of the National Assembly for the conduct of its activities must be with due regard not only to a representative democracy but also to a participatory democracy. The Supreme Court in *King's case* also

finds expression in the National Assembly's power to receive petitions, representations or submissions from any interested persons or institutions, its duty to facilitate public involvement in its legislative and other processes and of those of its committees, its duty generally, to conduct its business in an open manner and hold its sittings and those of its committees in public, and its duty, generally, not to exclude the public or the media from sittings of its committees.

How has the Constitution impacted the participation of women in South Africa? How have women influenced the country's national sustainability agenda in terms of promoting renewable energy policies and sustainable development? I examine these questions in the following subsections with the aid of illustrative examples.

4.2.1.1 The Impact of Constitutionally Promoting Public Participation in South Africa

Facilitating active public participation in the South African legislature as a constitutional imperative ensures a *living* democracy where citizens perceive that they have the political agency to influence law-making.⁷⁷⁶ This is evidenced in the increasing number of women participating in the legislative sector. For instance, before the advent of democracy in 1994 women merely represented 2.7% of people in Parliament. However, since democracy women have made strides both in South African politics, and all other sectors of society. In 2015, the South African government noted that,

⁷⁷⁴ *Constitution of South Africa*, 1996 at s. 70(1) (b) & 116.

⁷⁷⁵ *King and Others v Attorneys Fidelity Fund Board of Control and Another* [2005] ZASCA 561/2004.

⁷⁷⁶ Legislative Sector South Africa, *Public Participation Framework: For the South African Legislative Sector* (s:I: Legislative Sector South Africa, 2013) at 14.

following the first democratic elections, women representation in the National Assembly stood at 27.7 percent. In 1999 that figure increased to 30 percent and then to 32.7 percent in 2004. After the 2009 national elections women representation reached 42 percent. Currently, women ministers comprise 41 percent of the Cabinet, women deputy ministers make up 47 percent of the total number of deputy ministers and there is a 41 percent representation of women in the National Assembly.⁷⁷⁷

A look at the participatory situation in other countries like Rwanda show that in 2015 women represented 63.8% of people in Parliament.⁷⁷⁸ Compared to the insignificant 6.7% participation of women in the Nigerian National Assembly,⁷⁷⁹ South Africa is faring decently in enabling women to take an active role in government, and globally ranks as number ten for female representation in the legislature.⁷⁸⁰ Thus, through qualities – identity and representativeness, women can influence energy policy outcomes. An illustration of this success can be seen in the energy sector, and in the way the government has made areas impacting women’s well-being such as households, clinics, and schools the targets for improvement. As an example, over 5.2 million households and more than 12,000 schools were successfully connected to the electric grid between 1994 and 2010. Also, over 345 clinics, 3 000 schools and 46 000 households were supplied with off-grid renewable energy electricity.⁷⁸¹ Official statistics released in 2012 further show that households using electricity for lighting increased from 58.2% in 1996 to 84.7% in 2011 while those using paraffin and candles decreased from 12.7% to 3.0% in 1996 and from 28.7% to 11.4% in 2011.⁷⁸² According to the *White Paper on Energy Policy Development*, which I discuss in more detail in the following section,

⁷⁷⁷ South African Government, Women’s Month 2015 (2015) online: Republic of South Africa <<https://www.gov.za/womens-month-1-31-aug-2015>>.

⁷⁷⁸ Inter-Parliamentary Union, *Women in Parliament: 20 Years in Review* (s:I: Inter-Parliamentary Union, 2015).

⁷⁷⁹ Independent National Electoral Commission (INEC), *Report of the Registration and election Review Committee (RERC)* (s:I: Independent National Electoral Commission (INEC), 2012) at 130. See also, A. Irene Pogonson, “Gender, Political Parties and the Reproduction of Patriarchy in Nigeria: A Reflection on the Democratisation Process, 1999-2011” (2012) 11:1 J. African Elections 100 at 109.

⁷⁸⁰ Inter-Parliamentary Union, *Women in National Parliaments. (2019)* online: <<https://www.ipu.org/wmn-e/classif.htm>>.

⁷⁸¹ Gisela Prasad, “South African Electrification Programme” (2018) online: Energy Research Centre < <https://energy-access.gnesd.org/cases/22-south-african-electrification-programme.html>>. See also, Mary Willcox & Dean Cooper, “NAE Case Study: South Africa, Integrated National Electrification” (2018) online: National Approaches to Electrification <https://energypedia.info/wiki/NAE_Case_Study:_South_Africa,_Integrated_National_Electrification>.

⁷⁸² Statistics South Africa, *Statistical Release (Revised): Census 2011* (Pretoria: Statistics South Africa, 2012) at 61.

the “[g]overnment commits itself to implementing reasonable legislative and other measures, within its available resources, to progressively realise universal household access to electricity.”⁷⁸³

Furthermore, the policy states that,

[an] important factor to consider when formulating energy policy is that most household energy users are women. The gendered division of labour traditionally means that women are a “disempowered” class. They are responsible for managing household resources and doing menial work in the home—using appliances to perform energy tasks and purchasing fuels.⁷⁸⁴

In view of the above, since 2004, the South African government set up an Electrification Programme where it provides free basic electricity of 50 KW per month for poor households with a minimal connection fee of about USD 30; for certain municipalities like Cape Town the connection fee can be deducted from their monthly electricity bills using a 14% rate each time electricity purchases are made.⁷⁸⁵ The Electrification Programme also has a positive impact on poor people who cannot afford to pay for electricity connection. In line with the 1998 Energy White Paper directive to establish a national Electrification Programme, the Integrated National Electrification Programme (INEP) was established in 2000. Currently, the INEP is undertaking an “Electricity for All” programme with a “target of access to electricity for all formal households by 2025.”⁷⁸⁶

4.2.2 White Paper on Energy Policy Development

There *was* a significant change in the post-Apartheid energy legal system that allows for greater emphasis on accountability, inclusiveness and transparency with the aim of building confidence in the policy development process.⁷⁸⁷ This according to Eberhard and van Horen, was

⁷⁸³ DME, 1998 *supra* note 217.

⁷⁸⁴ *Ibid* at 31, 9.

⁷⁸⁵ Marlett Wentzel, “Achieving Universal Access to Electricity in South Africa” (2005) online: Energize <<https://www.ee.co.za/wp-content/uploads/legacy/Achieving%20universal%20access.pdf>>.

⁷⁸⁶ GIA Costella, “Department Aims to Provide Electricity for all South Africans by 2025” Creamer Media’s Engineering News (February 8, 2013) online: < https://www.engineeringnews.co.za/article/departments-aims-to-provide-electricity-for-all-south-africans-by-2025-2013-02-08/rep_id:4136>. See also, Willcox & Cooper, *supra* note 724. See, GET.invest, “South Africa: Energy Sector” online: GET.invest <<https://www.get-invest.eu/market-information/south-africa/energy-sector/>>.

⁷⁸⁷ DME, 1998 *supra* note 217, at para 4.1.

as a result of the lifting of international sanctions in 1993 and the democratic election in 1994.⁷⁸⁸ Between 1994 and 1997 the Government of National Unity (GNU)⁷⁸⁹ concentrated more on re-addressing Apartheid biases in all sectors including the energy sector. For instance, in 1996 the International Energy Agency (IEA) noted that,

[t]hemes of transparency and inclusion in the policy making process supplanted those of opacity and exclusion, while the policy imperatives of social equity, economic growth and environmental sustainability replaced the siege-engendered pre-occupation with self-sufficiency⁷⁹⁰

This means that socially, equity includes the act of participation which was not allowed in the Apartheid era of secrecy. Economically, energy is adequately supplied and distributed to both black and white homes as well as small, medium and large-scale businesses while promoting economic growth. Although a lot of progress is evidently being made economically, this does not mean that all homes and businesses in South Africa have reliable, constant, and affordable energy. Environmentally, light sources from electricity should exceed those from paraffin, candle and firewood which emit black carbon, the third largest forcing pollutant that warms the atmosphere.⁷⁹¹

As mentioned above, in 1998 the Department of Minerals and Energy developed and published the *White Paper on Energy Policy*.⁷⁹² The policy formulation process⁷⁹³ was remarkable especially efforts made to include the participation of previously deprived and marginalized groups, such as blacks and women in its development.⁷⁹⁴ For example, the policy formulation process included 1) educating citizens (by holding workshops, building public confidence by communicating policy documents in ways that are clear and understandable); 2) identifying energy

⁷⁸⁸ Anton A. Eberhard & Clive Van Horen, *Poverty and Power: Energy and the South African State* (London: Pluto Press, 1995). See also, Qase, *supra* note 610, at 11. See, DME, 1998 *supra* note 217, at 5.

⁷⁸⁹ *Interim Constitution of South Africa* (Act No. 200 of 1993) at clause 88 (The *Interim Constitution* recognized the GNU).

⁷⁹⁰ International Energy Agency, *Energy policies of South Africa 1996 Survey (Energy Policies of IEA Countries)* (Paris: Organisation for Economic Co-operation and Development, 1996) at 21.

⁷⁹¹ United States Environmental Protection Agency (EPA), *supra* note 17, at 6.

⁷⁹² DME, 1998 *supra* note 217.

⁷⁹³ Process included training, workshop, and actual participation.

⁷⁹⁴ Qase, *supra* note 610, at 11.

policy issues and dividing them into sections, including energy governance, energy demand, energy supply etc.; 3) identifying the underlying causes of problems; 4) identifying possible solutions, analyzing their implications; and, 5) drafting an Energy Policy Discussion Document (also known as the *Green Paper*).⁷⁹⁵

Furthermore, to facilitate an effective and participatory policy development process the government through the Department of Minerals and Energy supported capacity building, education, information dissemination and energy awareness.⁷⁹⁶ For instance, community radio was/is one accessible and readily affordable medium within the rural community to educate and disseminate information.⁷⁹⁷ Educational documents published in all local languages recognized by the country's Constitution was/is another channel for disseminating information.⁷⁹⁸ Concerning capacity building (typically defined as the development and strengthening of human and institutional resources), individuals are trained to have the ability to perform functions, solve problems and achieve objectives.⁷⁹⁹ This means that by raising awareness, education and building capacity women are transformed beyond performing household tasks. It further means that where women depend on unsustainable energy production and use, there is a possibility of changing their mindsets and attitudes toward the use of modern renewable energy.⁸⁰⁰ For instance, through these measures (raising awareness, education and building capacity), and with the support of Land O'Lakes International Development, a USAID-funded organization; rural women were trained to

⁷⁹⁵ DME 1998, *supra* note 217, 17 & 18.

⁷⁹⁶ *Ibid* at 16, 98.

⁷⁹⁷ Madeleine C. Fombad & Glenrose Veli Jiyane, "The role of community radios in information dissemination to rural women in South Africa" (2016) 51:1 J. Librarianship Information Science 47 at 50.

⁷⁹⁸ *Constitution of South Africa*, 1996 at s.6. See also, Jana Möller, "The State of Multilingual Publishing in South Africa" (2013) 11:1 Revue électronique d'études sur le monde anglophone. See also, Toby Mendel, *Parliament and Access to Information: working for Transparent Governance* (Washington: International Bank for Reconstruction and Development/The World Bank, 2005) at 1.

⁷⁹⁹ World Health Organization, "Tobacco Free Initiative (TFI): capacity Building and Initiatives" online: <https://www.who.int/tobacco/control/capacity_building/background/en/>.

⁸⁰⁰ United Nations Development Programme (UNDP), *Capacity Development: A UNDP Primer* (New York: United Nations Development Programme, 2009) at 1.

design a solar-powered pump that is mobile, easily transported between fields and stored when not in use. The solar-powered pump is capable of irrigating one acre for 6-12 hours a day. This way women were able to change their mindset from using buckets and cans, a much more time-consuming method.⁸⁰¹

In addition, through the 1998 White Paper on Energy Policy, the government encouraged energy supply solutions which provide appropriate and affordable access to electricity through measures, including budget allocation, technology-oriented research,⁸⁰² facilitating local technical skills, participation and using local materials.⁸⁰³ This is also in line with section 16(3) of the country's National Energy Act 2008⁸⁰⁴ which provides that,

[i]n respect of the rights in any discovery, invention or improvement that are contemplated in subsection (1), the South African National Energy Development Institute may award to the person responsible for the discovery, invention or improvement such bonus as it deems fit, or make provision for financial participation by him *or her* in the profit derived from such discovery, invention or improvement to such extent as the Minister may determine with the concurrence of the Minister of Finance.

Therefore, the above Act encourages any discovery, invention, and improvement made through local technical skill; it adopts a gender-inclusive approach by expressly including “him or her;” and it aims at making provision for financial participation in this regard. The following illustrative example helps put this section in context.

4.2.2.1 Case Study: The Active Participation of Rural Women in Renewable Energy Policy-Making Process

In 1993, a group of women activists who attended the National Energy Forum were stunned by the lack of women at the meeting. In view of the ideology that law has been fundamental to the

⁸⁰¹ Clare Bishop-Sambrook, *Compendium of Rural Women's Technologies and Innovations: Gender, Targeting and Social Inclusion* (Rome: International Fund for Agricultural Development, 2016).

⁸⁰² Technology-oriented research “entails physical investigations using basic and applied research methodologies, in laboratories, in pilot projects and in field work.”

⁸⁰³ DME, 1998 *supra* note 217, at 48, 49, 55, 93.

⁸⁰⁴ *National Energy Act*, 2008.

historic exploitation of women,⁸⁰⁵ they requested that more women attend the forum. By bringing together their experiences, this group of women decided to form a network which they called the Women's Energy Group (WEG).

The WEG brought together a broad spectrum of women from South African communities, including rural and urban, rich and poor, research institutions, non-governmental organizations, parliamentarians and personnel from energy industries. They all committed to transform the energy sector. Through participatory methods (e.g., visits to rural communities with energy issues, organized trainings and workshops that allowed for one-on-one engagement), the WEG served as a catalyst for poor and rural women to speak, and for the wealthy ones to listen in a way that allowed poor and rural voices shape outcomes.⁸⁰⁶ For instance, members of the WEG participated in various working groups of the National Electrification Forum which had been formed to negotiate an electrification programme.

Through lobbying, the WEG was successful in including the representation and participation of rural women in the decision-making process of regulatory bodies such as the National Electricity Regulator (NER).⁸⁰⁷ The WEG drew their strengths and ideologies from pre-1994 women's movements like the Rural Women's Movement. Both the Rural Women's Movement, and the WEG believed that it *is* more likely to address the energy needs and interests of poor women if this category of women represented and participated themselves in decision-making processes.⁸⁰⁸ As a result, the WEG had rapidly developed to raise the profile for women and energy in South Africa. By organizing and preparing rural women through workshops, trainings, and repeated dialogue, the WEG aimed at ensuring that energy policy- and law-making

⁸⁰⁵ Fineman, *supra* note 212, at 14. See also, Dalton, *supra* note 241, at 2. See, Ainsworth, *supra* note 241.

⁸⁰⁶ *Ibid* at 85.

⁸⁰⁷ *Ibid*.

⁸⁰⁸ Bronwyn James, "At the Margins of Power: Gender and Policy in the Energy Sector" (1999) 15:1 Agenda: Empowering Women for Gender Equity - AGI Monograph at 25.

processes were participatory, and policies and laws contained gender-sensitive provisions. Also, by exposing women to energy related technical skills (for instance, building, maintaining, and using stoves and biogas technologies etc.), the WEG educated rural women on safe and economically sound ways of using energy. Through trainings, the WEG enabled women to gain the technical skills needed to pursue careers in the field of energy.⁸⁰⁹

After the first democratic election in 1994, the need to design and implement an energy White Paper arose. The WEG among other stakeholder representatives (including the EDRC, DMEA, MEPC etc.), wrote and submitted a discussion *Green Paper* with a focus on household energy and women's representation. Through the *Green Paper*, the WEG was determined to establish for the then-new South African government, energy policy priorities that considered women's perspectives and needs. As part of the process, a National Energy Summit was proposed by the National Department of Minerals and Energy (DME). Representatives of all stakeholder groups were to attend the National Energy Summit which was expected to produce a consensus on the goals of the energy sector. Prior to the summit, the WEG objected to the intended process on the ground that it was unrealistic particularly for those unfamiliar with the energy sector, to digest the 220 pages of technical language in the discussion documents.⁸¹⁰

After a huge struggle, the WEG was able to get the support of the DME, for a programme to raise "the capacity of community representatives so that they could participate actively in the making of the [then] new energy policy for the country."⁸¹¹ The WEG was contracted to design and conduct workshops which would mobilize and prepare community representatives for the

⁸⁰⁹ *Ibid.*

⁸¹⁰ Wendy Annecke, "Impact of Women's Energy Group on National Policy: South Africa" in Gail Karlsson, ed, *Generating Opportunities: Case Studies on Energy and Women* (New York: United Nations Development Programme, 2001) at 79.

⁸¹⁰ DME, 1998 *supra* note 217, at 17. See also, *Ibid* (Annecke) *supra* note 810, at 82.

⁸¹¹ Sarah Ward, "Transforming the Energy Sector-Transforming Local Government: SEED's Mission in South Africa" in *Energia News*, "Women, Gender, and Energy in South Africa" (2003) 6:1 Gender & Sustainable Energy at 14, 15.

summit.⁸¹² Over 100 confident and outspoken community representatives (mostly black women) were selected to attend the Summit. The selection process was by a vote by participants who attended the workshops organized by the WEG. The women were interested in learning about energy and the policymaking process. They were also interested in taking an active role in the process. Efforts were made to ensure that the women who represented and participated had a clear understanding of community energy problems. A few days before the national summit was held, the community representatives met together to discuss these strategies.⁸¹³

Although community representatives successfully participated at the National Summit as planned, they felt they were being marginalized as their voices were not being taken seriously by the 300 more powerful delegates.⁸¹⁴ That said, the exercise made visible to the government women's energy issues, including energy poverty, energy service demands, and environmental issues. Thus, through the help of the WEG, these issues became a visible and an important part of the local and national agenda.⁸¹⁵

The National Energy Summit was a historic event in the South African energy sector, being the first-time black women from poor communities were regarded as stakeholder participants. Moreover, these women had an opportunity to participate actively alongside other stakeholder representatives from the energy industry.⁸¹⁶ Even though most of the suggestions made by women who participated were either diluted or omitted in the final energy policy adopted in 1998 (*White Paper on Energy Policy* discussed above), women's participation was significant because at the minimum their energy issues and interests were placed on the national energy policy agenda.⁸¹⁷

⁸¹² Annecke, *supra* note 810, at 82.

⁸¹³ Annecke, *supra* note 810.

⁸¹⁴ *Ibid* at 79.

⁸¹⁴ *Ibid* at 82.

⁸¹⁵ Ward, *supra* note 755, at 14, 15.

⁸¹⁶ James, *supra* note 753, at 43.

⁸¹⁷ Annecke, *supra* note 810, at 79.

For instance, the *White Paper* committed to addressing the imbalance resulting in the under-representation of black women in the sector. According to the 1998 *White Paper on Energy Policy*,

The Department of Minerals and Energy will strive to increase the number of black people and women on all policy development structures, forums, parastatal boards and similar structures. A target of at least 30 per cent women and 50 per cent black participants and two per cent disabled persons by the year 2000, is envisaged, in line with the White Paper on Affirmative Action Policy.⁸¹⁸

Although these goals have yet to be fully met, some progress is being made. For instance, a black rural woman was appointed to one of the most powerful portfolios in the government of South Africa - Minister of Minerals and Energy.⁸¹⁹ Next, I examine the 2003 White Paper on *Renewable Energy Policy*.

4.2.3 White Paper on Renewable Energy Policy

By formulating and publishing the *White Paper on Renewable Energy Policy* in 2003, the government developed a strategic programme of action for generating energy through renewable energy resources.⁸²⁰ The 2003 *White Paper* plans to increase and encourage the diversity of energy supplied and consumed through modern renewable energy options. Furthermore, it aims at addressing energy poverty, avoiding energy imports, and minimizing environmental impacts.⁸²¹ Therefore, it envisions providing affordable and equitable access to energy services throughout South Africa while contributing to sustainable development and environmental conservation.

Interestingly, it recognizes the link between gender and energy and its implications for sustainable development.⁸²² For instance, the 2003 *White Paper* recognizes that the involvement of women in decision making regarding energy and the reflection of their concerns in the outcome

⁸¹⁸ DME, 1998 *supra* note 217. See also, *Ibid* (Annecke) at 83.

⁸¹⁹ UN Women, "Executive Director Phumzile Mlambo-Ngcuka" online: <<http://www.unwomen.org/en/about-us/directorate/executive-director/ed-bio>> (Ms. Phumzile Mlambo-Ngcuka served as Minister of Minerals and energy from 1999-2005.)

⁸²⁰ DME, 2003 *supra* note 218, at viii.

⁸²¹ *Ibid* at 3.

⁸²² *Ibid* at 38.

of energy policy-making could bring about the realization of sustainable energy development targets.⁸²³ Also, it could bridge the energy gap between urban and rural people, and lead to women in rural areas substituting firewood with clean energy and more efficient energy technologies.⁸²⁴ Similar to the 1998 *Energy Policy*, it states that women must be encouraged and assisted by way of education, including awareness raising, training programmes, and information dissemination. These measures are necessary for the effective participation of women and needed to “develop entrepreneurial skills through productive uses of renewable energy technologies.”⁸²⁵

As sated above, the policy provides for renewable energy options in South Africa.⁸²⁶ Therefore, one of the aims of the 2003 *White Paper* is to ensure that renewable energy resources are used optimally. Renewable energy such as biomass, wind, solar and small-scale hydro are available and are intended to be used for power generation and non-electric technologies such as solar heating, and biofuels.⁸²⁷ As noted by the 2003 *White Paper*,

Some of the main benefits of the White Paper will be renewable energy for rural communities, far from the national electricity grid, remote schools and clinics, energy for rural water supply and desalination, and solar passive designed housing and solar water heating for households in urban and rural settings and commercial applications.

As demonstrated above, the number of clinics (345), schools (3 000) and households (46 000) supplied with off-grid renewable energy electricity by 2010⁸²⁸ is evident that the 2003 *White Paper* is being implemented. That said, it should be noted that concerning hydro, South Africa is confronted with frequent droughts and intermittent flow, which pose obstacles to the success of

⁸²³ Prasad, *supra* note 724. (As already mentioned above this has led to the successful connection of 5.2 million households and more than 12,000 schools to the electric grid etc.)

⁸²⁴ DME, 2003 *supra* note 218, at 53.

⁸²⁵ *Ibid* at 39.

⁸²⁶ *Ibid* at i.

⁸²⁷ *Ibid* at i.

⁸²⁸ Gisela Prasad, “South African Electrification Programme” (2018) online: Energy Research Centre < <https://energy-access.gnesd.org/cases/22-south-african-electrification-programme.html>>. See also, Mary Willcox & Dean Cooper, “NAE Case Study: South Africa, Integrated National Electrification” (2018) online: National Approaches to Electrification <https://energypedia.info/wiki/NAE_Case_Study:_South_Africa,_Integrated_National_Electrification>.

hydropower.⁸²⁹ Again, to solve the hydro issue, in 1986 the ongoing Apartheid agreement - Lesotho Highlands Water Project (LHWP) treaty made between Lesotho and South Africa (for Lesotho to supply South Africa with water in exchange for royalty payments)⁸³⁰ was signed.

4.3 Why South Africa?

I selected South Africa because certain sections (including sections 59 (1), 70(b), 72(1) etc.) of the South African Constitution mandates decision-making institutions to facilitate public involvement in the legislative and other processes of the Assembly and its Committees. Interestingly, the actual participation of rural women occurred in the country's energy policy making process. In addition, the Supreme Court of South Africa has favourably adjudicated on matters relating to the participation of citizens. Also, the country makes justiciable its provision on the environmental rights of all citizens. What similarities and differences exist between the Nigeria example (discussed in chapter three), and the South Africa example?

4.4 Similarities and Differences between the Nigeria Example and the South Africa Example

4.4.1 Similarities

Both countries continue to use fossil fuels as their main sources of energy. Concerning renewable energy, both countries have similar situations. For instance, they both have the potentials for hydropower, biomass, geothermal, solar, and wind resources with larger potential for solar⁸³¹ (because of their geographical location), and biomass (because of large hectares of

⁸²⁹ "Hydropower in South Africa" Microhydropower.net online: <<http://www.microhydropower.net/rsa/>>.

⁸³⁰ Refilwe Mabula, "Whose Water is it Anyway?" University of the Witwatersrand (May 18, 2018) online: <<https://www.wits.ac.za/news/latest-news/research-news/2018/2018-05/whose-water-is-it-anyway.html>>.

⁸³¹ Douglas Banks & Jason Schäffler "The potential contribution of renewable energy in South Africa" *Generation* (2005) 37.

available natural woodlands and plantations).⁸³² In addition, both countries have yet to develop their geothermal energy. In terms of wind, both countries have fair wind potentials.⁸³³

Both countries were colonized. During colonial Nigeria and Apartheid South Africa, women were socially, economically, politically, and legally excluded from decision-making. For instance, legally in colonial Nigeria, the *1922 Sir Hugh Clifford Constitution* and the *1954 Lyttleton Constitution* excluded women from basic participation – by voting. Likewise, the Apartheid *Separate Representation of Voters Act*⁸³⁴ sought to deny political participation and representation of blacks including women at all levels of government.⁸³⁵

In both the colonial and Apartheid eras respectively, women's (especially Black women) activities were considered as "private" and "personal", while men regarded their activities to be "public" and "political."⁸³⁶ Also, certain laws⁸³⁷ and legal provisions which excluded women and blacks from participating were declared unconstitutional after the colonial and Apartheid eras.

In both countries' women experienced varied forms of intersecting and interacting discriminations based on identities, such as "womanness," poverty, location, and race. Thus, despite the significance of energy services for small industries and rural households in both countries, such services were not adequately supplied and rural women experienced inequities.

4.4.2 Differences

While South Africa continues to pursue coal-based power production, Nigeria focuses on the production of oil and gas. Concerning renewable energy, especially hydropower, while Lesotho

⁸³²Belynda Petrie & Duncan Macqueen, "South African Biomass Energy: Little heeded but much needed" IIED Briefing (2013).

⁸³³ http://www.energy.gov.za/files/esources/renewables/r_wind.html

⁸³⁴ *Separate Representation of Voters Act* (No. 46 of 1951). This was a South Africa law enacted by the apartheid government to remove the right of coloured voters in the Cape Province.

⁸³⁵ "Defiance Campaign 1952" *supra* note 605.

⁸³⁶ Veeran, *supra* note 638, at 58, 57.

⁸³⁷ Such as *Separate Representation of Voters Act* (No. 46 of 1951). This Act provided for the removal of coloured voters from the voting register.

supplies South Africa with water, Nigeria has abundant water resources. From the evidence above, the South African renewable energy policy appears to be better implemented. For instance, in 2015, while 15% of South Africans were without access to electricity supply, 60% of Nigerians lacked access to electricity.⁸³⁸ The reason for this may be because of the difference in the size of their population, and the amount of energy produced. While the population of South Africa is estimated at 54.96 million, the Nigerian population is estimated at over 170 million.⁸³⁹ Furthermore, in the domestic sector, South Africa generates 58,095 MW of electric power⁸⁴⁰ while Nigeria is mostly able to generate about 4,000 MW daily for its population.⁸⁴¹

In Apartheid and democratic South Africa, the women's movements (especially the rural women's movement with Lydia Kompe as the leader, and the WEG) went beyond raising women's consciousness, organizing women through collective action, helping women understand their common and shared land and energy issues; to actually lobbying/visiting and having dialogues with dominant male leaders on why they should consider and allow women to participate in decision-making. However, in democratic Nigeria the focus for NGOs like the Women Environmental Programme (WEP) is to educate "women and youths on their civic rights and responsibilities..."⁸⁴² which entail voting - the least form of participation. Although participation by voting is an important civil right, "no one should be a silent [citizen] merely casting a vote."⁸⁴³

⁸³⁸ IRENA, *Africa 2030: Roadmap for a Renewable Energy Future* (Abu Dhabi: IRENA, 2015) at 11. See also, NREEEP 2015, *supra* note 28, at iv.

⁸³⁹ *Ibid* (NREEEP 2015) at iv.

⁸⁴⁰ USAID, "South Africa Power Africa Fact Sheet" (October 21, 2019) online: <<https://www.usaid.gov/powerafrica/south-africa>>. In South Africa access to electricity is at 95% for urban areas and 92% in rural areas. Installed capacity includes 58,095 MW - hydro: 3,485 MW (6%), thermal: 48,330 MW (85%), wind: 2,323 MW (4%), and other: 580 MW (1%).

⁸⁴¹ USAID, "Nigeria Power Africa Fact Sheet" (November 24, 2020) online: <<https://www.usaid.gov/powerafrica/nigeria>>.

⁸⁴² Women Environmental Programme (WEP): "Brief About Us" (2020) online: WEP <<https://wepnigeria.net/index.php/brief-about-wep/>>.

⁸⁴³ Linda Gordon, "Socialist Feminism: The Legacy of the "Second Wave" (2013) 22:3 *New Labor Forum* 20 at 27.

In South Africa, the 1996 Constitution provides for a justiciable participatory framework for the renewable energy sector among others. In Nigeria, section 6 (6) (c) of the 1999 Constitution makes participatory matters provided particularly in section 14 (2) (c) non-justiciable.⁸⁴⁴

In South Africa, among other levels of government, the local government can legislate about energy issues. Energy-related matters in Nigeria remain within the purview of the national and state government.

Women's participation in the Apartheid era led to legal transformations, including the judicial recognition of the concept of participation as well as the active participation of the public in legal decision-making processes. In Nigeria, women's participation in the colonial era appears to have allowed for the *theoretical* recognition of concepts such as gender equality. Also, by virtue of section 6 (6) (c) of the 1999 Constitution the Nigerian Courts lack the jurisdiction to hear participatory matters, especially participation in law-making processes.

4.5 Summary and Conclusion

The chapter examined historic fights for voice and power by women in South Africa, and how these have transformed laws and participatory practices with a possible lesson for Nigeria. With the aid of three illustrative examples on access and right to environmental resources such as land, water, and energy, it focused on Apartheid energy policy- why and how women's participation occurred, and how women's participation has led to legal changes. In addition, it examined how Constitutional provisions have impacted the participation of women in South Africa as well as how women have influenced the country's national sustainability agenda in terms of promoting renewable energy policies and sustainable development.

⁸⁴⁴Constitution of Nigeria, 1999 at Chap. II. The sections contained in Chapter II of the 1999 Constitution is so germane because it provides for the political, economic and social blueprint of the country.

The national renewable energy legal frameworks, and the similarities and differences between the Nigeria example and the South Africa example were also analyzed. It concludes that both the Constitutional provisions and the judgements of the Supreme Court of South Africa on the right to participate provide interesting lessons on the significance of the inclusion of rural women in renewable energy legislation and government policies. In the next chapter, I critically analyze Nigerian renewable energy policies and laws to determine to what extent they allow for rural women's participation.

Chapter Five

A Critical Analysis of the Legal Framework for Participation in Decision-making on Renewable Energy Development in Nigeria: Giving Voices to the Voiceless

5.0 Introduction

The connection between women/gender and energy has begun to be recognized on the international agenda. This connection is widely viewed as one of the critical pathways for bridging the gap between energy interventions and the Sustainable Development Goals (SDGs); for example, the SDGs targeting women's education⁸⁴⁵ and decent employment,⁸⁴⁶ climate action,⁸⁴⁷ clean water⁸⁴⁸ and maternal health, child mortality,⁸⁴⁹ increasing gross domestic income, hunger and poverty eradication.⁸⁵⁰ At the domestic level, in Nigeria particularly, there is a growing consensus among lawmakers and scholars that developing a comprehensive and integrated renewable energy legal framework could play an important role in meeting development challenges,⁸⁵¹ and this will require the full participation of women,⁸⁵² including rural women.

To this end, the Nigerian government is constantly formulating legal frameworks for renewable energy. The overall thrust of these legal frameworks is to achieve sustainable development by ensuring reliable, secure, adequate, and optimal supply and utilization of rural

⁸⁴⁵ SDG 4.

⁸⁴⁶ SDG 8.

⁸⁴⁷ SDG 13.

⁸⁴⁸ SDG 6.

⁸⁴⁹ SDGs 3 & 5.

⁸⁵⁰ SDGs 10, 2 & 1.

⁸⁵¹ *Renewable Energy Master Plan*, 2005 at 31. These challenges include accelerating economic growth, reducing poverty, promoting human development and addressing environmental concerns. See also, Aliyu Salisu Barau, Aliyu Haida Abubakar, & Abdul-Hakim Ibrahim Kiyawa, "Not There Yet: Mapping Inhibitions to Solar Energy Utilization by Households in Africa Informal Urban Neighbourhoods" (2020) 12:840 *Sustainability* at 4. See, Charles, *supra* note 94, at 1. See, Efurumibe, *supra* note 39. See, Ladan, *supra* note 18.

⁸⁵² Cecelski, *supra* note 129, at 59.

electrification at an appropriate cost, and in an environmentally friendly manner.⁸⁵³ For instance, policies such as the *National Energy Policy* (NEP) 2003 committed to de-emphasizing the use of firewood in the nation's energy mix. Despite this promise among others, the NEP 2003 was unsuccessfully implemented and its objectives unattained, and therefore the energy issues persist, and sustainable development remains a challenge as the formulation of subsequent renewable energy legal frameworks (as shown below) suggest.

This chapter proceeds in three stages. First, it presents a legislative review of renewable energy policies and laws in Nigeria to identify whether there are legal measures to enable, enhance and/or facilitate women's right to effective participation in decision-making. Second, it investigates the participation of rural women in implementing renewable energy policies and projects. Third, it critically analyzes how participation is defined from the perspective of the Nigerian renewable energy policies and laws. It further analyzes whether these perspectives are sufficient to effectively make real changes to the energy lives and participation of rural women in both renewable energy policy- and law making, and in the sector itself.

5.1 The Constitution and other Legal Provisions: Legislative Framework for Participation

5.1.1 The Nigerian Constitution

As the supreme law of the Federal Republic of Nigeria, the Constitution is a fundamental part of Nigeria's democratic practice⁸⁵⁴ particularly as it relates to participation in decision-making processes in all sectors. Although, to date, the Nigerian constitutions have failed to clearly state how an active and effective participatory process in legal decision-making should be conducted;

⁸⁵³ *National Energy Policy*, 2003 at 8. See also, NREEEP 2015, *supra* note 28.

⁸⁵⁴ Chatham House, *The Review of Nigeria's 1999 Constitution: Report of a Consultation with UK-based Nigerians* (London: Chatham House, 2013) at 3

commencing with the 1960⁸⁵⁵ and 1979⁸⁵⁶ constitutions, they appear to have always recognized the importance of participation in legislative decision-making. For example, both constitutions permitted the presence and/or participation of persons other than a member of the House of Parliament in parliamentary proceedings.⁸⁵⁷ Similarly, the 1989 Constitution made it a duty for every citizen of Nigeria to *participate in and defend all democratic processes and practices*.⁸⁵⁸ Currently, the 1999 Constitution guides renewable energy policy and law-making processes. While section 14(2)(c) provides that “the participation by the people in their government shall be ensured...,” section 61 permits the presence and/or participation of any citizen in the proceedings of the legislature; notwithstanding, that such a person is a non-member of the legislative sector.⁸⁵⁹ Although section 14(2)(c) uses the word “ensure,” it is considered non-justiciable by virtue of section 6(c)(c).⁸⁶⁰ That said, section 61 appears to be justiciable because it falls outside the ambit of Chapter II (consisting of sections 13 -24) of the 1999 Constitution.

In Part II, paragraph 13 of the Constitution provides that,

The National Assembly may make laws for the Federation or any part thereof with respect to-

- (a) electricity and the establishment of electric power stations;
- (b) the generation and transmission of electricity in or to any part of the Federation and from one State to another State;

⁸⁵⁵ Section 60 of the Nigeria Constitution 1960 states that:

Each House of Parliament may act notwithstanding any vacancy in its membership (including any vacancy not filled when the House first meets after any dissolution of Parliament) and the presence or participation of any person not entitled to be present at or to participate in the proceedings of the House shall not invalidate those proceedings.

⁸⁵⁶ Section 57 of the Nigeria Constitution 1979 provides that,

The Senate or the House of Representatives [House of Parliament] may act notwithstanding any vacancy in its membership, and the presence or participation of any person not entitled to be present at or to participate in the proceedings of the House shall not invalidate those proceedings.

⁸⁵⁷Section 60 (2) of the Nigeria Constitution 1960. See also, Section 57 of the 1979 Constitution. These provisions are currently contained in Section 61 of the 1999 Constitution. See Section 61 of the 1999 Constitution.

⁸⁵⁸ Constitution of Nigeria, 1989 at s. 24 (h) [Emphasis added]. See also Chatham House, *supra* note 854, at 3.

⁸⁵⁹ Sections 61 & 102 of the 1999 Constitution. The Legislative arm of government includes the House of Representative, Senate (at the federal level), or the House of Assembly (at the state level). They provide that

The Senate or the House of Representatives may act notwithstanding any vacancy in its membership, and the presence or participation of any person not entitled to be present at or to participate in the proceedings of the House shall not invalidate those proceedings.

⁸⁶⁰ Section 6 (6) (c) of the 1999 Constitution provides that judicial powers shall not extend to any issue or question arising from Chapter II for which section 14 is part of.

Similarly, Part II, paragraph 14 states that,

A House of Assembly may make laws for the State with respect to -

- (a) electricity and the establishment in that State of electric power stations;
- (b) the generation, transmission and distribution of electricity to areas not covered by a national grid system within that State

Section 42 (1) (b) prohibits discrimination on the grounds of sex, status etc.⁸⁶¹ Since a country's constitution cannot be read in isolation but must be read in context,⁸⁶² a combined reading of the above provisions suggests that the 1999 Constitution lays down the legal foundation for an active and equitable participation of Nigerian citizens⁸⁶³ in law-making processes relating to decentralized electrification through renewable energy.⁸⁶⁴

To promote a planned and balanced economic development that enables an efficient and effective participation of all people in decision-making, the Constitution provides that, the government must direct its policy towards ensuring that citizens have the opportunity to secure sustainable livelihoods and suitable employment. It further ensures that "suitable and adequate shelter, food, a reasonable national minimum living wage, old age care and pensions, and unemployment, sick benefits and welfare of the disabled are provided for all citizens."⁸⁶⁵ One measure set by the Constitution to reasonably achieve these goals is for government at all levels to ensure equal and adequate educational opportunities for all genders while developing

⁸⁶¹ *Constitution of Nigeria*, 1999, C23 at s.15 (2).

⁸⁶² Yash Ghai, "Litigating the Basic Law: Jurisdiction, Interpretation and Procedure" in Johannes M.M Chan, H. L. Fu & Yash Ghai, eds, *Hong Kong's Constitutional debate: Conflict Over Interpretation* (Aberdeen: Hong Kong University Press, 2000) at 29.

⁸⁶³ *Constitution of Nigeria*, 1999, C23 at ss.14 (2) & 42. s. 42 is significant because it provides for the non-discrimination of all citizens.

⁸⁶⁴ *Ibid* at Part II 13 & 14. See also, Chatham House, *supra* note 854, at 3. See, Ladan, *supra* note 210, at 16.

⁸⁶⁵ Deloitte Nigeria, "The Fiscal Environment and the Nigerian Worker: Is a New Approach Required? Deloitte Nigeria (November 1, 2016), Accessed April 9, 2019 online: <<https://www.taxathand.com/article/1951/Nigeria/2016/The-fiscal-environment-and-the-Nigerian-worker-Is-a-new-approach-required>>. See also, *Constitution of Nigeria*, 1999, C23 at s. 16 (2) (a) & (d). See, Clifford Ndujihe, "Constitution Amendment: What the People Want" Vanguard (November 4, 2012), Accessed April 9, 2019 <<https://www.vanguardngr.com/2012/11/constitution-amendment-what-the-people-want/>>. Chapter II of the 1999 Constitution (of which section 14 is a part of) should be made enforceable to "address the socio-economic needs of young people in Nigeria, e.g., access to free and compulsory education, employment, housing, healthcare and quality food. Enforcement of Chapter II should adopt a similar enforcement regime to Chapter 4 in the Constitution."

technological and scientific capacity.⁸⁶⁶ It mandates the government to strive to practically eradicate illiteracy by providing free, compulsory and universal primary education, an important pre-requisite to an effective public participation. In addition, in sections 60 and 101, the 1999 Constitution empowers the legislative arm “to regulate its own procedure, including the procedure for summoning and recess of the House.”⁸⁶⁷ These constitutional provisions gave birth to the National Assembly *Standing Rules (Powers and Procedures) Act*⁸⁶⁸ (Standing Rules).

5.2 Other Legal Provisions: Legislative Frameworks for Participation

5.2.1 Standing Rules (Powers and Procedures) Act (Standing Rules)

The *Standing Rules* provide that following the second reading, bills are submitted to the relevant committees for further consideration of the bill and the organization of public hearings.

Accordingly,

[a]ny member of the *public or expert(s)*⁸⁶⁹ having interest in the bill may be allowed to attend the public hearing and make contributions to the public debate of the bill. A member of the public can make suggestion(s) on any aspect of the bill, but only a Member of the Committee can propose amendment[s] to the bill.⁸⁷⁰

Too often, the *Standing Rules* have been applied to support the participation of mainly government and industry experts as opposed to other members of the general public. For instance, in an interactive session held by the Senate Committee on Power, Steel Development and Metallurgy in 2017, the only participants other than the Committee members were the representatives of the Rural Electrification Agency (REA), National Power Training Institute of Nigeria (NAPTIN) Management, Nigerian Electricity Regulatory Commission (NERC)

⁸⁶⁶ *Constitution of Nigeria*, 1999, C23 at ss. 18 & 21 (b). Unfortunately, these sections fall under Chapter II and are deemed non-justiciable.

⁸⁶⁷ While section 60 refers to the Senate and House of Representative at the federal level, section 101 concerns itself with the activities of the House of Assembly at the state or provincial level.

⁸⁶⁸ Federal Republic of Nigeria, “National Assembly: The Legislative Process” online: <<http://www.nassnig.org/page/the-legislative-process>>. See also, Akande, J.O, *Introduction to the Constitution of the Federal Republic of Nigeria 1999* (Lagos: MIJ Publishers, 2000) at 150-151.

⁸⁶⁹ Emphasis Added.

⁸⁷⁰ Federal Republic of Nigeria (National Assembly,) *supra* note 868.

Management, and Nigerian Bulk Electricity Trading Plc. (NIBET) Management.⁸⁷¹ A close look at the 2015 *National Renewable Energy and Energy Efficiency Policy* (NREEEP),⁸⁷² and the 1979 *Energy Commission of Nigeria Act*⁸⁷³ (discussed in more detail in chapter three) suggests that these categories of legal persons are mostly informed about hearings ahead of time. In order to encourage and increase rural women's participation in policy and law making, the Standing Rules should be amended to ensure gender-equitable participatory measures, such as training and skill deployment, financing, information dissemination and energy education programmes⁸⁷⁴ (discussed in detail in Chapter six).

On a related note, the procedural aspects of public hearings should not be left to the discretion of the committee; rather, the Standing Rules should contain substantive provisions to facilitate public participation – and women's participation in particular. For example, public hearings on energy policy should be held in locations that are accessible to rural women, that is, in the rural community where an energy or environmental problem or project exist. This has been described by feminists as “bringing government to the people.”⁸⁷⁵ Additionally, the *Standing Rules* should demand that the legislature and/or committee give the public notice⁸⁷⁶ of the intended hearing. While taking into consideration the status and capacities⁸⁷⁷ of affected persons, such notices should be given within a reasonable period and in advance to allow people to prepare and make arrangements to attend. In addition, communications to the public should be made either

⁸⁷¹ “Senate Committee Holds Interactive Session on Power” Vanguard (October 23, 2017), Accessed April 1, 2019 online: <<https://www.vanguardngr.com/2017/10/senate-committee-holds-interactive-session-power/>>.

⁸⁷² NREEEP 2015, *supra* note 28.

⁸⁷³ *Energy Commission of Nigeria (ECN)*, 1979.

⁸⁷⁴ United Nations, *Equal Participation of Women and Men in Decision-Making Processes, With Particular Emphasis on Political Participation and Leadership*.” (New York: Division for the Advancement of Women, Department of Economic and Social Affairs, 2005) at 17.

⁸⁷⁵ Cheryl McEwan, ““Bringing Government to the People’: Women, Local Governance and Community Participation in South Africa” (2003) 34:4 *Geoforum* 469.

⁸⁷⁶ Policy and Legal Advocacy Centre (PLAC), *Assembly* (Abuja: Policy and Legal Advocacy Centre, 2015) at 41. For example, a public notice or announcement stating the date, time and location is usually issued in relation to recall, “a procedure where voters can remove an elected member of an Area Council, State House of Assembly or National Assembly from Office.”

⁸⁷⁷ For instance, such notices should also take into account the various differences e.g. literacy and illiteracy, rural and urban, etc.

through invitations, websites, handbills, placing adverts on radio, newspapers, televisions, notice boards and/or other conspicuous public places. In the event that the notice given for the hearing is too short for effective participation, the process should specify that interested persons who are unable to attend the hearing could make submissions through specified email addresses and/or print copies at a designated and easily accessible address. These submissions or contributions should be published so that the final policy or statute on the subject matter reflects the contribution of the people. In all cases concerning public hearings, submissions from the public on specific bills must be accepted in any local languages. For instance, in South Africa, the Constitution recognizes that equal treatment should be given to the country's eleven official languages when publishing public documents.⁸⁷⁸

In other words, public hearings must encourage easy accessibility, transparency and accountability. For proper functioning of a participatory democracy,⁸⁷⁹ the Constitution corroborates the above recommendations by providing for the fundamental right to freedom of information (also referred to as Access to Information), thought and expression without discrimination on the grounds of sex, status etc.⁸⁸⁰ The constitutional provision on the right of citizens to access information from public institutions (such as renewable energy institutions) was reaffirmed and entrenched in the 2011 *Freedom of Information Act* (FoIA).⁸⁸¹ Both the 1999 Constitution, and the FoIA make access to information a fundamental and justiciable right,⁸⁸² as discussed in the next section.

⁸⁷⁸ *Constitution of the South Africa*, 1996 at s. 6. See also, Möller, *supra* note 798. See also, Mendel, *supra* note, 798, at 1.

⁸⁷⁹ Khan Academy, "Types of Democracy" Accessed March 10, 2019 online: <<https://www.khanacademy.org/humanities/ap-us-government-and-politics/foundations-of-american-democracy/types-of-democracy/a/types-of-democracy>>. In a participatory democracy, citizens can influence policy decisions. However, they do not directly make those policies.

⁸⁸⁰ Constitution of Nigeria, 1999 C23 at ss. 39, 15 (2), & 42(2).

⁸⁸¹ *Freedom of Information Act*, 2011. See also, Funmilola Olubunmi Omotayo, "The Nigeria Freedom of Information Law: Progress, Implementation Challenges and Prospects" (2015) 1:6 University of Nebraska-Lincoln 1 at 6.

⁸⁸² *Ibid* at s. 1(3) & 2(6).

5.2.2 Freedom of Information Act (FoIA)

In theory, the FoIA should enable all members of the public such as rural women, to freely access public information and records from public institutions such as the Energy Commission of Nigeria, Federal Ministry of Environment, Ministry of Power and Steel, and other institutions associated with the renewable energy sub-sector. For effectiveness and efficiency, the Act mandates public institutions to organize and maintain a transparent and accountable informatory process in all their activities, operations and businesses.⁸⁸³

However, it does not state measures⁸⁸⁴ through which informed citizens can participate in decision-making. Moreover, the FoIA has been criticized by scholars like Jacob U. Agba, Eric Ugor Oгри and Kwita Ojong Adomi as existing more in principle than in practice, for reasons including lack of knowledge of the provisions of the law by citizens, undue secrecy of civil service operations encouraged by statutes such as the *Official Secrets Act* 1962,⁸⁸⁵ the immunity clause enjoyed by the executive arm of government; consequently, the issue of citizens' access to justice.⁸⁸⁶ For instance, in a study conducted in 2018, a respondent narrated,

how he was denied some classified information by top government officials under the guise that they do not have the right to disclose such information. Invariably, only the governor can disclose such information. And if the governor refuses to give approval for such information to be released, it then becomes very difficult to institute a court process due to the immunity he enjoys.⁸⁸⁷

⁸⁸³ *Ibid* at s. 2 (1) & (2).

⁸⁸⁴ Measures could include those mentioned in Chapter six.

⁸⁸⁵ *Official Secrets Act* 1962, C.03. See also, Omotayo, *supra* note 881, at 6. According to Omotayo, there had become entrenched in the conduct of government in Nigeria, a culture of secrecy about government information. Virtually all government information in Nigeria was classified as top secret and this veil of secrecy made it difficult to obtain information from any public/government institution because government information is tagged "classified", "confidential", "restricted", "not to be disclosed", "official secret", and so on. Public servants have also been hiding under the plethora of laws that prevent them from divulging official facts and figures to the public. Notable is the *Official Secrets Act*, which makes it an offence, not only for public servants to give out government information, but also for anyone to receive or reproduce such information as well as other laws in the statute books that inhibit freedom of expression and freedom of speech.

⁸⁸⁶ Jacob U. Agba, Eric Ugor Oгри & Kwita Ojong Adomi, "The Nigerian Freedom of Information (FOI) Act and the Right to Know: Bridging the Gap between Principle and Practice" (2018) 73 *New Media and Mass Communication* at 29, 30. See also, UNESCO, *Freedom of Information: The Right to Know* (S:I: United Nations Educational, Scientific and Cultural Organization, 2011) at 42.

⁸⁸⁷ *Ibid* (Agba) at 29.

Ogbuokiri suggests that the reason could be because,

the Act contains more exemption sections and clauses than sections that grant access to information, alerting that some mischievous public officers can use these sections for unjust and mischievous purposes. For instance, only Sections 1 and 3 grant access to information; but as many as ten sections (Sections 7⁸⁸⁸, 11⁸⁸⁹, 12⁸⁹⁰, 14⁸⁹¹, 15 16, 17, 18, 19⁸⁹² and 26) are meant to deny the public access to information.⁸⁹³

However, section 12 (1) (v) of the Act further provides that "where the interest of the public would be better served by having such record being made available, this exemption to disclosure shall not apply."⁸⁹⁴ Section 12 (1) (v) of the Act is commendable with the expectation that the Judiciary would interpret it liberally for the public good.⁸⁹⁵

In addition to specific renewable energy policies and laws discussed below, other energy-related policies such as the 1992 *Environmental Impact Assessment (EIA) Act* have made provisions relating to renewable energy, as I show next.

5.2.3 Environmental Impact Assessment (EIA) Act

The EIA Act is the first Nigerian law to formally give participatory rights to parties other than government institutions (and private investors), in decision-making processes regarding the development of the renewable energy sub-sector.⁸⁹⁶ Under the EIA Act, industries or persons engaged in activities, including power generation and transmission are subject to EIA requirements. EIAs submitted by these industries are assessed by the Federal Ministry of

⁸⁸⁸ The section provides that "[w]here the government or public institution refuses to give access to a record or information applied for under this Act, or a part thereof, the institution shall state in the notice given to the applicant the grounds for the refusal..."

⁸⁸⁹ The section provides that "[a] public institution may deny an application for any information..."

⁸⁹⁰ The section provides that "[a] public institution may deny an application for any information..."

⁸⁹¹ The section provides that "...a public institution must deny an application for information that contains personal information..."

⁸⁹² All of these sections provide that "[a] public institution shall deny an application for information..."

⁸⁹³ Ogbuokiri, "Nigeria: The Limits of Freedom of Information Act" allAfrica.com. (October 11 2011), Accessed March 11, 2019 online: <<https://www.right2info.org/recent/nigeria-the-limits-of-freedom-of-information-act>>.

⁸⁹⁴ *Freedom of Information Act*, 2011 at s.12 (1) (v).

⁸⁹⁵ Although the Act provides a leeway, it will depend on judicial interpretation.

⁸⁹⁶ Specifically, the *EIA Act* deals with hydro-power generation and the construction of dams among others.

Environment (FME).⁸⁹⁷ The environmental assessment regime provides that prior to any final decision by the FME, opportunity shall be given to,

government agencies, members of the public, experts in any relevant discipline and interested groups to make comment on the environmental impact assessment of the activity.⁸⁹⁸

The Act provides that after receiving a mandatory study report in respect of a project, the Agency shall put out a public notice *in any manner*⁸⁹⁹ *it considers appropriate*, stating,⁹⁰⁰

- a) the date on which the mandatory study report shall be available to the public;
- b) the place at which copies of the report may be obtained; and
- c) the deadline and address for filing comments on the conclusions and recommendations of the report.

The legislation further provides that *any person*⁹⁰¹ may file comments with the FME in relation to the conclusions and recommendations of the mandatory study report. The review panel (RP) is to examine the environmental assessment report and ensure that the information is made available to the public. It shall hold hearings in a manner that offers the public an opportunity to participate in the assessment.

By using the seemingly vague phrase “any manner,” the Act gives the *Federal Environmental protection Agency* (FEPA, now FME) a wide discretion to give public notice in ways that may be unsuitable and unaffordable to certain social groups such as rural women. Therefore, it is recommended that the phrase “any manner,” be removed and replaced with specific recommendations for public notice. For instance, public notice can be in writing and in the different languages of the Nigerian people, as this will create access to a practical and/or active public participation.

⁸⁹⁷ The *Federal Environmental protection Agency Act*, 1988 c.131 created a now-defunct body, the Federal Environmental Protection Agency. The duties and functions assigned to the FEPA have since 1999 been re-assigned to the Federal Ministry of the Environment (FME).

⁸⁹⁸ *Environmental Impact Assessment Act*, 1992 at s.7.

⁸⁹⁹ Emphasis added.

⁹⁰⁰ *Environmental Impact Assessment Act*, 1992 at s. 24.

⁹⁰¹ Emphasis added.

Additionally, the Act provides that “any person” may file comments with the FEPA (now FME) and the review panel shall hold hearings, but it fails to provide specific procedures for conducting or organizing such public hearings.⁹⁰² Nor does it specify how citizens are expected to file their comments i.e., whether through emails, regular mail, etc. The Power Holding Company of Nigeria affirms this position by attributing lack of citizens’ participation in the EIA process, to low awareness of their right to participate in public affairs such as public hearing.⁹⁰³ However, it does not state how it plans to resolve this issue.

Hence, the EIA is lacking in providing procedural steps through which Nigerian citizens in general and rural women in particular could actively participate in decision-making. These lacunae in the EIA Act have led Nigerian citizens including women to legally question its effectiveness.⁹⁰⁴ For instance, the failed solar project at Bishop Kodji Village has been criticized for its “failure to include the local community in planning, project implementation, operations, and arrangement for maintenance and operation of the project deliverables.”⁹⁰⁵ An examination of the *National Energy Policy* 2003 follows.

5.2.4 National Energy Policy (NEP)

The National Energy Policy came into effect in 2003 to serve as a comprehensive legal framework, for the better development of Nigeria’s energy future.⁹⁰⁶ For the first time, the NEP recognized and included renewable energy development as one of the segments of the national

⁹⁰² For instance, procedures may begin with giving out public notices with information such as time, location, and general agenda for the hearing.

⁹⁰³ Power Holding Company of Nigeria (PHCN), *Environmental and Social Management Framework (ESMF) for Distribution Component of the Power Guarantee Project (PSGP)* (Abuja: The Environment, Resettlement and Social Unit (ERSU), 2013) at 30.

⁹⁰⁴ *Gbemre v Shell Petroleum Development Co and Others* [2005]; FHC/B/CS/53/05 (FHC).

⁹⁰⁵ Chima O. Okereke, “Causes of Failure and Abandonment of Projects and Project Deliverables in Africa” (2017) VI:1 PM World Journal.

⁹⁰⁶ *National Energy Policy 2003* at iv. See also, Ajayi & Ajayi, *supra* note 72, at 62.

energy sector.⁹⁰⁷ The overall thrust of the NEP was to achieve sustainable development by ensuring reliable, secure, adequate and optimal supply and utilization of the nation's energy resources⁹⁰⁸ at an appropriate cost, and in an environmentally friendly manner.⁹⁰⁹ Among other things, the NEP aimed at extending electric energy to rural, remote, and peri-urban areas.⁹¹⁰

As previously stated, the NEP committed to de-emphasize the use of firewood from the nation's energy mix (including domestic, productive/industrial, and agricultural sectors). It states that to avoid inconsistencies in national energy planning and policy formulation, it is imperative that a comprehensive and integrated approach to energy planning is evolved through the provision of a framework for national decision-making.⁹¹¹ This it claims to attain by addressing issues, including active indigenous and foreign private sector participation⁹¹² in the energy sector for stability and self-reliance.⁹¹³ The wordings of the NEP raise the presumption that increased private sector participation will attract new investments, while solving many of the management problems associated with and experienced under public ownership.⁹¹⁴

To attract increased private sector inflow, the NEP states (without being specific) that it will "[e]stablish appropriate fiscal measures to indigenous and foreign entrepreneurs for the local

⁹⁰⁷Temilade Sesan, "Status of Renewable Energy Policy and Implementation in Nigeria" (2008) online: University of Nottingham at 4 <<https://pdfs.semanticscholar.org/e08f/7afa5b38f5825540d8d4326696023cd9ad0d.pdf>>. See also, *Renewable Energy Master Plan*, 2005 at 32.

⁹⁰⁸ *National Energy Policy*, 2003 at 8, iv.

⁹⁰⁹ *Renewable Energy Master Plan*, 2005 at 32.

⁹¹⁰ *National Energy Policy*, 2003 at 24.

⁹¹¹ *National Energy Policy*, 2003 at 59.

⁹¹²Ayo Luqman Salami, "Recent Developments on Nigerian Content Law in the Oil and Gas Industry" (2017) online: KPMG Newsletter <<https://assets.kpmg/content/dam/kpmg/ng/pdf/tax/ng-recent-developments-on-nigerian-content-law-oil-and-gas-industry.pdf>>. See also, *National Energy Policy*, 2003, objective II at 56. By indigenous and private sector participation the main thrust of the NEP like others that will be considered hereunder is to increase the participation of indigenous and foreign companies and/or investors. By Indigenous private sector the National Energy Policy means the participation of indigenous/Nigerian private companies and/or individual Nigerian citizens, however mainly for the purpose of profit and not justice. Also, in the National Energy Policy 2003, references to private sector participation were mainly used in the context of financing and encouraging private investments, both domestic and foreign, in the energy sector industries.

⁹¹³ *Nigeria Oil and Gas Industry Content Development Act*, 2010. See generally for matters relating to the promotion of indigenous and other private sector participation. See also, *National Energy Policy*, 2003 at iv, 9, 11.

⁹¹⁴*National Energy Policy*, 2003 at 6. See also, Chikwendu, *supra* note 143, at 56.

production of hydropower plants and accessories”⁹¹⁵ among other renewable energy systems. It therefore called for both the deregulation and privatization of the energy sector.⁹¹⁶ In that sense, it is likely that the NEP in fact undermines public (especially women’s) participation in renewable energy decision-making in Nigeria.

5.2.5 The Renewable Energy Master Plan (REMP)

Inspired by the objectives and strategies of the 2003 *National Energy Policy*,⁹¹⁷ the overall objective of the REMP 2005 is to put in place a comprehensive framework, for developing renewable energy policies, legal instruments, manpower, markets, technologies, and infrastructure.⁹¹⁸ Through accelerated development and exploitation of renewable energy, the REMP 2005 articulates a road map for addressing key development challenges⁹¹⁹ affecting the energy situation of populations in the rural communities.⁹²⁰

One primary strategy is to develop a participatory process that encourages the full participation of key stakeholders.⁹²¹ The REMP 2005 defines stakeholders from several categories. For instance, from the perspective of the international community, stakeholders, include the Global Environmental Facility (GEF) as well as the international energy and environmental non-governmental organizations (NGOs). From the public sector of Nigeria, they include institutional representatives within the federal government: The Ministries of Power and Steel, Health, Education, Communication, and Water Resources, Forestry and Energy Conservation Agencies, the Ministry of the Environment (FME), the Department of Forestry, the Energy Commission of

⁹¹⁵ *National Energy Policy*, 2003 at 69.

⁹¹⁶ Chikwendu, *supra* note 143, at 56. See also *National Energy Policy*, 2003 at iv/4.

⁹¹⁷ *Renewable Energy Master Plan*, 2005 at 35.

⁹¹⁸ *Ibid* at 11.

⁹¹⁹ *Ibid* at 188, 121. Challenges include problems of sustainability, accessibility and affordability of alternative fuels as well as public awareness, capacity-building, policy, regulatory and institutional frameworks, research and development, pricing and financial issues etc.

⁹²⁰ *Ibid* at 11, 84.

⁹²¹ *Ibid* at 21, 178-179.

Nigeria the (ECN), the Rural Electrification Agency, and the National Energy Centres (SERC,⁹²² CERD⁹²³). Stakeholders also include state and local governments. Finally, they include actors from the private and civil society sectors: environmentalists, national NGOs, individual Nigerians and local communities.⁹²⁴

The term “individual” and “local communities” is somewhat vague as a typical local community could consist of business operators, chiefs, public agencies and/or individual/private investors, who are not directly affected by the energy challenges confronted by certain social groups such as rural women. The list of stakeholders consulted⁹²⁵ in the planning and drafting of the REMP 2005 suggest that there is still an overwhelming emphasis on consulting “experts” rather than members of the affected public. There certainly does not appear to have been any effort to secure the effective participation of rural women in developing the 2005 REMP. This is why scholars like C.A.O Akinbami, J.E. Olowoye, F.A. Adesina and V. Nelson call for a policy framework that enhances Nigerian rural women’s participation through climate and development aid finance.⁹²⁶

⁹²²Sokoto Energy Research Centre.

⁹²³Centre for Energy Research and Development, Obafemi Awolowo University, Ile-Ife.

⁹²⁴*Renewable Energy Master Plan*, 2005 at 187, 188, 189, 195, 197, 199, 203, 205, 207, 211 and 213.

⁹²⁵*Renewable Energy Master Plan*, 2005 at 214. The list includes “Centre for Energy Research and Development, Obafemi Awolowo University, Ile Ife; Ministry of Science and Technology; Department of Industrial Technology and Energy Research (DITER) of the Federal; Faculty of Agriculture, UDUS; Department of Power, Federal Ministry of Power and Steel, Department of Power; Energy Commission of Nigeria Federal Department of Forestry; Federal Ministry of Agriculture; Federal Ministry of Environment; Federal Ministry of Science and Technology, Department of Industrial Technology &Energy Research; Federal Office of Statistics; Forest Management, Evaluation and Co-ordinating Unit; International Institute for Tropical Agriculture (IITA), Ibadan; Lagos State University; National Centre for Energy Research and Development (NCERD); National Planning Commission, Directorate of Infrastructure and Public National Planning Commission, Directorate of Rural Development; Nigeria Meteorological Agency, Federal Ministry of Aviation; RISØ National Laboratory, Denmark; Sokoto Energy Research Centre; Sokoto State Ministry of Agriculture; United Nations Development Program, Abuja; United Nations Development Program, Sokoto and, Utilities.”

⁹²⁶A.O Akinbami, J.E. Olowoye, F.A. Adesina and V. Nelson “Exploring Potential Climate-related Entrepreneurship Opportunities and Challenges for Rural Nigerian Women” (2019) 9 *J. Global Entrepreneurship Research* online: <<https://link.springer.com/article/10.1186/s40497-018-0141-3>>. It should be noted here that participation is with respect to climate-related entrepreneurship and risk management practices and not legal decision-making.

Although the REMP 2005 acknowledged that there are no proper measures put in place (including information and awareness creation)⁹²⁷ to systematically inform the public on how they can be involved in renewable energy planning,⁹²⁸ it left this vital issue unresolved. It identified rural women and children as “vulnerable groups,” yet it provided no measures through which these mostly affected social groups could be included in decision-making concerning their lives. It seems that these women are viewed as mere consumers of social, economic, and environmental goods rather than thinkers, problem-solvers and producers.

Deliberate efforts should have been made to involve rural women as competent and knowledgeable stakeholders with good practical knowledge of their energy issues and problem-solving capacities since 1) they are the experts on their own needs and capacities and, 2) their inclusion will help raise decision-makers’ conscious awareness of sustainable development issues as well as women’s issues. The 2005 *Electric Power Sector Reform Act* will be examined next.

5.2.6 Electric Power Sector Reform Act (EPSRA)

The 2005 EPSRA and its attendant regulations, the Electricity (Private Licences) Regulations, Electricity (Annual Returns) Regulations; the Electricity Installation Regulations, and the Electricity Supply Regulations⁹²⁹ regulate the relationship between the government and the licensees who are persons, national, and multinational companies authorized to generate, distribute and transmit electricity by the issue of a licence by the Minister of Power and Steel.⁹³⁰

⁹²⁷ *Renewable Energy Master Plan*, 2005 at 22, 143.

⁹²⁸ *Ibid* at 22.

⁹²⁹ *Electricity Supply Regulations*, 1996 S.I. 6 at 224.

⁹³⁰ *Ibid* at 65, 233

For the purposes of this dissertation, the most important element of the EPSRA is Part ix, section 88(9)⁹³¹ which stipulates that:

The Minister of Power and Steel shall, once in a quarter, submit to the President reports, prepared in consultation with the Rural Electrification Agency and the Commission, on the progress and achievement of the Rural Electrification Strategy and Plan, which shall include information relating to:

- (a) the expansion of the main grid;
- (b) the development of isolated and mini-grid systems; and
- (c) renewable energy power generation.

From the above, the 2005 EPSRA seems to have associated the development and utilization of renewable electricity with rural electrification. This strategy is commendable as renewable electricity resources have been observed to be suitable for improving the rural electricity access situation and promoting decentralized electricity governance.⁹³² Except for the above section 88(9) of the ESPRA which mentions renewable energy (without reference to participation), no section in the EPSRA provides a detailed measure for the participation of the public, especially women, in the decision-making of this critical sub-sector. Participation under the EPSRA is basically with respect to private sector actors.⁹³³

The EPSRA mandates the Minister of Power and Steel to prepare a Rural Electrification Strategy and Plan.⁹³⁴ In 2006 the Minister prepared the *Renewable Electricity Action Program* (REAP). Although the REAP failed to make reference to women/gender, it provided that information dissemination on government programs and activities will be achieved through radio and television available at community viewing centers.⁹³⁵

Unfortunately, having only 6 REA offices - community viewing centers - will pose a challenge of accessibility for communities far away from those geo-political zones.⁹³⁶ To create

⁹³¹ *Electric Power Sector Reform Act*, 2005 at 6.

⁹³² The link between renewable energy electricity and rural development is also recognized by previous and current renewable energy laws.

⁹³³ *Electric Power Sector Reform Act*, 2005 at s. 32 (2) (a) & 88 (13).

⁹³⁴ *Ibid* at s. 88(4).

⁹³⁵ Federal Republic of Nigeria, *Renewable Electricity Action Program* (Abuja: Federal Ministry of Power and Steel, 2006) at 63.

⁹³⁶ *Electric Power Sector Reform Act*, 2005 at s. 88 (2) (a).

easy accessibility for people in communities, especially rural women, it is recommended to have community viewing centers in all communities located in each local government area. That said, the *Rural Electrification Strategy and Implementation Plan 2014*, the *Rural Electrification Strategy and Plan 2015*, and the *Rural Electrification Strategy and Implementation Plan (RESIP) 2016* respectively have omitted this useful measure (radio and television available at community viewing centers) for disseminating information to communities in rural areas.

The 2006 REAP, and the 2014, 2015, and 2016 Plans (RESIP) fail to provide for the participation of rural women. Rather, the only mention of women in the 2015 and 2016 Plans concern promoting the “use of domestic electrical appliances to reduce the drudgery of household tasks typically allocated to women.”⁹³⁷ However, these Plans (RESIP) recognize the participation of NGOs and private sector entities in decisions about Rural Electrification.⁹³⁸ To facilitate private sector participation, they state that the “REA will advocate for tax incentives, investment capital allowances, and low-interest loans for local producers of RE equipment and materials.”⁹³⁹ Although these market measures appear to solely facilitate participation in developing rural electrification projects, as demonstrated by the 2014 notice of public hearing sent out by the former Chairman/CEO of the NERC, Dr. Sam Amadi, they also give the private sector a voice as stakeholder participants in decision-making.⁹⁴⁰

That said, in its section 45⁹⁴¹ the ESPRA empowers and mandates the Nigerian Electricity Regulatory Commission (NERC) to,

⁹³⁷ Rural Electrification Agency (REA), *Final Draft Rural Electrification Strategy & Plan* (s:I: Federal Ministry of Power, Works and Housing, 2015) at 5. See also, Rural Electrification Agency (REA), *Rural Electrification Strategy and Implementation Plan* (s:I: Federal Ministry of Power, Works and Housing, 2016) at 5.

⁹³⁸ *Ibid* (REA, 2016) at 5, 16. See also, *Ibid* (REA, 2015) at 5. See, Federal Republic of Nigeria, *supra* note 864, at 63.

⁹³⁹ *Ibid* (REA, 2016) at 17. See also, *Ibid* (REA, 2015) at 17.

⁹⁴⁰ Faloseyi & Ekeh, *supra* note 572.

⁹⁴¹ *Electric Power Sector Reform Act*, 2005 at s. 45 (1) & (2).

make regulations for the discharge of its functions and for the conduct of its proceedings, consultations and hearings, including procedures for the participation of licensees, consumers, eligible customers and other persons.

In line with the above section, in 2012, the NERC developed its *Regulation for Embedded Generation*.⁹⁴² Embedded generation,

allows for power generation plants (including renewable energy) to be directly connected to and evacuated through a distribution network. It provides a window for investors, communities, state and local governments to generate and sell or utilize power...⁹⁴³

However, progress towards adopting an embedded generation system has been slower than expected due to faltering plans caused by over-dependence on fossil fuels and funding.⁹⁴⁴

The regulation's reference to participation is with respect to two categories: Market Participant (MP) and Non-Market Participant (NMP). MP means any "person who is a party to a Market Participation Agreement,⁹⁴⁵ including the Market Operator." NMP on the other hand, means persons who are not parties to a Market Participation Agreement.

The 2015 NERC's *Regulation on Feed-in-Tariff for Renewable Energy Sourced Electricity in Nigeria*⁹⁴⁶ discusses greater private sector participation in power generation for renewable energy technologies; however, it does not define what private sector means rather, it leaves it vague. Next, I examine the *Renewable Electricity Policy Guidelines* (REPG) 2006, and the *Nigerian Biofuels Policy Incentives* (NBPI) 2007.

⁹⁴²*Regulation for Embedded Generation*, 2012.

⁹⁴³Nigerian Electricity Regulatory Commission, "Generation" online: < <https://nerc.gov.ng/index.php/home/nesi/403-generation>>.

⁹⁴⁴ African Energy, "Nigeria's Plans for Embedded Generation Hit Obstacles" (2016) 332 African Energy Newsletter. See also Hachimenum Nyebuchi Amadi, "Distributed Generation in Nigeria's Post-Privatised Power Sector – Challenges and Prospects" (2017) 7:7 Intl J. engineering Research and Application 54 at 57.

⁹⁴⁵Federal Ministry of Power, *Outline Business Case Report for Omi-Kampe Hydro Power Project* (Lagos: Magnartis, 2013) at 120. See also, Administrator, "Market Participation Agreement" (2017) Operator of the Electricity Market online: <http://www.onemnigeria.org/index.php?option=com_content&view=article&id=100:market-participation-agreement&catid=1:latest-news&Itemid=50>. The *Regulation for Embedded Generation* doesn't define the term Market Participation Agreement (MPA). According to the Operator of the Nigeria Electricity Market (ONEM), the MPA is for Investors/economic agents such as distribution companies (DISCOs) and the generation Companies (GENCOs) acting as producers or suppliers of a marketable goods or services.

⁹⁴⁶*Regulation on Feed-in-Tariff for Renewable Energy Sourced Electricity in Nigeria*, 2015 at 6.

5.2.7 Renewable Electricity Policy Guidelines 2006, and Nigerian Biofuels Policy Incentives 2007

The 2006 REPG is an overarching policy on electricity derived from renewable energy sources.⁹⁴⁷ Similar to the EPSRA 2005, it acknowledges that access to rural electricity is less than 20%, and renewable electricity technologies are ideal for improving access to rural electricity in Nigeria.⁹⁴⁸ The 2006 REPG was drafted based on the 1999 Constitution, and legislation such as the *NEP 2003*, the *Electric Power Sector Reform Act 2005*, and the *Renewable Energy Master Plan 2005*. Therefore, a large part of the 2006 REPG reviewed the above-stated policies and laws.⁹⁴⁹

The *Nigerian Biofuels Policy Incentives 2007* lay down the framework to gradually reduce the nation's dependence on imported gasoline. It also aims at reducing environmental pollution while at the same time developing a commercially viable industry that can create sustainable jobs in Nigeria. To promote bio-fuel production, "investments in domestic production of bio-fuels will be private sector driven."⁹⁵⁰ In order to facilitate the market entry of biofuels, the Minister of Petroleum shall create industry incentives in the form of pioneer status—tax holiday—to all registered businesses engaged in biofuel production; such companies shall be exempted from taxation, withholding tax and capital gains tax on interest and dividends and enjoy waivers on import and customs duties etc.⁹⁵¹

Unfortunately, neither the 2006 REPG nor the 2007 *Nigerian Biofuels Policy Incentives* propose the procedure for women's participation in policy- and law-making. Once again,

⁹⁴⁷ *Renewable Electricity Policy Guidelines*, 2006 at 3, 13. The policy Guidelines is said to have been primarily drawn from frameworks such as the 1999 Nigeria Constitution, 2003 National Energy Policy, 2001 National Electric Power Policy, 2005 Electric Power Sector Reform Act, 2005 the Renewable Energy Master Plan, 2004 National Economic Empowerment and Development Strategy (NEEDS).

⁹⁴⁸ *Ibid* at 3, 16. Renewable energy will be mostly generated and distributed through decentralized energy options or off-grid renewable electrification.

⁹⁴⁹ *Ibid* at 3.

⁹⁵⁰ *Nigerian Biofuels Policy Incentives 2007* at 6.

⁹⁵¹ *Ibid*.

regulatory silence reflects the undervaluing of women's voices in Nigerian energy policy. The next sub-section investigates *the National Climate Change Policy 2011: National Adaptation Strategy and Plan of Action on Climate Change for Nigeria (NASPA-CCN)*.

5.2.8 National Climate Change Policy 2011: National Adaptation Strategy and Plan of Action on Climate Change for Nigeria (NCCP/NASPA-CCN)

Renewable energy is an effective tool to address climate change.⁹⁵² The NCCP/NASPA-CCN recognizes that countries like Nigeria are susceptible to the impacts of climate change, a challenge for sustainable human development.⁹⁵³ It states the importance of taking into account gender-differentiated needs, vulnerabilities and roles⁹⁵⁴ when preparing for and responding effectively to the impacts of climate change.⁹⁵⁵ Similar to the 2005 REMP, it asserts that women are more vulnerable than men to the effects of climate change because they constitute the majority of the country's poor; therefore, they are more likely to depend on natural resources.⁹⁵⁶ As a result, vulnerable and socially marginalized groups particularly women, children, the poor, elderly etc. located in rural communities will bear the brunt of environmental change. Hence, one of the policy measures recommended by the NCCP/NASPA-CCN for adaptation purposes is to promote the development and utilization of decentralized renewable energy resources.⁹⁵⁷

Although the NCCP/NASPA-CCN states that the strategy and plan must be integrated,

⁹⁵² International Renewable Energy Agency (IRENA), *Renewable Energy: A Key Climate Solution* (s:I: IRENA, 2017). See also, Building Nigeria's Response to Climate Change, *National Adaptation Strategy and Plan of Action on Climate Change for Nigeria (NASPA-CCN)* (Oyo: Nigeria Environmental Study/Action Team (NEST), 2011) at 48.

⁹⁵³ *Ibid* (Building) at i.

⁹⁵⁴ *Ibid*.

⁹⁵⁵ *Ibid* at i, 31, 47. The impacts of climate change, such as weather-related disasters which have become more visible in the past four decades, and its impacts on the nation's natural and agricultural ecosystems, including freshwater and coastal resources cannot be ignored.

⁹⁵⁶ *Ibid* at iv, 23, 39.

⁹⁵⁷ *Ibid* at 48.

comprehensive in scope, and inclusive of all stakeholders⁹⁵⁸ who must be allowed to participate actively in climate change adaptation,⁹⁵⁹ it does not define who these stakeholders are.⁹⁶⁰

The NCCP/NASPA-CCN does not specify measures or techniques⁹⁶¹ through which stakeholders (especially vulnerable women in rural communities) can participate in decision-making. Again, I find a hole in policy where there should be specific guidance for integrating rural women into decision-making. For instance, government could ensure rural women's participation through legal empowerment⁹⁶² and law reform by providing participatory approaches, social security (food and income etc.), health care systems, trainings, educational workshops, seminars, conferences and pre-hearings.

Similar to other policies and statutes before and after this, the NCCP/NASPA-CCN seems to tilt toward focusing on the participation of civil society organizations (CSOs), non-governmental organizations (NGOs)⁹⁶³ and women's groups⁹⁶⁴ in major national and state policies and programmes.⁹⁶⁵ As I will discuss in more detail below, there appear to be no records of policies either theoretically or specifically allowing for the participation of rural women's organizations, a different category of social group. Also, in practice, there seems to be no public evidence to show that women's organizations particularly rural women's

⁹⁵⁸ *Ibid* at v, 26, 42.

⁹⁵⁹ *Ibid* at viii.

⁹⁶⁰ It should however be mentioned that the policy appears to refer to the following entities as stakeholders — the Federal Government, the State Government, the Local Government, Civil Society and Organized Private Sector.

⁹⁶¹ Measures and Techniques will be discussed in detail in Chapter six.

⁹⁶² Legal empowerment is another measure that can help women overcome participatory barriers. Legal empowerment is broadly used in the sense that legislation, court rulings, decision-making processes, agreements and law reforms on renewable energy can encourage and benefit disadvantaged populations such as rural women by specifying procedures through which these groups of women can participate in the development of renewable energy policies and laws.

⁹⁶³ Ranjita Mohanty, "Civil Society and NGOs" (2002) 63 *Indian J. Political science* 213 at 213 <<https://www.jstor.org/stable/pdf/42753687.pdf?refreqid=excelsior%3A4199355bb0227f0516e4adce576605b9>>. NGOs also call themselves CSOs or Civil Society Organization.

⁹⁶⁴ *National Renewable Energy and Energy Efficiency Policy*, 2015 at 9. The NREEEP provides for women groups as stakeholders both at the formulation and implementation of policy frameworks stages.

⁹⁶⁵ *Building Nigeria's Response to Climate Change*, *supra* note 952, at 6, 22, 72, 73, 89.

organizations participate in decision-making about renewable energy.⁹⁶⁶ Comfort Yemisi Afolabi points out that the role of Nigerian women's organizations in decision-making is invisible.⁹⁶⁷ An examination of the 2012 *Renewable Energy Master Plan* follows.

5.2.9 Renewable Energy Master Plan, 2012

The 2012 REMP is a revised edition of the voluminous 2005 REMP.⁹⁶⁸ Like the 2005 version, the 2012 REMP objectives include enhancing national energy security especially by expanding energy access to rural communities. Unlike the 2005 REMP, the 2012 REMP concisely highlights the renewable energy programmes of biomass, wind, hydropower, and solar energy options among others.

Both the 2005 and 2012 REMP provide for extended targets and timelines in the short, medium and long terms. However, most targets and timelines contained in the 2005 edition of the REMP have passed,⁹⁶⁹ save for the long term which has an on-going timeline from 2016 to 2025.⁹⁷⁰ Perhaps the 2012 REMP seeks to remedy this lapse in time by extending the timelines of the short term from 2013 to 2015, the medium term from 2016 to 2020, and the long term from 2021 to 2030.⁹⁷¹

Furthermore, the 2012 REMP provides for the active participation of the private sector.⁹⁷² Conversely, it contains no measure to enhance the active participation of women particularly in the rural communities. Once again, there is silence on this issue. The 2015 *National Renewable Energy and Energy Efficiency Policy (NREEEP)* follows.

⁹⁶⁶ Comfort Yemisi Afolabi, "The Invisibility of Women's Organizations in Decision Making Process and Governance in Nigeria" (2019) 3:40 *Frontiers in Sociology*.

⁹⁶⁷ *Ibid* (Afolabi). See also, Cecelski, *supra* note 74.

⁹⁶⁸ REMP, 2005 *supra* note 128, at viii.

⁹⁶⁹ According to the REMP 2005, the short term was (2005-2007⁹⁶⁹), the medium term was (2008-2015), and the long term is (2016-2025).

⁹⁷⁰ REMP, 2005 *supra* note 128, at 27.

⁹⁷¹ *Ibid* at viii.

⁹⁷² *Ibid* at iv.

5.2.10 National Renewable Energy and Energy Efficiency Policy (NREEEP), 2015

In service of the federal government's aspiration to diversify Nigeria's energy mix and provide affordable and clean access to electricity for all Nigerians; the drafters of the NREEEP saw the need to develop a "nationally acceptable renewable energy and energy efficiency policy" that is expected to help drive the renewable energy sector.⁹⁷³ The NREEEP sets out economic strategies to support, promote and incentivize the entry of renewable energy and energy efficiency in Nigeria.⁹⁷⁴ To drive the financing of renewable energy, the NREEEP engages international donors and NGOs "that are active in and interested in developing renewable energy in Nigeria."⁹⁷⁵ For instance, NGOs like U.S.-based Winrock International have been improving access to finance in developing countries.⁹⁷⁶

However, like the other legal instruments reviewed above, besides the private sector, international donors (with ideas of investments and bankability) and NGOs, the NREEEP provides no measure for the participation of the general public including rural women. Rather, it facilitates the participation of private sector actors by adopting financial measures such as Power Production Tax Credit (PPTC),⁹⁷⁷ Feed-in-Tariffs (FiT),⁹⁷⁸ Public Benefit Fund (PBF)⁹⁷⁹ among others. The NREEEP also makes provisions for tax holidays and exemptions as well as waivers on licensing procedures for renewable energy producers who produce less than 1 MW on site.⁹⁸⁰

⁹⁷³ NREEEP 2015, *supra* note 28, at iv, 10.

⁹⁷⁴ *Ibid* at 5.

⁹⁷⁵ *Ibid* at 22.

⁹⁷⁶ Chris Warren, "In Nigeria, a Template for Solar-Powered Minigrids Emerges" *gtm* February 20, 2018. Accessed March 6, 2020 online: <<https://www.greentechmedia.com/articles/read/nigeria-solar-powered-minigrids>>.

⁹⁷⁷ The PPTC serves as an incentive to electricity generation.

⁹⁷⁸ The FiT serves as an incentive to electricity producer by giving favourable prices for electricity produced by renewable energy.

⁹⁷⁹ The PBF is one way of generating funds (a certain percentage of tariff) to support renewable energy generation projects.

⁹⁸⁰ NREEEP 2015 at 4, 24.

Again, the above market measures appear to solely facilitate private investors' participation in developing rural electrification projects. However, as demonstrated by the 2014 notice of public hearing sent out by the former Chairman/CEO of the NERC, Dr. Sam Amadi, they also give the private sector a voice as stakeholder participants in decision-making.⁹⁸¹ How does such regulatory silence impact women's participation in implementing renewable energy policies and projects?

5.3 Women's Participation in Implementing Renewable Energy Policies and Projects

In addition to the general regulatory frameworks, rural women's perspectives are also needed in the downstream implementation of general policies. For example, and similar to the 2015 NREEEP, the *Electric Power Sector Reform Act* provides that licences are required for electricity generation and distribution exceeding 1MW & 100KW respectively.⁹⁸² Therefore, licences effectively act as a barrier to new entry in the generation and distribution of renewable energy activities,⁹⁸³ as is the case with the oil and gas sector.⁹⁸⁴ This means that if the required licence fees for new entrepreneurs are removed or waived, Nigeria could promote its sustainable development agenda through increased participation in its renewable energy industry.

For instance, while being motivated by the long debates on the climate change crisis, and the rising costs of maintaining a fossil-fuel driven vehicle, in less than one year a Nigerian student,

⁹⁸¹ Faloseyi & Ekeh, *supra* note 572.

⁹⁸² The EPSRA, 2005 at s. 62 (2). See also, *ESR*, 1996 at s.41 (1).

⁹⁸³ Eric Biber & J.B Ruhl, "The Permit Power Revisited: The Theory and Practice of Regulatory Permits in Administrative State" (2014) 64 *Duke L. J* 133 at 178. See also, Autos, "A Nigerian student Builds Wind and Solar Powered Car" Planet Custodian (March 18, 2014), Accessed April 7, 2019 online: <<http://www.planetcustodian.com/2014/03/18/2603/a-nigerian-student-builds-wind-and-solar-powered-car.html>>. See also, Bressa, *supra* note 75. See also, Miriam, "Nigerian Student Builds A Solar-Powered Keke" Whigohost (October 31, 2016), Accessed April 7, 2019 online: <<https://blog.whigohost.com/nigerian-student-builds-solar-powered-keke/>>.

⁹⁸⁴ Chris Eze, "JTF Impounds 20 Barges Laden with 1, 348 Barrels of Stolen Crude in Niger Delta" Daily Trust. January 21, 2014. Accessed April 4, 2019 <<https://www.dailytrust.com.ng/jtf-impounds-20-barges-laden-with-1-348-barrels-of-stolen-crude-in-niger-delta.html>>. See, "Nigeria Cracks Down on Illegal Oil Refineries" Punch, April 23, 2017. Accessed April 7, 2019 <<https://punchng.com/nigeria-cracks-down-on-illegal-oil-refineries/>> See, eNCA, "Nigeria to legalise Mini refineries Crude oil" eNCA August 4, 2017. Accessed April 7, 2019. <<https://www.enca.com/africa/nigeria-to-legalise-mini-refineries-crude-oil>>.

Segun Oyeyiola manufactured a solar and wind-powered zero emissions electric car, using scrap materials. Oyeyiola also developed a software to indicate battery level, locate the car, and how many miles the car could go considering the weather conditions.⁹⁸⁵ Similarly, in 2016, another Nigerian undergraduate student Ekomobong Finbarr produced a solar-powered “keke napep” vehicle. Typically, a licence would have been required; however, since this was an academic project (even though it was a functional vehicle) no licence was required.⁹⁸⁶ Hence, reducing requirements like licensing facilitates innovation among new stakeholders.

Furthermore, the government must make necessary efforts not to intimidate, suppress and/or prevent local knowledge, but rather enhance it for the common good of the country’s self-reliance. As an example, in Nigeria there are rural people with the technical know-how to refine crude oil. These individuals whose acts and omissions are equivalent to the acts of the International Oil Corporations (IOCs) particularly in terms of refining crude oil and environmental pollution are arrested, punished, and in most cases convicted. In addition, they have their refineries destroyed for not having the required oil production licence to operate in a location, making them illegal. Although Vice President Yemi Osinbanjo has proposed legalizing these modular refineries, this has yet to become a reality.⁹⁸⁷

Therefore, “even if the regulatory standards on their face apply equally to existing and new participants in an activity, that does not always mean that their burdens are in fact equal.”⁹⁸⁸ Small actors in the renewable energy field may not be equally able to bear licencing fees; as a result, the more licencing fees are fixed for generating and distributing electricity exceeding 1MW and 100

⁹⁸⁵ *Ibid* (Bressa).

⁹⁸⁶ Miriam, *supra* note 983.

⁹⁸⁷ Eze, *supra* note 984. See also, “Nigeria Cracks Down on Illegal Oil Refineries” *supra* note 984. See, eNCA, *supra* note 984.

⁹⁸⁸ Biber & Ruhl, *supra* note 983, at 179. See also Richard A. Epstein, “The Permit Power Meets the Constitution” (1995) 81 Iowa L. Review 407 at 416. Epstein asserts that “legal doctrines are not equal to social problems.”

KW respectively, the more they become an economic/financial burden on small actors.⁹⁸⁹ This issue may have been raised and adequately addressed if rural women had been included in the formulation of the 2015 NREEEP and the 2005 EPSRA.

Thus, such provisions (1MW and 100 KW) could prevent a cluster of people or a syndicate of rural women businesses (if any) from coming together to utilize common resources (including knowledge, human resources and finance) in the generation and distribution of renewable energy.⁹⁹⁰ As an example, the Women Environmental Programme (WEP)⁹⁹¹ has no responsibility to fund trainees in the design and implementation of community development projects. However, the WEP trainees are to devise a “means of mobilizing different kinds of resources...;” one of which could be for different trainees to come together as a syndicate to design and implement environmental and climate change projects and programmes in Kaduna State Nigeria.⁹⁹² This can bring about syndicate financing for scaling up off-grid renewable energy solutions.⁹⁹³

As pointed out by the 2005 REMP, the distribution of renewable energy helps to fast-track poverty reduction, reduction in the burden of diseases, provision of safe water supply and sanitation, school enrolment, quality education and gender equality.⁹⁹⁴ Hence, policies and laws in the renewable energy, and the oil and gas sectors should enable the production and circulation of human innovation and not prevent it. Furthermore, J. Ikeme & Obas John Ebohon assert that efforts made at reforming the energy sector will not yield any desired results unless there are strategic and

⁹⁸⁹ Thomas J. Dean & Robert L. Brown, “Environmental Regulation as a Barrier to the Formation of Small Manufacturing Establishments: A Longitudinal Examination” (2000) 40 J. Environmental, Economics & Management (2000) 56 at 56, 71. See also, Biber & Ruhl, *supra* note 983, at 180. See also, Bruce et al, *supra* note 229, at 6.

⁹⁹⁰ Maria Yetano Roches, Nnanna Ude & Ikenna Donald-Ofoegbu, True Cost of Electricity: Comparison of Costs of Electricity Generation in Nigeria (Abuja: The Nigerian Economic Summit Group, 2017) at 17. See also, Eze, *supra* note 984. See also, Admin, “JTF Destroys 9 Illegal Refineries. Impound Crude Laden Barge” LeadershipA (May 2, 2014), online: <<https://ndlink.org/jtf-destroy-9-illegal-refineries-impounds-crude-laden-berge/>>.

⁹⁹¹ WEP, *supra* note 842.

⁹⁹² *Ibid.*

⁹⁹³ Energy Sector Management Assistance Program (ESMAP), *Annual Report 2018* (Washington: The World Bank, 2018) at 23.

⁹⁹⁴ REMP, 2005 *supra* note 128, at 34.

structural plans to also constrain the energy inefficiency of end-users.⁹⁹⁵ Such strategic plans could include educating and training rural women for enhanced participation because these women constitute a larger number of end-users more likely to move from using “fuelwood stove with a technical efficiency of 12–18 percent to a kerosene stove with an efficiency of 48 percent, or to a liquefied petroleum gas stove with an efficiency of 60 percent.”⁹⁹⁶

Thus, to avoid the issue of social exclusion, supporting rural women to learn, understand, and apply the knowledge base in the renewable energy sector through trainings is therefore recommended. This is in light of the country’s different and peculiar energy-environmental circumstances as well as its nationally defined development priorities. For instance, the country’s international Intended Nationally Determined Contributions (INDCs)⁹⁹⁷ under the Paris Agreement includes among other things promoting off-grid solar PV of 13GW (13,000MW), halting deforestation, and conserving the remaining natural forest.

That being said, laws and policies to encourage engaging rural women in the generation and distribution of electricity exceeding 1MW and 100 KW will be an interesting area to investigate for further research. In the following section, I examine some financial strategies used to finance the development of renewable energy projects in Nigeria and their implications for rural women. This is necessary because financial resources such as credit, cash etc. are key to an effective implementation of the renewable energy industry.

⁹⁹⁵ J. Ikeme & Obas John Ebohon, “Nigeria’s Electric Power Sector Reform: What Should Form the Key Objectives?” (2005) 33 Elsevier 1213 at 1220.

⁹⁹⁶ Eberhard Jochem, “Energy End-Use Efficiency” in United Nations Development Programme, *World Energy Assessment, Energy and the Challenge of Sustainability* (New York: United Nations Development Programme, 2000) at 181.

⁹⁹⁷ The Federal Government of Nigeria, “Nigeria’s Intended Nationally Determined Contribution” (Abuja: Federal Ministry of Environment, 2015).

5.3.1 Rural Women and Renewable Energy Financing in Nigeria

5.3.1.1 Crowdfunding Platforms (CPs)

Crowdfunding Platforms (CPs) could be a regulated way of raising capital for renewable energy projects or businesses. Crowdfunding as a method of financing can either be by rewards, donations, equity-based or debt-based. Equity-based crowdfunding is closer to an investment in shares - the lenders are able to provide funding to businesses in exchange for shares in the borrowing companies.⁹⁹⁸ Debt-based crowdfunding, also known as peer-to-peer lending allows either institutions or groups of individuals to lend funds to businesses or individuals in return for the principal plus interest payments.⁹⁹⁹

Crowdfunding in Nigeria remained unregulated until January 21, 2021 when the Securities and Exchange Commission (SEC) issued the SEC Rules on Crowdfunding.¹⁰⁰⁰ The SEC Rules, however, appear to be applicable to equity- or investment-based crowdfunding. This is, where funds are raised in exchange for shares, plain vanilla bonds or debenture and simple investment contracts or other instruments approved by the SEC.¹⁰⁰¹

The 2019 International Energy Agency (IEA) report reveals that women entrepreneurs in the solar energy field face similar barriers in “securing funding, building partnerships and educating stakeholders about the benefits of clean energy technologies.”¹⁰⁰² According to the IEA report,

⁹⁹⁸ Jason Futko, “Equity vs. Debt Crowdfunding” Crowdfund Insider (September 24, 2014) accessed January 20, 2021 online: <<https://www.crowdfundinsider.com/2014/09/50628-equity-vs-debt-crowdfunding/>>.

⁹⁹⁹ Katapult, “10 Must-Have Features for Successful Debt Crowdfunding Platforms (Peer-to-peer Lending Platform)” (August 2018), accessed January 20, 2021 online: < <https://www.katapult.com/blog/10-must-have-features-for-successful-debt-crowdfunding-platforms>>.

¹⁰⁰⁰ New Rules and Amendments to the Rules and Regulations of the Commission dated the 21st of January 2021.

¹⁰⁰¹ *Ibid* at 15.

¹⁰⁰² International Energy Agency (IEA), “Seven Women Entrepreneurs of Solar Energy” IEA (November 2019), accessed January 2021 online: <<https://www.iea.org/reports/seven-women-entrepreneurs-of-solar-energy>>.

[a]t the early stages of operation, [these] women found it challenging to convince financial institutions, typically owned or operated by men, to finance their innovative ideas. This was particularly challenging for women who did not have an established reputation in business.¹⁰⁰³

That said, renewable energy developers such as SOSAI (a woman-owned business) have been able to take advantage of foreign-based crowdfunding debt platforms to finance their projects. For instance, SOSAI Renewable Energies Company Limited has raised a total loan of €450,000 (£396,000) through Bettervest GmbH, an online crowdfunding debt platform based in Germany.¹⁰⁰⁴

As I show in more detail below, although, most renewable energy funding methods do not target women, it cannot be overstated that funding secured by rural women enhances their participation in both the formulation and implementation of renewable energy policy and law. Thus, as recommended below in chapter six, in addition to debt-based crowdfunding, it is further recommended that for small-scale renewable energy projects; funds could be raised from citizens or companies (including energy companies) through other types of crowdfunding platforms, such as donations, and thrift associations and co-operative credits.¹⁰⁰⁵

Thrift associations and co-operative credits (also known as Esusu, Etoto, Ajoo, Adashi) are traditional forms of cooperation whereby a group of people contribute money to informal savings and credit associations, to be distributed either on a need basis or in a rotating or chronological manner. However, instead of using this type of informal financing on an individual basis as is usually the case, the pool of money raised could be applied by rural women's organizations in the development of small-scale renewable energy projects.

¹⁰⁰³ *Ibid*

¹⁰⁰⁴ Davinia Cogan, Irene Maffini & Simon Collings, *Crowd Power: Who is the Crowd?* (s:I: Energy4Impact, 2018) at 11.

¹⁰⁰⁵ Evans Osabuohien & Oluyomi Ola-David, "Esusu" in ed. Alena Ledeneva *The Global Encyclopedia of Informality* (London: University College London (UCL), 2018) at 66, 67.

5.3.1.2 Federal Funding

In line with Nigeria's INDCs commitment to reduce its greenhouse gas emissions by 45% by 2030,¹⁰⁰⁶ the government has taken to providing finance for projects that may relate to renewable energy, sustainable water and waste management, climate change adaptation etc. For instance, in 2020, the government announced that it will soon be launching its third green bond programme to raise the sum of NGN 25 billion (USD 68.7 million), a loan issued on the market by investors to finance environmentally friendly projects.¹⁰⁰⁷

To foster the participation of women in these projects, it is therefore recommended that by setting up a renewable energy trust fund or funding or grants specifically for rural women in the renewable energy sector, the Nigerian government would be mapping out a useful strategy to encourage the productive engagement of these women in the renewable energy industry.

5.3.1.3 Climate Investment Funds (CIFs)

The Nigerian government has developed a Clean Technology Fund (CTF)¹⁰⁰⁸ investment plan for an expected sum of USD 250 million. The plan is designed to support sustainable and climate-resilient development, accelerate private sector investments in the renewable sector as well as pioneering projects.¹⁰⁰⁹ The CTF will be channeled through the African Development Bank (AfDB) among others.¹⁰¹⁰ In 2019, the Board of Directors of the Africa Development Bank Group

¹⁰⁰⁶ The Federal Government of Nigeria, "Nigeria's Intended Nationally Determined Contribution" *supra* note 997.

¹⁰⁰⁷ Jean Marie Takoueu, "Nigeria: To Launch 3rd Green Bond to Fund Several Eco-Friendly Projects" *Afrik 21* (February 11, 2020), accessed January 20, 2021 online: < <https://www.afrik21.africa/en/nigeria-to-launch-3rd-green-bond-to-fund-several-eco-friendly-projects/>>.

¹⁰⁰⁸ The Clean Technology Fund (CTF) is one of the two multi-donor Trust funds within the Climate Investment Funds (CIFs) used to scale-up the production of low-carbon technologies with the aim of reducing long-term greenhouse gas emissions.

¹⁰⁰⁹ "Clean Technology Investment Plan for Nigeria," *supra* note 6 at 11.

¹⁰¹⁰ *Ibid* ("Clean Technology Investment Plan for Nigeria"). See also, International Institute for Sustainable Development, "CIF Trust Fund Committee and Sub-Committee Meetings" (November 18-21, 2019), accessed January 20, 2021, online: <<https://sdg.iisd.org/events/cif-trust-fund-committee-and-sub-committee-meetings-5/>>. Other channels could include the Asian Development Bank (ADB), the European Bank for Reconstruction and Development (EBRD), the Inter-American Development Bank (IDB) and the World Bank Group.

approved an investment fund in the sum of USD 25 million for renewable energy projects across Sub-Saharan Africa, including Nigeria.¹⁰¹¹

Similarly, in 2020, the European Union added €10 million (USD11.9 million) toward financing renewable energy projects in Nigeria.¹⁰¹² The expectation is for the funding to enable the construction of over 150MW of renewable energy projects. For instance, some of the funding will be used for the financing of a 30MW solar project in Kaduna state, which has been approved with construction expected to commence sometime in 2021.¹⁰¹³ This is a welcome and necessary development for rural women particularly in Kaduna State, assuming that most of these projects would be located in the rural communities. Studies from Guatemala reveal that including rural women in the implementation process of renewable energy projects could impact the effective production and consumption patterns especially in terms of reliability etc. Also, it could aid in the empowerment of these women. An illustrative example of this can be seen in the Productive Uses of Renewable Energy (PURE) project implemented in Guatemala from 2007 to 2013 by Fundación Solar, a private development organization.

The PURE project identified a gap in relation to the participation of women in the implementation phases of renewable energy technologies. To close this gap, it adopted a social inclusive and equitable approach that allowed for women to participate through measures such as affirmative actions, participation quotas, and technical trainings.¹⁰¹⁴ To further ensure women's

¹⁰¹¹Namho Oh, "Africa Development Bank Group Approves \$25 million Equity Investment in Fund for Renewable Energy Projects in Africa" Africa Development Bank Group (January 22, 2019), accessed January 20, 2021 online: <<https://www.afdb.org/en/news-and-events/african-development-bank-group-approves-25-million-equity-investment-in-fund-for-renewable-energy-projects-in-africa-18935>> See also, "Clean Technology Investment Plan for Nigeria," *supra* note 6 at 8, 12.

¹⁰¹²Nicholas Nhede, "Nigeria Benefits from EU Funding for Renewable Energy Projects" ESI Africa (December 3, 2020), accessed January 20, 2021, online: <<https://www.esi-africa.com/industry-sectors/finance-and-policy/nigeria-benefits-from-eu-funding-for-renewable-energy-projects/>>.

¹⁰¹³ *Ibid.*

¹⁰¹⁴ UICN, *Creating Conditions for Gender Equity in Rural Energy Projects: Experience in Productive Uses for Renewable Energy in Guatemala* (Guatemala: ENERGIA, 2014) at 6.

empowerment and the effective participation of women in decision-making processes, the implementation of the PURE project was made in eight stages,

- (i) Identification and selection of communities participating in the project;
- (ii) Awareness-raising among stakeholders and preparing social conditions;
- (iii) Determination of the technical viability of the project and formalizing cooperation relationships;
- (iv) Knowledge of the social and institutional surroundings (stakeholder mapping, technical survey, socio-economic census);
- (v) Training and education;
- (vi) Technical studies;
- (vii) Management of RET projects; Implementation of RET.¹⁰¹⁵

Having gone through these stages, through participation, women were able to “discover their own capacity to create, develop, and maintain work opportunities ... using local resources and promoting small collective entrepreneurial initiatives.”¹⁰¹⁶ For instance, through training and awareness raising, women learned how to install, use, and maintain photovoltaic pump systems for tomato greenhouses, and biodigesters to provide gas for domestic and productive uses. They were also able to acquire skills as administrators and accountants. With these skills, one of the women was employed as an accountant at “the Energy Administration office for the Micro Hydropower Plant built in Chahal, Alta Verapaz”¹⁰¹⁷ and another woman interested in becoming an electrician enrolled for the electrician’s course and was able to complete it satisfactorily.¹⁰¹⁸ In addition, the installed renewable energy technologies (solar, photovoltaic systems, biodigesters etc.) facilitated women’s domestic and productive work.¹⁰¹⁹ More similar approaches in Nigeria could be very beneficial.

¹⁰¹⁵ *Ibid* at 9.

¹⁰¹⁶ *Ibid* at 10.

¹⁰¹⁷ *Ibid* at 11.

¹⁰¹⁸ *Ibid* at 19.

¹⁰¹⁹ *Ibid* at 11.

5.3.1.4 Local Commercial Banks

Representatives of commercial banks in Nigeria like Sterling Bank Plc. are of the view that resolving the energy/electricity problem in Nigeria through decentralized renewable energy solutions will lead to rapid industrialization, quality education, job creation, healthcare delivery etc.¹⁰²⁰ For these reasons, the bank has committed to funding the development of a digital trading platform (called Imperium) to enable the sale of renewable energy solutions between electricity generators, distributors and users.¹⁰²¹ The bank further committed to creating partnerships that will encourage the flow of foreign investments into the Nigerian renewable energy industry. For example, it has invested over USD 1 million with a plan to further invest USD 5 million for the delivery of solar-generated power to factories. In addition, the bank has partnered with Zola Electric, a for-profit social enterprise, and a subsidiary of the U.S. parent Company Zola Electric, for the supply of off-grid renewable energy solutions to Nigerian companies.¹⁰²²

Through Sterling bank's corporate social responsibility (CSR) programme it appears to financially empower women (including vulnerable women) by developing female oriented products, such as Women in Business (WIMBIZ), and the Market Women's Quick Cash Scheme.¹⁰²³ For instance, under the Market Women's Quick Cash Scheme, in 2017 the bank organized financial literacy trainings for women in Kaduna State, Nigeria.¹⁰²⁴ In the same year, the bank empowered 30 women in Kaduna State with over NGN 5 million (about USD 10,000.00).¹⁰²⁵ The bank's actions on financially empowering women should be commended as a

¹⁰²⁰ "Imagine a Nigeria, Where the Lights Never Go Off" Sterling (2020), accessed January 20, 2021 online: < <https://sterling.ng/sterling-bank-lights-nigerias-path-to-accelerated-development/>>.

¹⁰²¹ *Ibid.*

¹⁰²² *Ibid.*

¹⁰²³ Sterling Bank, *Pledge to be Nature's Keeper: Sustainability Report 2017* (s:I: Sterling Bank, 2017) at 68.

¹⁰²⁴ *Ibid* at 36.

¹⁰²⁵ *Ibid* at 51.

step in the right direction, especially as it is committed to reducing anthropogenic greenhouse gas emissions through utilizing and financing the development of renewable energy technologies.

However, a close review of the bank's 2017 sustainability report shows that the bank has yet to financially empower women to participate in the development and utilization of renewable energy technologies. Hence, the bank has failed to connect its social sustainability goal - to financially empower women with its environmental sustainability goal - to utilize and finance the development of renewable energy technologies. By not recognizing the interconnectedness between these areas of sustainability, the bank ignores the importance of renewable energy as a foundational tool to facilitating women's empowerment. There is a link between renewable energy access and rural women's economic empowerment, and financial capability has an important role to play in bridging the divide.

5.3.1.5 Project Finance

A project finance is essentially the financing (funding) of utilities or infrastructure, such as the development of renewable energy projects. While the rights, interests and assets of a renewable energy project serves as a collateral, repayment of the loan (funds) is entirely dependent on the revenues the project generate.¹⁰²⁶

In Nigeria, the 461MW gas-fired power plant - Azura-Edo project located in Edo State is reportedly the first project financed independent power project (IPP).¹⁰²⁷ The Azura-Edo project is being developed by a consortium of private investors through a holding company in Mauritius. In order to be bankable, the project received guarantees from multiple arms of the World Bank -

¹⁰²⁶ David F. Asmus, "What is Project Finance?" Sidley (April 23, 2020), accessed January 20, 2021. Online: <<https://www.lexology.com/library/detail.aspx?g=aa0c547c-3069-4933-b3e6-743fa47188ce>>.

¹⁰²⁷ Azura-Edo, "Azura-Edo is a 461MW Independent Power Plant operating in Edo State, Nigeria: Power to Change" online: <<https://azuraedo.com/>>. Online: See, Abiodun Oyeledun & Nnenda Hayatuddini, "2018 Project Finance Report: Nigeria" (January 26, 2018), accessed January 20, 2021 online: <<https://www.iflr.com/article/b1lp1tj62z8k1b/2018-project-finance-report-nigeria>>. An IPP refers to a "non-public utility company investing or operating power generation facilities."

International Bank for Reconstruction and Development (IBRD), Multilateral Investment Guarantee Agency (MIGA) and International Finance Corporation (IFC).¹⁰²⁸ However, the project financiers include commercial banks in Nigeria: First City Monument Bank, Stanbic IBTC Bank, and Standard Chartered Bank.¹⁰²⁹

In 2019, CrossBoundary Energy Access (CBEA) an investment firm with funding from the Rockefeller Foundation and CeniARTH Foundation announced Africa's first project financing facility for renewable energy mini-grids. According to CBEA it will,

initially invest \$16 million into mini-grids serving 170,000 people, providing first-time power to homes and businesses. The focus is on markets with supportive mini-grid regulatory frameworks, such as Tanzania, Nigeria, and Zambia.¹⁰³⁰

From the above, it is clear that the financial barrier is an impediment to women's participation as producers and consumers of renewable energy, a challenge that both policy and law should address. Presently, I have located no documentary evidence to show that rural women make decisions (including financial decisions) at all stages of implementing renewable energy project development, and this has to change, especially because their participation could bring about accountability, transparency, and integrity in the financial management of such projects.

That being said, I ask the question - how is participation viewed from a renewable energy policy and law perspective? In the next sub-section, I attempt to critically analyze this question.

5.4 A Critical Analysis of the Efficacy of Renewable Energy Law in the context Participation and Rural Women

Upon reviewing the above legal frameworks (discussed in section 5.1), key and recurring actors identified in relation to renewable energy policies and laws, and in the context of

¹⁰²⁸Jon Whiteaker, "Azura-Edo Gas-fired, Nigeria" IJGlobal (January 13, 2016), accessed January 20, 2021 online: <<https://ijglobal.com/articles/99010/azura-edo-gas-fired-nigeria>>.

¹⁰²⁹ Other banks include Rand Merchant Bank, and Siemens Bank.

¹⁰³⁰ CrossBoundary, "Africa's First Mini-Grid Finance Facility Announced-The Rockefeller Foundation and CeniARTH" CROSSBOUNDARY (January 24, 2019) accessed January 20, 2021 online: <<https://www.crossboundary.com/crossboundary-mini-grid-facility-announces-first-close-with-the-rockefeller-foundation-and-ceniARTH/>>.

participation are, Women/gender, NGOs/CSOs/Women's Groups, and indigenous and/or private sector participants.

5.4.1 Women/Gender

Almost all of the above policies and statutes refer somewhere to the concept of women/gender.¹⁰³¹ However, the national energy legal frameworks have made little effort to remedy the unique concerns and needs of women even when they are explicitly recognized.¹⁰³² Some relevant legal instruments list the inequities women experience from lack of access to energy, unsustainable use of energy, and the consequential environmental degradation and health risk.¹⁰³³ For instance, the REMP 2005 identifies that the “diminishing stock of fuelwood will compound the problem of poverty reduction and challenge efforts to empower women, children...”¹⁰³⁴ These inequities lead to women (particularly those in the rural and remote areas) being more affected by lack of access to energy and indeed rural women have been recognized in policy and law as the most vulnerable group.¹⁰³⁵

Nonetheless, the renewable energy legal frameworks in Nigeria follow an approach that is ostensibly gender neutral, thus failing to effectively recognize rural women's unique needs, experiences, knowledge, and participatory potential in energy policy-and law-making. At best, relevant Nigerian policies and laws are deemed “gender-neutral” solely because they identify “women” as a relevant group¹⁰³⁶ and include vague clauses listing women's expected needs such as,

¹⁰³¹ Except for the EPSRA, 2005, and the NBP, 2007.

¹⁰³² NREEEP, 2015 *supra* note 28. See also, NEP, 2003 *supra* note 100.

¹⁰³³ *Ibid* (NEP, 2003). See also, *Ibid* (NREEEP, 2015). See, REMP, 2005 *supra* note 128, at 32. See also, REMP, 2012.

¹⁰³⁴ REMP, 2005 *supra* note 128, at 32.

¹⁰³⁵ REMP, 2005 *supra* note 128, at 32. See also, REMP, 2012 *supra* note 129.

¹⁰³⁶ Mostly, in the context of women's vulnerability. See, NEP, 2003 *supra* note 100, at 25. For instance, the NEP 2003 states that the firewood system has a very “low thermal efficiency and the smoke is also hazardous to Human health, especially to women and children who mostly do the cooking in homes.”

- Increasing the scope and quality of rural services, including schools, health services, water supply, information, entertainment...
- Availability of energy, reducing cost, drudgery, indoor air pollution, environmental degradation and health risks, particularly to vulnerable groups such as women and children.¹⁰³⁷

In most cases, by stating the above, decision-makers assume that women's needs, interests, and concerns are brought to the forefront of planning and policy making. However, in practice this is not the case.

Nigerian women in general and rural women in particular are under-represented at the decision-making level in the energy sector.¹⁰³⁸ Despite the above clauses, as earlier stated, 70% of people live in poverty,¹⁰³⁹ 80% of women are mostly poor,¹⁰⁴⁰ and about an estimated 78 million live in rural households¹⁰⁴¹ and experience lack of energy access. In addition, 73.36% of the 77% of Nigerian households led by women¹⁰⁴² depend on wood for lighting, heating, boiling water, cooking. Furthermore, these women depend on manpower as a substitute for mechanical production and processing of agricultural crops such as cassava and palm oil among others.

Where rural women continue to use traditional biomass resources as their primary source of energy, they remain confronted with social, economic, and environmental problems; as a result, their potential to pursue a quality life that is free and fulfilling becomes limited. To this end, and as earlier stated, reforms in energy law and policy must reflect the unique societal/social, economic, and environmental challenges confronted by rural women.¹⁰⁴³ How is energy a rural woman's issue and a challenge for sustainable development? In the following sub-section, I briefly examine this question.

¹⁰³⁷ REMP, 2005 *supra* note 128, at 11, 84.

¹⁰³⁸ Chikwendu, *supra* note 143, at 57.

¹⁰³⁹ Nwabughio, *supra* note 192.

¹⁰⁴⁰ Jimoh, *supra* note 193.

¹⁰⁴¹ *Ibid.*

¹⁰⁴² IFAD, *supra* note 195, at 8.

¹⁰⁴³ Fineman, *supra* note 212.

5.4.1.1 Energy - A Rural Woman's Issue and a Challenge for Sustainable Development

According to Michelle Bachelet, Margaret Chan, and Kandeh K. Yumkella

It is already clear that achieving sustainable development in poor countries is not possible without sustainable energy. Indeed, access to energy spurs development on many levels – not least in terms of women and their health, safety, and autonomy.¹⁰⁴⁴

Without access to sustainable and affordable energy, rural women suffer socially. Thus, lack of access to sustainable energy services can bring about social exclusion. Social exclusion includes rural women's inability to access basic amenities that are necessary to reducing drudgery, poverty, hunger etc.—potable water, education, maternity/health care system, a healthy environment, autonomy, and dignity.¹⁰⁴⁵ As discussed in chapter three, social exclusion can be a barrier to rural women's effective participation in policy- and law making.

With respect to education, a study carried out by the University of Ibadan, Nigeria reveals that gender disparity between boys' and girls' participation in education exists because 1) the male gender is regarded as superior, 2) the cultural belief that a woman should deal with the household chores, rather than attend school, and 3) the deep rooted belief in the differentiation and subordination of females.¹⁰⁴⁶ In 2011, a World Bank report on Nigeria recorded that most women are engaged in agricultural activities and as a result, fewer females are enrolled in schools, compared to their male counterparts.¹⁰⁴⁷ Where modern and reliable energy is lacking, attracting

¹⁰⁴⁴ Michelle Bachelet Margaret Chan and Kandeh K. Yumkella, "Sustaining Women" online: Project Syndicate <<https://www.project-syndicate.org/commentary/sustaining-women?barrier=accesspaylog>>.

¹⁰⁴⁵ Shauna MacKinnon, "Poverty and Social Exclusion: Solving Complex Issues through Comprehensive Approaches," CCPA Review Economic & Social Trend (September 2008), accessed May 5, 2016 online: <http://www.policyalternatives.ca/sites/default/files/uploads/publications/Manitoba_Pubs/2008/Poverty_and_Social_Exclusion.pdf>.

¹⁰⁴⁶ Charles B.U. Uwakwe, Ajibola O. Falaye, Benedict O. Emunemu, and Omobola Adelere, "Impact of Decentralization and Privatization on the Quality of Education in Sub-Saharan Africa: The Nigerian Experience," *European Journal of Social Sciences* 7 (2008) 160 at 165-166. See also, UNESCO and UNICEF, *The Education of Girls the Ouagadougou Declaration and Framework for Action: Pan-African Conference on the Education of Girls* (Ouagadougou: UNESCO and UNICEF, 1993) at 4-5. This position has been reaffirmed by African leaders (including Nigeria) at the Pan-African Conference on the education of girls held at Ouagadougou, Burkina Faso. Nigeria is lagging behind other regions of the world in female literacy and enrolment.

¹⁰⁴⁷ World Bank, "Reproductive Health at a Glance: Nigeria," *World Bank*, (2011), accessed May 5, 2016 online: <<http://siteresources.worldbank.org/INTPRH/Resources/376374-1303736328719/Nigeria42211web.pdf>>.

teachers to rural communities become difficult and women's safety also become uncertain. For instance, due to unavailable access to energy,¹⁰⁴⁸ on the night of April 14, 2014, 276 female students were abducted from a government secondary school in the village of Chibok in Borno State, Nigeria by members of an Islamic terrorist group known as Boko Haram.¹⁰⁴⁹ This experience will remain devastating for the girls involved. If there was energy/electricity these girls could have protected themselves, some may have escaped and/or called the police for help using their cell phones.

As demonstrated in chapter one, rural women are also at the receiving end of all forms of environmental degradation due to the poor energy system. In addition to the belief that the use of agricultural and animal waste negatively impacts land fertility, some authors have argued that emissions from methane and black carbon (released during wood combustion) are the second and third largest forcing pollutants that warm the atmosphere and contribute to global anthropogenic climate change.¹⁰⁵⁰

Economically, rural women need energy for activities such as mechanization, water pumping, irrigation, fertilizer production, agro-processing, storage, transportation, community services and commercial enterprises.¹⁰⁵¹ Thus, including rural women's voices, interests, needs and priorities in renewable energy decision-making process is essential to empowering and facilitating their contribution to sustainable rural development, including reducing rural poverty, and promoting national sustainability agenda in general. As primary consumers, producers, and suppliers of energy as well as affected persons, it is inevitable that a gender-aware energy

¹⁰⁴⁸ Which also includes electricity in this context.

¹⁰⁴⁹ Fox News, "Nigeria Says 219 Girls in Boko Haram Kidnapping Still Missing," FoxNews.com, (June 23, 2014), accessed May 5, 2016 online: <<http://www.foxnews.com/world/2014/06/23/nigeria-says-21-girls-in-boko-haram-kidnapping-still-missing.html>>.

¹⁰⁵⁰ United States Environmental Protection Agency (EPA), *supra* note 17 at 6.

¹⁰⁵¹ FAO, *The Energy and Agriculture Nexus*, *supra* note 88 at 49. See also, United Nations, *Rural Women in a Changing World: Opportunities and Challenges* (New York: United Nations Department of Economic and Social Affairs, 2008) at 30.

framework should recognize and enhance the voices and roles of rural women in energy planning and policy- and law formulation and implementation.¹⁰⁵²

5.4.2 Private Sector Participation

Nigeria’s renewable energy policies and laws do not make a clear distinction between foreign investors and domestic investors; rather, they appear to categorize both as private sector actors. That said, in Nigeria, a foreign investor may either invest and participate in the operation of any enterprise or become a shareholder of any Nigerian renewable energy company.¹⁰⁵³ The difference between domestic and foreign investors is that the latter are “guaranteed unconditional transferability of funds through an authorised dealer.”¹⁰⁵⁴ However, both domestic and foreign companies operate under the ambit of the same law - the Companies and Allied Matters Act, 2004 (now 2020)¹⁰⁵⁵ – a principal statute regulating the establishment and operation of companies in Nigeria. On this basis, this section will consider both foreign and domestic actors having investment commonalities as private sector actors.¹⁰⁵⁶

The recognition of private sector actors other than domestic actors has made energy scholars in Africa (especially Nigeria) state that developing policies at the “national level is strongly influenced by events on the world stage and also by multilateral and bilateral development agencies.”¹⁰⁵⁷ Also, measures in the Nigerian energy regime are largely geared towards “attracting international finance.”¹⁰⁵⁸ It appears that renewable energy frameworks are mainly established to tackle economic and/or financial measures such as market based-instruments and fiscal

¹⁰⁵²Chikwendu, *supra* note 143, at 57.

¹⁰⁵³ *Nigerian Investment Promotion Act* (NIPA), 1995. See also, Mosadoluwa Peace Adeleke, “Foreign Direct Investment in Nigeria” (2018) 1 *African Connected* at 10. See also, James Chen, “Foreign Direct Investment (FDI)” *LegalShield* (February 24, 2020), Accessed April 7, 2020 online: <<https://www.investopedia.com/terms/f/fdi.asp>>.

¹⁰⁵⁴*Ibid* (NIPA, 1995).

¹⁰⁵⁵ *Companies and Allied Matters Act*, 2004 now *Companies and Allied Matters Act*, 2020.

¹⁰⁵⁶ PHCN, *supra* note 903 at 22.

¹⁰⁵⁷Joy S. Clancy, *Policies, Project and the Market Empowering Women? Some Initial Reactions to Development in the Energy Sector* (Twente: University of Twente, Technology and Development Group, 2000) at 9.

¹⁰⁵⁸ REMP, 2005 *supra* note 128, at 21.

incentives¹⁰⁵⁹ that may act as barriers to private sector actors.¹⁰⁶⁰ The enormous attention towards attracting international finance from private sector investors cannot be overemphasized. This may be why one of the critical aims of the NREEEP is to involve the representatives of the private sector in decision-making prior to the Federal Executive Council (FEC) approving future policies.¹⁰⁶¹

The above policies and statutes (discussed on section 5.1) clearly encourage and promote private sector participation. There is no doubt that private sector investments are crucial to economic growth and sustainable development. However, the challenges with largely depending on private actors (such as financial markets, multinational companies, international and/or local syndicates of “rich” private individuals) when promoting sustainable development cannot be ignored. First, the focus of private investors is profitability and not internalizing environmental and social values.¹⁰⁶² Second, and as observed by the Bruntland Report, private investors are insensitive to “the essential needs of the world’s poor to which overriding priority should be given.”¹⁰⁶³

However, the NEP 2003 presumes that increased private sector participation will solve many of the problems experienced under public ownership.¹⁰⁶⁴ On the one hand, practical evidence in Nigeria does not support this assumption. On the second hand, scholars have asserted that despite increased private sector participation, and the expansion in infrastructural services in the energy-power sector, the sector has been characterized by “inadequate quantity, poor quality

¹⁰⁵⁹ NREEEP, 2015 *supra* note 28. See also, *Ibid*, (REMP 2005) at 21. See, REA (*Rural Electrification Strategy*, 2016), *supra* note 937, at 5, 16. See, REA (*Final Draft Rural Electrification*, 2015) *supra* note 937, at 5. See, Federal Republic of Nigeria, *Renewable Electricity Action Program* *supra* note 935, at 63. See, *Nigerian Biofuels Policy Incentives*, 2007 at 6.

¹⁰⁶⁰ REMP, 2005 *supra* note 128, at 21.

¹⁰⁶¹ NREEEP, 2015 *supra* note 28, at 5.

¹⁰⁶² Fleurbaey & Kartha, *supra* note 203, at 303.

¹⁰⁶³ *Ibid*. See also, (WCED) *supra* note 208.

¹⁰⁶⁴ Chikwendu, *supra* note 143, at 56. See also, NEP, 2003 *supra* note 100, at 6.

and low accessibility to electricity services.”¹⁰⁶⁵ Economists have described the private sector management of the energy-power industry as “[n]ew owners, same problems.”¹⁰⁶⁶ As an example, the Senate proceedings of May 24, 2017¹⁰⁶⁷ criticized private sector actors (such as the Electricity Distribution Companies (DisCos) by stating that they leave “millions of their customers at their mercy through estimated billings.”¹⁰⁶⁸ According to the proceedings, private sector actors prefer to harass consumers with jaw-dropping estimated bills in order to realize “targeted profit margins through the imposition of arbitrary billing systems usually referred to as ‘Crazy Bills’ by customers.”¹⁰⁶⁹ If this is not addressed, even if rural electrification becomes a success, it could result in issues such as affordability on the part of the rural people.

As a further example, the Senate Proceedings of March 1, 2017 criticized private sector actors by stating that tank farms¹⁰⁷⁰ owned by private investors are not properly accounted for, as they are illegally sold and usually designed to enrich a few persons stupendously at the expense of the masses particularly women who bear a disproportionate burden of energy pollution and lack of access to energy.¹⁰⁷¹

Therefore, I would argue that no investment strategy will be completely successful without first having a good foundational policy plan where the practical issues are brought to the forefront by people who have lived and experienced these issues and had participated in developing practical solutions to them. The inclusion of rural women in policy and law-making (through measures and techniques such as education, skill development and “taking parliament to the people,” discussed

¹⁰⁶⁵ Ebele Stella Nwokoye, Uju Ezenekwe, Amaka Metu & Kalu Christopher, “Efficiency of Nigerian Electricity Market: Emerging Issues, Prospects and Challenges” (2014) 6:1 Nigerian J. Energy Environmental Economic at 2.

¹⁰⁶⁶The Economist Group, “Nigeria: Challenges Facing the Nigerian Power Sector” The Economist (February 26, 2016), Accessed March 28, 2019 online: <http://country.eiu.com/article.aspx?articleid=1003980684&Country=Nigeria&topic=Economy_1>.

¹⁰⁶⁷ 8th National Assembly, *supra* note 219.

¹⁰⁶⁸ *Ibid*

¹⁰⁶⁹ *Ibid*.

¹⁰⁷⁰ Defined above in the section titled defining terms.

¹⁰⁷¹ 8th National Assembly, *supra* note 219.

in chapter six) can help enhance the transparency and accountability needed to promote good governance structures. After addressing foundational issues and developing practicable solutions, investment solutions can then become an additional useful tool to enhance policy implementation.

5.4.3 Non-Governmental Organizations (NGOs), Civil Society Organizations (CSOs) and Women's Groups

The mention of NGOs/CSOs/women groups in the renewable energy legal frameworks suggest their legitimacy to participate in the process of decision-making. Feminist legal theorists note that the “efforts of NGOs, women’s groups and other members of civil society are perhaps key in effecting positive legislative and social change.”¹⁰⁷² This is so because, at the minimum, their efforts can provide entry into the male stronghold of legislative drafting.¹⁰⁷³

The challenge with this participatory arrangement is that in most cases NGOs etc. do not share the same experiences as rural women either by reason of class and/or having no community roots. Some of these organizations are made up of people who come from far and wide and not the affected people themselves who have common concerns, interests and needs to protect, a situation feminists describe as representing the other “Other.”¹⁰⁷⁴ This means that the inclusion of NGOs/CSOs/women groups in decision-making does not imply that the voices of rural women are being represented (for instance, the representation of rural women by organizations such as the Renewable Energy Association of Nigeria (REAN) - discussed below). Consequently, it is not sufficient participatory practice for any NGO to speak for and on behalf of members of groups oppressed in ways they do not themselves experience.

Furthermore, most NGOs are either funded by the government and/or donors,¹⁰⁷⁵ and

¹⁰⁷² Natalie Persadie, *A Critical Analysis of Efficacy of Law as a Tool to Achieve Gender Equality* (Lanham: University Press of America, INC., 2012) at 2.

¹⁰⁷³ *Ibid.*

¹⁰⁷⁴ Kitzinger & Wilkinson, *supra* note 318.

¹⁰⁷⁵ Donors could be either local or international entities.

therefore, must consider their own financial well-being. For instance, Javier Betancourt, a representative for the USAID-funded Renewable Energy and Energy Efficiency Project (REEEP) in Nigeria, being implemented by the U.S.-based NGO Winrock International, stated that: “[e]xtending the grid is very expensive. There are many communities... *You will never get enough money out of these communities to justify doing this.*”¹⁰⁷⁶ Due to conflicting interest, there is no doubt that the adage NGOs cannot bite the hands that feed them applies. Hence, NGOs are more likely to make decisions that may not necessarily be in the interest of rural communities, especially the women they represent.¹⁰⁷⁷ In this regard, Natalie Persadie states that,

[w]hile NGOs are crucial to change, their ability to effect change depends on their degrees of political and financial independence and should, therefore, not be taken as given, as NGOs are generally required to promote the agendas of their sponsor.¹⁰⁷⁸

Therefore, even if organizations are indeed consulted, they may not have the objective to build the capacity necessary to enable rural women to participate actively in renewable energy law-making processes. For instance, it could be a mistake to appoint an organization like the Renewable Energy Association of Nigeria (REAN) whose objective is to represent “the interest of over 40 privately owned companies in Nigeria’s Renewable Energy Sector” in matters concerning rural women. As a further example, organizations like the Women Environmental Programme (WEP)¹⁰⁷⁹ may appear appropriate to represent the interests of rural women in energy-related matters. However, to avoid the mistake of categorizing women as a homogeneous group, certain factors need to be taken into consideration. For instance, in the case of the WEP, the website is

¹⁰⁷⁶ Warren, *supra* note 976.

¹⁰⁷⁷ Cecilia Tortajada, “Nongovernmental Organizations and Influence on Global Public Policy” (2016) 3:2 Asia & Pacific Policy Studies 266 at 268. Like Persadie, Cecilia Tortajada asserts that “NGOs could be anxious for their own survival rather than for the poor populations they [are] supposed to help.”

¹⁰⁷⁸ Persadie, *supra* note 1072. See also, Anthony Bebbington, “Donor-NGO Relations and Representations of Livelihood in Nongovernmental Aid Ahains” (2005) 33:6 World Development 937. See, *Ibid* (Tortajada) at 268.

¹⁰⁷⁹ WEP, *supra* note 842.

silent on what group of women (whether rural/grassroots or urban/elites) form this organization, an aspect that is critical to understanding which group of women represent the others in decision-making processes. Also, as part of its strategic objectives, the WEP educates “women and youths on their civic rights and responsibilities...,”¹⁰⁸⁰ an important form of participation that allows women and youths to vote during elections; however, not actively participate (by confidently speaking out in ways that can influence outcomes) when policies and laws are made.

In my view, the role of an NGO (especially one that isn’t organized by rural women themselves or directly impacted by the reality of a community) ought to be to bridge the gap between policy- or law-makers and rural women, and not to usurp their (rural women’s) position to lead their own change. For instance, in South Africa (discussed in Chapter four), through workshops, trainings (including technical skill development) and repetitive dialogue to prepare and instill confidence,¹⁰⁸¹ both the Women’s Energy Group (WEG), and the Rural Women’s Movement served as a conduit for bridging the gap between policymakers and rural women.¹⁰⁸²

That said, the Federal Ministry of Environment has established the Rural Women Energy Security (RUWES) initiative to provide clean energy options for rural women in Nigeria. It aims at “lowering market entry barriers of the clean energy market... from the design of clean energy products, to building a lasting market for reliable, practical and affordable clean energy technologies.”¹⁰⁸³ The main objective of RUWES is to empower rural women economically “by making them marketers and distributors [and not producers] of clean energy products.”¹⁰⁸⁴ Since income generation is the goal, in 2017 the Federal Ministry of Environment reported that,

¹⁰⁸⁰ *Ibid.*

¹⁰⁸¹ Transvaal Rural Action Committee, *supra* note 625 at 3.

¹⁰⁸² Annecke, *supra* note 810, at 85.

¹⁰⁸³ Federal Republic of Nigeria, *National Beijing + Review* (s:I The Federal Ministry of Women Affairs and Social Development, 2014).

¹⁰⁸⁴ *Ibid* at 46.

Ten (10) rural women Cooperatives are already empowered with the RUWES Business Model Package-tricycle loaded with the cleaner energy lighting and cooking kits aimed at creating viable market potentials for the women while creating jobs for foundry workers, welders, mechanics etc. in cookstoves production.¹⁰⁸⁵

However, the insignificant number¹⁰⁸⁶ of rural women cooperatives since the inception of RUWES in 2013 may be because economic growth alone cannot automatically promote human development that translates to societal change. Social transformation requires a “deliberate and effective public action that enables people [rural women] to participate in, and benefit from the process of development,”¹⁰⁸⁷ such as legal processes about renewable energy. This means that by involving them actively in law-making processes, rural women stop seeing their participation as being linked to survival; rather, they gain the confidence to share their voices in policy and law making and make adequate energy choices. In addition, they become recognized actors in the renewable energy project which can stimulate an increase in the production and use of renewable energy particularly in rural Nigeria.¹⁰⁸⁸

5.5 Summary and Conclusion

This chapter investigated the renewable energy, and related policies and laws in Nigeria to identify whether they include legal measures to enable, enhance and/or facilitate women’s rights to effective participation in decision-making and in the renewable energy sector. It critically analyzed how participation is defined from the Nigerian renewable energy policies and laws perspective. It further examined whether the definitions identified are sufficient to effectively making real changes to the energy lives and participation of rural women in both policy and law

¹⁰⁸⁵ Federal Republic of Nigeria, *Nigeria’s 6th Periodic Country Report:- 2015-2016 on the Implementation of the African Charter on Human and People’s Rights in Nigeria* (Abuja: The Federal Ministry of Justice, 2017) at 139. See also, Federal Ministry of Environment, “Clean Energy Initiatives” (2020) Federal Ministry of Environment online: <<https://environment.gov.ng/clean-energy-initiatives/>>.

¹⁰⁸⁶ Nwabughio, *supra* note 192.

¹⁰⁸⁷ UNDP, (*HDR 1990*) *supra* note 205, at 83, 84.

¹⁰⁸⁸ Newsom, *supra* note 92.

making, and in the sector itself. It concludes that much work remains to be done to ensure rural women's participation in renewable energy policy and law-making. For the most part, relevant laws and policies in Nigeria are silent on women's participation – a silence that speaks volumes. Finally, for legal pathways to be truly sustainable, “those [rural women] whose lives and well-being are at stake must be [actively] involved in decision-making and leading the way, through ...collective action and engagement.”¹⁰⁸⁹ This is also true of promoting rural women's effective participation in renewable energy projects.

¹⁰⁸⁹ UN Women, *World Survey on the Role of Women in Development 2014: Gender Equality and Sustainable Development* (New York: The Research and Data Section of UN Women 2014) at 16.

Chapter Six

Overcoming the Barriers to the Participation of Rural Women: Proposals for Reform

6.0 Introduction

While renewable energy policies and laws may contain provisions¹⁰⁹⁰ that may bring about improvements in the lives of rural women, it is clear that in the long run, the formulation and adoption of such policies and laws “can be successful if and only if they are accompanied with mechanisms that enable”¹⁰⁹¹ the full and effective participation of rural women. This chapter attempts to develop a blueprint for what an inclusive renewable energy law should contain. It explores ways of increasing and strengthening the participation of rural women in both policy and law-making processes.

The first section examines measures through which renewable energy policies and laws can successfully create opportunities for and facilitate the active participation of rural women in law-making processes. In this thesis, measures refer to the first steps, that is, the preparatory processes or courses of action needed to enable rural women to participate competently and actively. I will mainly discuss financial capabilities, consciousness raising, grassroots women’s organization, training, and legal empowerment.

In the second section I investigate possible techniques that can be integrated and adopted by lawmakers for the active participation of rural women. By techniques, I mean the procedures for accomplishing public participation, the examples I use include “Taking Parliament to the

¹⁰⁹⁰ This has been discussed in more detail in Chapter three.

¹⁰⁹¹ Dutta, *supra* note 159, at 40.

People” committee meetings and house sittings, public hearings, sectoral Parliaments, public outreach programmes and information dissemination, and collaboration with constituency offices.

6.1 Measures for Increasing and Strengthening the Participation Rural Women

Effective participation requires the strengthening of rural women’s capabilities. To achieve this, article 13 (ii) and (iii) of the *Geneva Declaration for Rural Women, 1992*¹⁰⁹² states that new “legislation and institutional procedures should be introduced or the existing ones reformed” to include measures that allow rural women to have equitable participation in the formulation of policies and laws affecting their well-being.¹⁰⁹³ These measures (which will be discussed in more detail below) are: financial assistance, access to information, communication, training, and education (including non-formal education).¹⁰⁹⁴ Including these measures will potentially be the difference between mediocre and good renewable energy laws and policies. Therefore, it will help avoid laws and policies that languish, and ensure that the ones that are adopted are implemented.¹⁰⁹⁵

6.1.1 Financial Capability

Rural women’s access to financial support is needed to bolster their participation in both policy- and law-making processes. According to the 2015 World Bank report on Women, Business and the Law, 155 of 173 countries have at least one law impeding women’s economic opportunities, and in 18 countries “husbands can legally prevent their wives from working.”¹⁰⁹⁶

¹⁰⁹² *Geneva Declaration for Rural Women, 1992.*

¹⁰⁹³ *Ibid* at art. 13 (ii) & (iii).

¹⁰⁹⁴ *Ibid* at art. 13 (xiii). See also, UNESCO, “Non-formal Education” (2011) online: Institute of Statistics <<http://uis.unesco.org/en/glossary-term/non-formal-education>>. According to the United Nations Education, Scientific and Cultural Organization (UNESCO), non-formal education is acquired within the “process of the lifelong learning of individuals.”

¹⁰⁹⁵ Ellen Morris & Jennye Greene, *Blueprint Guide for Creating Gender-Sensitive Energy Policies* (Lisbon: Sustainable Energy Solutions, 2019) at 7.

¹⁰⁹⁶ World Bank Group, *Women, Business and the Law 2016* (Washington DC: World Bank, 2015.) at 8.

This could be the case in Nigeria. In 2015, the Center for Health Ethics Law and Development (CHELD) report on *Violence against Women in Nigeria and the Need for Women's Fund* stated that domestic violence includes “husbands preventing their wives from working or/and denying them funds for necessities that include children’s school fees, health services and even food.”¹⁰⁹⁷ Therefore, a gender-focused legal framework on renewable energy needs to address the issue of lack of finance (economic inequities) impeding rural women from participating in policy- and law-making.

Fiscal policy and public financial management could be used to promote the participation of rural women by increasing financial resources meant for women. For instance, the budget allocated to the Ministry of Women Affairs in Nigeria could be increased to include funds for the participation of rural women.¹⁰⁹⁸ In Rwanda, the budget allocation on education advocated for and successfully achieved by women Parliamentarians was increased in 2005 to financially support private and public institutions involved in “early education, in order to give women opportunities in the society.”¹⁰⁹⁹ This pro-women action may be why as of March 1, 2020 the Data on National Parliaments ranked female political participation in Rwanda at 61.25%,¹¹⁰⁰ compared to 48.8% in 2004.¹¹⁰¹

¹⁰⁹⁷Cheluchi Onyemelukwe-Onuobia, “Violence against Women in Nigeria and the Need for Women’s Fund” (2015) online: Center for Health Ethics Law and Development <<https://cheld.org/chelds-project-on-violence-against-women/>>. See also, Leon Usigbe, “Nigerian Women Say ‘no to gender-based violence’” online: Africa Renewal <<https://www.un.org/africarenewal/news/nigerian-women-say-‘no’-gender-based-violence>>.

¹⁰⁹⁸AllAfrica, “Nigeria: 2016 Budget – N4 Billion Allocation to Women Affairs Ministry Inadequate - Tinubu” Vanguard (January 26, 2016) Accessed March 25, 2020 online: <<https://allafrica.com/stories/201601270211.html>>. See also, Federal Ministry of Women Affairs and Social Development, “About us - Federal Ministry of Women Affairs and Social Development.” Accessed March 25, 2020 <<http://www.womenaffairs.gov.ng/index.php/about-us>>.

¹⁰⁹⁹Elizabeth Powel, *Rwanda: The Impact of Women Legislators on Policy Outcomes Affecting Children and Families* (s:I: United Nations Children’s Fund (UNICEF), 2007) at 15.

¹¹⁰⁰Global Data on National Parliament, “Percentage of Women in National Parliaments” online: Inter-Parliament Union (March 1, 2020) <<https://data.ipu.org/women-ranking?month=3&year=2020>>.

¹¹⁰¹Women in National Parliaments, “World Classification” (December 31, 2004) online: Inter-Parliament Union <<http://archive.ipu.org/wmn-e/arc/classif311204.htm>>.

In addition to recommendations made in chapter five, to further increase participation, policies and laws on renewable energy should contain provisions that support the participation of rural women in both their formulations and implementation through innovative finance, including using various mechanisms to raise funds from public, private and philanthropic actors. For instance, one idea could be to establish a renewable energy rural women trust fund management system or a crowdfunding platform that requires private energy companies in Nigeria to contribute meagre amounts — maybe 0.001 per cent of their annual profits based on audited financial reports for the year under review or to be determined by policymakers. This is one way energy companies could contribute to corporate social responsibility (CSR).

In terms of participating in policy- and law-making, funding is needed to pay for support services to care for rural women’s dependents, transportation to the venue, education (including non-formal education),¹¹⁰² training programmes and other costs. Another possible funding model would be the Nigerian Women Trust Fund (NWTF).¹¹⁰³ Although not created by statute, the NWTF was established in 2011 to address one major obstacle (lack of funds to finance campaigns) affecting women from participating in politics.¹¹⁰⁴ The federal government provided the initial seed-funding¹¹⁰⁵ of NGN 100,000,000.¹¹⁰⁶ Currently, the NWTF appears to focus on supporting urban/elite women in Abuja and Lagos to financially realize their political ambitions.¹¹⁰⁷ It should be commended as a step in the right direction but could be expanded to include a stream

¹¹⁰² UNESCO, (*Freedom of Information*) *supra* note 886.

¹¹⁰³The Nigerian Women Trust Fund (NWTF) is a “multi-stakeholder initiative backed by the Federal Ministry of Women Affairs and Social Development (MWASD), and a coalition of civil society, private sector and international development agency partners, including UN Women.”

¹¹⁰⁴ The Commonwealth, *Nigeria Women’s Trust Fund to strengthen Women’s Political Participation, Nigeria: Gender Equality Case Study* (London: Commonwealth Secretariat, 2015) at 10.

¹¹⁰⁵ This Seed Fund is the first official equity funding.

¹¹⁰⁶ Nigeria Women’s Trust Fund, “Fundraising & Grant Making,” accessed May 25, 2020. <<https://nigerianwomentrustfund.org/grant-making/>>. Although the NWTF’s website does not state whether contributions were made from other sources, it notes that the organization will “pursue funding from legal diverse backgrounds...”

¹¹⁰⁷ The Commonwealth, *supra* note 1104.

specifically for the purposes of participation in energy decision-making. Moreover, the NWTF should expand its scope to include funding women in rural areas who are considering participation in policy- and law-making related to renewable energy.

Another promising avenue for enhancing rural women's participation in renewable energy projects is to reform legal frameworks like the 2015 NREEEP, and the 2005 *Electric Power Sector Reform Act*¹¹⁰⁸ (discussed in Chapter three and five) — to include a waiver of licencing fees for the first ten years for rural women-focused businesses engaged in the generation and distribution of electricity (exceeding 1MW & 100KW respectively) from renewable energy sources. Such a waiver could allow a syndicate, or a cluster of people (women) come together to utilize common resources (including, finance, knowledge, and human resources). This could also bring about the financial capability and self-confidence necessary to participate in future policy- and law-making processes. It could also lead to a change of mindset in the belief that rural women continue to lag behind rural men who are more likely to get paid employment, and economically empowered to participate and influence policy-making in the renewable energy sector.¹¹⁰⁹ Financial confidence is the pathway to achieving almost all other measures listed below.

6.1.2 Consciousness Raising

Lack of education on the part of some rural women (who consider their persistent energy issues as the norm or a choiceless situation) can create a lack of interest in participating in policy- and law-making. Hence, consciousness raising seeks to make these women aware that lack of energy access is a problem that should be considered as both personal and political. This awareness

¹¹⁰⁸ *Electric Power Sector Reform Act*, 2005.

¹¹⁰⁹ Energy Sector Management Assistance Program (ESMAP), *Nigeria: Expanding Access to Rural Infrastructure Issues and Options for Rural Electrification, Water Supply and Telecommunication* (Washington, D.C, The World Bank, 2005) at 1. See also, Emeka Eugene Dim & Joseph Yaw Asomah, "Socio-demographic Predictors of Political Participation among Women in Nigeria: Insights from Afrobarometer 2015 Data" (2019) 20:2 J. Intl Women's Studies 91 at 91.

can prompt rural women to act on a mass scale, in the sense that, it can motivate them to come together to speak out, voice what they understand as their energy realities, identify their common and shared energy issues, and develop practical and appropriate solutions that are based on local circumstances.

Thus, to increase rural women's participation, grassroots women organizers should adopt a consciousness-raising approach. Having become aware of their capacity, needs and right to be heard, rural women should strive to enter and influence policy-making arenas as discussed below.

6.1.3 Trainings, Skills Development and Education

Providing trainings is another way to enable rural women to participate and influence processes and outcomes. Through trainings, facilitators such as the leaders of rural women organizations should aim to motivate and improve rural women's participatory skills by addressing challenges (such as lack of participatory experience, leadership skills and low confidence) facing rural women. To facilitate conversations, trainings should help develop participants' public presentation and communication skills effectively. It should also help rural women collectively move through the process of overcoming any form of discrimination in areas such as formal education. In addition, trainings, skills development, and education should enable these women make suggestions and promote ideas, thoughts and perspectives that add value.

For instance, in South Africa (discussed in chapter four), the Rural Women's Movement (RWM), and the Women's Energy Groups (WEGs) were able to help rural women build their skills and self-confidence through constant trainings and education. Trainings should also include programmes designed to develop technical skills in energy, water, environment etc., to enable participation in policy-and law-making as well as in the industry — policy implementation. These programmes should relate to rural women's everyday life. They should be geared toward

understanding technical terms and upgrading their technological capabilities as this would allow these women to better assimilate the language of other stakeholders such as the Technical Advisory Committee (discussed in Chapter three), listen empathetically,¹¹¹⁰ and build self-confidence, characteristics which also help with participation in policy- and law-making. For instance, this would help avoid one of the issues (inability to digest the hundreds of pages of technical language in discussion documents¹¹¹¹) experienced by rural women in South Africa who participated in the energy policy-making example discussed in Chapter four.

Also, facilitators must ensure that they train grassroots women in various rural communities in facilitation skills (such as creating an inclusive environment and conflict management) with a goal to hand over the facilitator role to them. In addition to personal contacts, using outreach programmes in the form of educational workshops, educational tools (such as pamphlets), radio-based education and visual aids (such as white or black boards, and artefacts) to spread messages can enhance and encourage a more active and creative training.¹¹¹² In addition, trainings “need to be conducted in vernacular languages which are accessible to all, or time allowed for translation”¹¹¹³ where the English language is used.

Finally, trainings and education should allow facilitators and attendees to speak by means of several languages. This means that facilitators must train and educate rural women to converse and persuade decision-makers using concepts familiar to both the energy community and the community of rural women.¹¹¹⁴

¹¹¹⁰ Meffe et al., *supra* note 360, at 233.

¹¹¹¹ Annecke, *supra* note 810, at 79.

¹¹¹¹ *Ibid* at 17.

¹¹¹² Baden, *supra* note 138, at 11.

¹¹¹³ IRC International Water and Sanitation Centre, *Women, Water and Sanitation* (Washington: D.C Prowess/UNDP, 1993) at 2, 27. See also, Baden, *supra* note 138 at 11.

¹¹¹⁴ Morris & Greene, *supra* note 1095, at 8.

6.1.4 Location

Since lack of time is a major constraint for women, especially in the rural communities, to encourage attendance during trainings and consciousness raising activities it is necessary to arrange discussions at places where women gather to carry out their daily routines such as cooking arenas, water collection points and local washing sites. Although these sites may not be the typical venue with facilities such as audio-visual equipment, wireless internet, computer rooms, etc., until the issue of rural electrification is addressed, self-generating energy sets could be deployed to serve these needs.

In addition, such locations could reduce transportation costs because they are within a reasonable distance for most rural women attendees. These spaces are certainly places to find rural women's voices and help to address the issue of time for rural women.

6.1.5 Developing Grassroots Women Organizations

Developing grassroots women organizations in the renewable energy sub-sector is another way of increasing the participation of rural women in law-making and in the renewable energy industry. My knowledge about Nigerian rural women is that they complain about their energy issues and energy-related issues on an individual basis, but most have yet to organize themselves as a political force in renewable energy-related matters.¹¹¹⁵ This could perhaps be due to barriers such as financial challenges, the perception of women, gender roles and lack of time etc. (discussed in Chapter three). It could also be due to women not having the confidence to begin an organization.

¹¹¹⁵This is discussed in more detail in Chapter five.

Through consciousness raising, women leaders in rural communities can begin organizing grassroots women organizations. Also, rural women who may have migrated to the cities or elsewhere for personal development could return to begin these organizations. For example, in colonial Nigeria in 1944, the Abeokuta Ladies' Club, consisting of local Abeokuta elite women like Fumilayo Ransome-Kuti collaborated with rural market women to form an organized political force which they named Abeokuta/Egba Women's Union (AWU).¹¹¹⁶ Although this organization did not concern itself with energy matters, but rather with colonial economic (tax) policy, this joint-force approach could be replicated in the renewable energy arena. As a further example, in South Africa (discussed in chapter four), the Rural Women's Movement (RWM) under the initiative of Lydia Kompe, a female rural employee of TRAC organized rural women from multiple communities to express their views and lobby for change.¹¹¹⁷

Thus, to ensure that these women's messages get to those in power and get translated into renewable energy policies and laws, it is recommended that an extensive network of grassroots women organizations and other national women organizations be created in the field of renewable energy. In other words, "[i]t is essential to develop a 'critical mass' because a woman...gains strength from an active women's movement outside the system and by reaching out to a critical mass within the system."¹¹¹⁸ However, for this to succeed in Nigeria the 'critical mass' currently consisting of upper/middle class elite women must be willing to grant equal voice to grassroots rural women. Therefore, all women in Nigeria must work across their differences,¹¹¹⁹ so that

¹¹¹⁶For readings on Abeokuta/Egba Women's Union (AWU) see, Funmilayo Ransome-Kuti, "We had Equality till Britain Came" (1947) *Daily Worker* in Tiffany K. Wanye, ed, *Feminist Writings from Ancient Times to the Modern World: A Global Sourcebook and History* (Santa Barbara: Greenwood, 2011) at 554. See also, African Feminist, "Fumilayo Ransome-Kuti: African Feminist Ancestors" at 1 online: <<http://www.africanfeministforum.com/funmilayo-ransome-kuti-nigeria/>>. See, Women in African History, "Funmilayo Ransome-Kuti: Biography" (2019) online: UNESCO < <https://en.unesco.org/womeninafrica/funmilayo-ransome-kuti/biography>>.

¹¹¹⁷ Transvaal Rural Action Committee, *supra* note 625, at 3.

¹¹¹⁸ "Women's Participation in Decision-making" *supra* note 552, at 2736. See also, Baden, *supra* note 138, at ii.

¹¹¹⁹ Differences could arise in areas such as elite and grassroots, educated and illiterate, rich and poor, urban and rural etc.

energy-related issues which affect mostly rural women do not remain invisible and silent.

For effective outcomes, it is a healthy practice to include men who are sensitive to women's energy issues, as it would benefit the cause of women if their access to energy struggle is regarded as a fight for human rights and energy justice and not just a branch of the women's movement.¹¹²⁰ Also, in order to effect changes, rural women's organizations need more than just tools¹¹²¹ to improve their political participation; they must be involved in organizing, lobbying and negotiating with decision-makers¹¹²² on why the participation of rural women in law-making processes is important while simultaneously requesting for the allocation of adequate financial resources. As one South African interviewee told Monique Dolye, through lobbying, Members of Parliament have championed our cause, "have assisted us to gain access to Parliamentary processes and helped in broadening/raising awareness."¹¹²³ In Nigeria, like other countries, lobbying is a powerful political tool. However, questions such as who does the lobbying, and whose interests are represented may raise issues including who is given a voice and who is silenced?

As earlier mentioned, financial capability is a critical piece for the establishment and survival of these organizations. Thus, in addition to the recommendations stated above (financial capability, subsection 6.1.1), these organizations could seek funding from local Nigerian churches, including those located in the cities. This can be a good way for churches in Nigeria to give back to society particularly those in grassroots communities.¹¹²⁴ Currently, there is little to no evidence to show that this is the situation particularly as it relates to grassroots organizations and the

¹¹²⁰ "Women's Participation in Decision-making," *supra* note 552, at 2737.

¹¹²¹ Tools could include education, capacity building and training etc.

¹¹²² As was demonstrated in the South Africa energy example discussed in Chapter four.

¹¹²³ Monique Dolye, *Public Participation Parliament – A Survey of Participants* (Cape Town: Parliamentary Monitoring Group, 2017) at 12.

¹¹²⁴ Olumide Omoboye, "Article 3: Giving Back to the Community" Church Refocus (February 6, 2020), Accessed June 6, 2020 online: < <https://churchre-focus.org/article-3-giving-back-to-the-community/>>.

renewable energy sector. Inspiration may once again be found in South Africa where international church links and networks¹¹²⁵ funded the Rural Women's Movement (RWM).

6.1.6 Information, Communication and Outreach Programmes

Increasing rural women's participation can be achieved through information and communication. Effective information dissemination and communication programmes can be carried out using local media, community structures (e.g., viewing centres¹¹²⁶), theatres and schools. To avoid barriers such as poor awareness and lack of information, pamphlets, films, stage plays, and radio programs can be used as educational tools to enhance women's knowledge about participatory processes and renewable energy opportunities.

Community radio is one accessible and readily affordable medium within the rural community to disseminate information¹¹²⁷ such as the date, time, and venue of meetings. This form of information dissemination tool also helps to raise awareness of residents protesting because of water shortages or lack of electricity due to cable theft and can enable discussions on renewable energy projects and policies while giving immediate attention to these issues.¹¹²⁸ As one South African female interviewee told Annecke, to become aware of events in her community, "...I cook quickly, boil water quickly, drink tea anytime of day, and listen to my radio anytime."¹¹²⁹

Communication and information could also be disseminated through the beating of the gong by the town crier, as has been traditionally done in Nigeria.¹¹³⁰ Movies or plays can take place at local venues, and by using local actors. This allows for creative learning, the bringing

¹¹²⁵ Abbott, *supra* note 686, at 99.

¹¹²⁶ A hall where the public sit to watch programmes.

¹¹²⁷ Fombad & Jiyane, *supra* note 779 at 50.

¹¹²⁸ Christine Schmidt, "In South Africa, Community Radio Stations – Lifelines for Local News in Rural Areas – Can Get a Boost with Volume." NiemanLab (July 23, 2018), Access June 4, 2020 online: <<https://www.niemanlab.org/2018/07/in-south-africa-community-radio-stations-lifelines-for-local-news-in-rural-areas-can-get-a-boost-with-volume/>>.

¹¹²⁹ Wendy Annecke, *Non-Economic Determinants of Energy Use in Rural Areas of South Africa* (Colorado: National Renewable Energy Laboratory, 1999) at 22.

¹¹³⁰ Odoemene, *supra* note 431.

together of women, raising their self-confidence, and ending gender-stereotype. Either the Nigerian government or private institutions could create, finance, or otherwise support these communication mediums by creating the environment for the effective operation of these methods of communication.¹¹³¹

In other situations, like community radio stations, funds are raised through fundraiser events attended by prominent South Africans.¹¹³² This fund-raising method could be replicated in Nigeria. Finally, “as part of its outreach programme, the South African Parliament conducts women’s workshops in rural areas to train leaders of local communities in the understanding of Parliament and the law-making process.”¹¹³³ Similar strategies could be pursued in Nigeria.

6.1.7 Legal Empowerment

Legal empowerment is an important measure that can help rural women overcome participatory barriers (discussed in Chapter three). Legal empowerment is broadly used in the sense that legislation, court rulings, decision-making processes, agreements, and law reforms on renewable energy can encourage and benefit disadvantaged populations such as rural women. It can be achieved by specifying procedures through which this group of women can participate in developing both policies and laws.¹¹³⁴ Through legally binding judgements and legislative clauses on participation, rural women’s participatory rights can be strengthened while bolstering their

¹¹³¹Sharon Friedman, *Post-Apartheid Dance: Many Bodies Many Voices Many Stories* (Newcastle: Cambridge Scholars Publishing, 2012) at 148 (For example, the National Arts Council (NAC) of South Africa is the main funding body for South African artists.)

¹¹³² TMO Reporter, “Briefly...Prominent South Africans to Join Fundraiser for Local Radio Station.” Themediaonline (March 3, 2014), Accessed June 5, 2020 <<https://thediaonline.co.za/2014/03/briefly-prominent-south-africans-to-join-fundraiser-for-local-radio-station/>>.

¹¹³³ Inter-Parliamentary Union, “Parliament and Democracy in the Twenty-First Century: A Guide to Good Practice” (2006) Inter-Parliamentary Union online: <<http://archive.ipu.org/dem-e/guide/guide-4.htm>>.

¹¹³⁴ Lorenzo Cotula, *Legal Empowerment for Local Resource Control: Securing Local Resource Rights within Foreign Investment Projects in Africa* (Hertfordshire: International Institute for Environment and Development (IIED), 2007) at 18. See also, Bruce et al, *supra* note 229, at 20.

agency.¹¹³⁵ For example, the Nigerian Constitution could conceivably enhance rural women's participation through mandatory affirmative action – quota system clauses that stipulate the number of rural women that should be included in law-making processes about renewable energy. Such politics of recognition should allow for the representation of subordinate social groups in bodies such as Parliaments and based on approaches like a quota system.¹¹³⁶ Although this may require an amendment of the Constitution which may involve a lengthy process,¹¹³⁷ it could also be achieved through the creation of a legislation. In countries like Rwanda, the 2003 Constitution provides for women to occupy 30% of all law-making positions; as shown above, these women have been credited for increasing the budget allocated to women's education, to allow for “early education, in order to give women opportunities in the society.”¹¹³⁸

Furthermore, the likelihood of this happening will depend on how well-educated rural women are on the legal provisions that give these women the right to participate in positions and processes connected to law-making institutions. Such legal education could be carried out by non-governmental organizations like the NWTF. Currently, the NWTF provides citizens with information on their right to vote,¹¹³⁹ the principal form of participation known to women in the rural communities. Rural women in Nigeria participate in rallies and vote during elections,¹¹⁴⁰ but not in the day-to-day governmental decision-making regarding energy policy and practice.

¹¹³⁵The 2009 report of the United Nations Secretary-General to the U.N. General Assembly A/64/133, 13 July 2009 para 4. See also, Vivek Maru, *Access to Justice and Legal Empowerment: A Review of World Bank Practice* (Washington, DC: The World Bank, 2009) at 2.

¹¹³⁶Walby, *supra* note 7, at 5504.

¹¹³⁷Constitution of Nigeria, 1999, C23 at s. 9 (2) & (3) & 58. The processes are that such amendment must be: 1) passed by the votes of not less than four-fifths majority of all the members of each House (National Assembly), 2) passed resolution of the House of Assembly of 24 states of the current 36 states in Nigeria, and 3) needs the President's assent.

¹¹³⁸ Powel, *supra* note 1099, at 15.

¹¹³⁹ Nigeria Women's Trust Fund, *Vote Na My Power: A Handbook for voters* (Abuja: Nigeria Women's Trust Fund).

¹¹⁴⁰ Samuel Chukwudi Agunyai, Temitayo Isaac Odeyemi, & Kayode Wakili Olawoyin, “Women and Politics of Marginalisation in Niger-Delta Are of Nigeria” (2014) 4:4 J. Research in Peace, Gender & Development 55 at 56.

Moreover, women remain under-represented in the Nigerian legislature which shapes the development of energy policy over the long term.

In many cases, rural women may not be aware that they are eligible to run for a seat in the House or Senate as per section 65 (1) and (2) of the 1999 Constitution.¹¹⁴¹ According to this section, rural women can seek election to the National Assembly if they meet the age requirement of 35 (Senate) and 30 (House of Representatives) respectively with an educational requirement of a primary school leaving certificate. In 2010, 68.94% of women progressed and completed their primary school education in Nigeria.¹¹⁴² That said, it cannot be ignored that financial challenges (discussed in Chapter three) can prevent rural women from considering participation in such elected positions.

Thus, in addition to the recommendations suggested above (especially on “financial capability”), in the near future the Independent National Electoral Commission (INEC) has a role to play in reviewing the fee for nomination forms - NGN1,000,000 (One Million Naira)¹¹⁴³ for House of Representatives aspirants and NGN2,000,000 (Two Million Naira)¹¹⁴⁴ for Senatorial aspirants.¹¹⁴⁵ The INEC should take into consideration the financial differences between rural women and those currently representing them at the National Assembly. The proposed uniform fee for nomination forms fails to achieve substantive equality for rural women.¹¹⁴⁶ It is therefore

¹¹⁴¹Constitution of Nigeria, 1999, C23 at 65 (1) & (2). See also, Kemdi Chino Opara, *Federal Republic of Nigeria: “What You Should Know and Why?”* (New York: Page Publishing, Inc., 2018). In section 106 of the Constitution of Nigeria, 1999, the Constitution makes provision for the “Qualification for Membership of House of Assembly and Right of Attendance.” Specifically, it provides that a person shall be qualified for election as a member of a House of Assembly if *he* has attained the age of thirty years and has an education of up to at least the School Certificate level or its equivalent.

¹¹⁴² United Nations Educational, Scientific and Cultural Organization (UNESCO), “Nigeria: Education and Literacy” (2020) online: UNESCO <<http://uis.unesco.org/en/country/ng>>. See also, British Council, *Girls’ Education in Nigeria Report 2014: Issues, Influencers and Actions* (S:I: British Council, 2014) at 5.

¹¹⁴³ Currently at USD 2,222.22

¹¹⁴⁴ Currently at 4,444.44

¹¹⁴⁵ Report of the Senate Committee on the Independent National Electoral Commission (INEC) on a Bill for an Act to Amend the Electoral Act No. 6, 2010 and other Related Matters (S.B. 231 and S.B. 234), Electoral Act No 6 2010 (Amendment) Bill 2017 at s. 87.

¹¹⁴⁶ Fineman, *supra* note 212, at 3.

recommended that the INEC revise the fees for the nomination forms by tying it to the applicant's ability to pay.¹¹⁴⁷

Enacting renewable energy laws and policies containing measures mandating and enabling women to participate in law and policy development is necessary to increasing rural women's participation. This is crucial and founded on the legal maxim, *ubi jus, ibi remedium* meaning, "[w]here there is a right there is a remedy."¹¹⁴⁸ But where this does not exist on paper, how could actual participation of rural women be carried out?

6.2 Techniques for Involving Rural Women: A Comparative Analysis

As mentioned in chapter four, sections 59(1), 70(b), 72 (1) (a), 115(a), 152 (a) and (e) of the South African Constitution mandate decision-making institutions to "facilitate public involvement in the legislative and other processes of the Assembly and its Committees."¹¹⁴⁹ The Supreme Court of South Africa has also recognized the right to participate as demonstrated in cases such as *Doctors for Life International v Speaker of the National Assembly & Ors*¹¹⁵⁰ (discussed in chapter four). Such legal mandates for public involvement have resulted in the introduction of techniques for participatory practices. However, as already mentioned, section 6(6)(c) of Nigeria's Constitution¹¹⁵¹ appears to deny citizens access to justice in participatory matters because it makes section 14(2)(c)¹¹⁵² non-justiciable. Despite this, possible techniques for participatory practices include the following.

6.2.1 "Taking Parliament to the People": Committee Meetings and House Sittings

¹¹⁴⁷ Report of the Senate Committee on the Independent, *supra* note 1036 at s. 87.

¹¹⁴⁸ Jeffery Davis, *Justice Across Borders: The Struggle for Human Rights in U.S. Courts* (Cambridge: Cambridge University Press, 2008) at 103.

¹¹⁴⁹ Constitution of South Africa, 1996 at s. 59 (1).

¹¹⁵⁰ *Doctors for Life International, supra* note 712.

¹¹⁵¹ Constitution of Nigeria, 1999, C23 at s.6 (6) (c).

¹¹⁵² Constitution of Nigeria, 1999, C23 at s. 14(2) (c) provides that "the participation by the people in their government shall be ensured in accordance with the provisions of this Constitution."

The legislatures in South Africa, for instance, have initiated the process of “Taking Parliament to the People.” This technique allows for committee meetings and formal sittings of the legislature to be held in community venues or towns more accessible to rural parts of the country.¹¹⁵³ It involves the upper chamber of Parliament and the National Council of Provinces (NCOP) sitting away from the Parliament building located in Cape Town. Every year for a period of one week, the NCOP takes its law-making process (the ordinary sittings of the House) to people in remote rural areas who lack resources to visit Parliament.¹¹⁵⁴

Thus, this technique serves the purposes of giving rural areas an opportunity to be exposed to the workings of the Parliament by involving them in its processes and interacting with them on issues and possible solutions. “Taking Parliament to the People” includes visits by committees to predetermined sites.¹¹⁵⁵ It promotes education about the Parliament, enhances participation of ordinary South Africans, mostly marginalized groups, and provides the public with an opportunity to have a say on matters affecting them.¹¹⁵⁶ Venues are located in and notices posted in conspicuous places, providing an easy way for rural women to learn about the meetings and sittings at their convenience.¹¹⁵⁷ For effective participatory processes, it is recommended that politicians make time to remain within the community after sittings and meetings to enable these women to further engage with them.¹¹⁵⁸

¹¹⁵³ Legislative Sector South Africa, *supra* note 776, at 48.

¹¹⁵⁴ Parliament of the Republic of South Africa, “How Parliament is Structured” online: Parliament of the Republic of South Africa <<https://www.parliament.gov.za/how-parliament-is-structured>>.

¹¹⁵⁵ Sakhile Mokoena & Abel Mputing, *Taking Parliament to the People: NCOP conducts Oversight on Service Delivery in Free State* (Cape Town: In session, 2017).

¹¹⁵⁶ *Ibid* (Mokoena & Mputing) (For instance, in 2001, the Parliamentary Portfolio Committee on Minerals and Energy implemented the process of “Taking Parliament to the People.”) See also, People’s Assembly, “Workshop on Capacity in the Energy Sector” (September 4, 2001) online: Parliamentary Monitoring Group <<https://pmg.org.za/committee-meeting/739/>>.

¹¹⁵⁷ Legislative Sector South Africa, *supra* note 776.

¹¹⁵⁸ Public Participation and Provincial Legislatures, “Strategic Framework for Public Participation in the SA Legislative Sector” An Implementation Strategy Workshop, August 15-16, 2009 at 30. See also, Mokoena & Mputing, *supra* note 1155. See, Parliament of The Republic of South Africa, (“National Council of Provinces”) *supra* note 518.

Unfortunately, this is not done in Nigeria; rather, legislative proceedings are conducted in the chambers located in Abuja, far away from thousands of rural communities. There is a possibility that the legislatures in Nigeria would resist participatory approaches such as “Taking Parliament to the People”¹¹⁵⁹ based on time and cost. Scholars like Sally Baden have however, noted that focusing on these issues clearly has a high cost in terms of policy failure.¹¹⁶⁰ Hence, adopting this approach would mean that the legislatures must first be willing to accept sittings outside of the legislative chambers.

Moreover, some authors and the media have stated that the Nigerian legislators are the highest paid in the world.¹¹⁶¹ In addition to their basic salaries the legislators in Nigeria are allocated and receive operational funds for administrative purposes.¹¹⁶² Jake Dan-Azumi and Chibuzo Okereke assert that,

Senators (109) and Members of the House of Representatives (360) receive cash advance every quarter (3 months) to cover the cost of constituency office management, office materials, travels, refreshment and meals as well as for purchase of library books and period[ical]s. Averagely, every Member of the House of Representatives receives the sum of \$20,468.31 (N7,400, 000.00) monthly geared called running cost to cover the cost of operating legislative offices as well as the discharge of their legislative functions. Similarly, Senators receive ‘retirable’ monthly running cost totalling \$37,088.1 (N13,408,630.71)...The allowances covers the cost of local travels (including constituency visits), office maintenance, and maintenance of operational vehicles. Other sub-heads covered in the allowances include: committee engagements; exchange of experience visits and foreign trainings and for refreshment and meals at both the National Assembly and constituency offices.¹¹⁶³

If this assertion is correct, a certain portion of these funds could be set aside for the purpose of taking Parliament to the people. Constituting sittings of the National Assembly in rural

¹¹⁵⁹ People’s Assembly, *supra* note 1156.

¹¹⁶⁰ Baden, *supra* note 138 at 3.

¹¹⁶¹“Nigerian Senators Earn Highest Salaries in the World among Lawmakers?” Encomium (June 17, 2015), accessed May 30, 2020 online: <<https://encomium.ng/nigerian-senators-earn-highest-salaries-in-the-world-among-lawmakers/>>. See also, Denrele Animasau, “Nigerian Lawmakers are the Highest Paid in the World” Vanguard, (August 25, 2013), accessed May 30, 2020 <<https://encomium.ng/nigerian-senators-earn-highest-salaries-in-the-world-among-lawmakers/>>. See, Bakare Majeed, “Fact Check: Are Nigerian Legislators Highest Paid in the World?” Order Paper (May 19, 2019) online: <<https://www.orderpaper.ng/fact-check-are-nigerian-legislators-highest-paid-in-the-world/>>. See, Fedelis Mac-Leva, “Many Senators, Reps Lack Functional Constituency Offices.” Sunday Trust. (January 22, 2017), accessed May 25, 2020 online: <<https://www.pressreader.com/nigeria/sunday-trust/20170122/281479276123492>>.

¹¹⁶² Jake Dan-Azumi & Chibuzo Okereke, “Legislative Representation and Constituency Office Management in Nigeria: An Assessment of Enugu- East Federal Constituencies/District (2011 to 2017)” (2018) 8 Nigerian J. Legislative Affairs at 5.

¹¹⁶³ *Ibid* at 5-6.

communities should not be a problem because before members of the legislature are elected by citizens, they (elected representatives) voluntarily go to various rural communities for campaigns while convincing the people to elect them. In almost all situations rural electorates never see or hear from their legislative representatives after they are elected.¹¹⁶⁴

6.2.2 Public Hearings

The public hearing is another technique through which rural women can participate as stakeholders in law-making processes. For instance, in 2018 the Parliament of South Africa held public hearings concerning a claim by Indigenous First Nation Advocacy South Africa (IFNASA) that the government's land reform proposal to review and amend section 25 of the Constitution¹¹⁶⁵ to empower the state to expropriate land in the public interest without compensation was unjust and founded on the "colonial conquest philosophy."¹¹⁶⁶ Concerning citizens' presence and active participation at the public hearing, Chairperson Vincent Smith stated,

[w]e want all South Africans to (1) feel free to come and give their view and (2) for South Africans to be tolerant enough to allow those who have different views, to air their views. I would hate to see a situation where people are shouted down or physically harassed because they might have a different view to yours or mine.¹¹⁶⁷

Before the Constitutional Review Committee, the Alliance for Rural Democracy (ARD)¹¹⁶⁸ consisting of the Rural Women's Movement with representatives like Ms. Constance Mogale (who comes from a forcibly removed community) participated and made oral submissions on behalf of rural women. Ms. Constance Mogale opposed the land reform proposal which she stated would

¹¹⁶⁴ Agunyai, Odeyemi, & Olawoyin, *supra* note 1140, at 56. See also, *Ibid* (Dan-Azumi & Okereke). See, Mac-Leva, *supra* note 1161.

¹¹⁶⁵ Constitution of South Africa at s. 25. The section states that properties may be expropriated only for public purposes or in the public interest and subject to compensation.

¹¹⁶⁶ L. Nzimande, "Section 25 Review of Constitution: Public Hearings Day 3" Parliamentary Monitoring Group (September 6 2018) online: Parliamentary Monitoring Group <<https://pmg.org.za/committee-meeting/27029/>>.

¹¹⁶⁷ Vincent Smith, "Strong Argument will Trump Numbers in Land Debate" (June 9, 2018), online: <<https://www.pa.org.za/blog/parliament-says-strong-arguments-will-trump-number>>.

¹¹⁶⁸ The Alliance for Rural Democracy is a rural organization set up to contest policy and law that undermines the rights of rural citizens in South Africa.

negatively affect marginalized and well deserving poor rural and urban women among others.¹¹⁶⁹ On March 4, 2020 a notice for a further hearing was issued to the members of the public.¹¹⁷⁰ However, to date there is no public document as to the outcome of the public hearings or an amendment of the 1996 Constitution by the South African National Assembly to remove the clause without compensation.¹¹⁷¹

Upon scheduling a public hearing in South Africa, notices are issued within an estimated period of 5 days to 3 weeks before the hearing.¹¹⁷² Where the notice given for public hearing is too short, for effective participation the committee setting up the hearing allows members of the public, including those unable to attend the hearing to make written or oral submissions.¹¹⁷³ In addition, communications are made through invitations, placing advertisements in newspapers, local radios and televisions, and placement on notice boards located in public places.¹¹⁷⁴

During hearings, the chairperson (Member of Parliament or Provincial Legislature) introduces the topic and explains the purpose of the hearing and the impact of such proposed legislation on the community. Subsequently, presentations and inputs are heard from the

¹¹⁶⁹ L. Nzimande, “Section 25 Review of Constitution: Public Hearings Day 1” (September 4 2018) online: Parliamentary Monitoring Group <<https://pmg.org.za/committee-meeting/26982/>>. See also, Ed Stoddard, “Public Hearings Show Support for Land Expropriation: South Africa Parliament” Reuters. November 1, 2018. Accessed March 28, 2020 online: <<https://in.reuters.com/article/safrica-land-parliament/public-hearings-show-support-for-land-expropriation-s-africa-parliament-idINL8N1XC6YB>>. See, Staff Writer, “The Alliance for Rural Democracy: Sonke and Partners Rally against the Traditional Courts Bill” Sonke Gender Justice (July 24, 2012), Accessed May 9, 2020 online: <<https://genderjustice.org.za/article/the-alliance-for-rural-democracy-sonke-and-partners-rally-against-the-traditional-courts-bill/>>.

¹¹⁷⁰ South Africa Government, “Parliament Hosts Public Hearings on Section 25 of Constitution Amendments, 5 to 8 Mar” South Africa Government (March 4 2020), Accessed March 28, 2020 online: <<https://www.gov.za/speeches/delegation-4-mar-2020-0000>>.

¹¹⁷¹ Section 25 South African Constitution 1996.

¹¹⁷² Public Participation and Provincial Legislatures, *supra* note 1158, at 29, 30. See also, Renee Scott, “An Analysis of Public Participation in the South African Legislative Sector” (2009) Master’s Thesis, Stellenbosch University at 85 (According to Scott, province with complaints such as poor quality inputs included Mpumalanga, Western Cape and Kwazulu-Natal.)

¹¹⁷³ *Draft Expropriation Bill*, 2019. See also, Department of Public Works, *Draft Expropriation Bill, 2019* (December 21, 2018), online: Government Gazette <https://www.gov.za/sites/default/files/gcis_document/201812/42127gon1409s.pdf> (For instance, in 2018, the Department of Public Works invited the public to comment on the 2019 *Draft Expropriation Bill* not later than sixty days (60) days from the publication of this notice, December 21, 2018).

¹¹⁷⁴ Public Participation and Provincial Legislatures, *supra* note 1158, at 29, 30. See also, Scott, *supra* note 1172, at 85 (provinces with complaints such as poor quality inputs include Mpumalanga, Western Cape and Kwazulu-Natal.)

participating public¹¹⁷⁵ and committee members. Participants have the right to ask questions. Both public hearings and submissions from the public on a specific bill or law can be made in any official languages of South Africa and are recorded and transcribed.¹¹⁷⁶ In Gauteng, South Africa, for example, the committee coordinator is in charge of processing the submissions.¹¹⁷⁷ Upon approval by the committee, certain issues raised by individuals or groups are reflected in the report of the committee to the House with the likelihood that issues raised may influence decision-making and final legislation. For instance, in an interview conducted between June 2015 and July 2016, 42% of the people who made oral submissions on 72% of legislations and 13% of policies concerning matters like climate change indicated that through public hearings, they had influenced the views of members of Parliament.¹¹⁷⁸

To enable effective access by rural communities etc., committees hold their hearings at various locations,¹¹⁷⁹ and on different dates. The committees also travel to the public to have the hearings (also known as “Taking Parliament to the People,” discussed above). Otherwise, the committee can offer to pay any expenses incurred by interested persons or members of the public who come to them, including transportation, accommodation, meals, childcare and photocopies.¹¹⁸⁰

¹¹⁷⁵ Participating public could include stakeholders from specific communities, political parties, civil society organizations, business and the general public.

¹¹⁷⁶ Parliament of the Republic of South Africa, “Submission” online: <<https://www.parliament.gov.za/submissions>>.

¹¹⁷⁷ Parliament of the Republic of South Africa, “Scores of Gauteng Residents Use NCOP Public Hearings to Address Service Delivery Needs Directly with Minister, MECS and Mayors” (Wednesday 21, 2018), online: Business of Parliament Press Release <<https://www.parliament.gov.za/press-releases/scores-gauteng-residents-use-ncop-public-hearings-address-service-delivery-needs-directly-ministers-mecs-and-mayors>>. See also, Jan Gerber, “Land: The People Speak –First Public Hearing on Expropriation to Commence” news24 June 26, 2018 Accessed 28 July 2018 online: <<https://www.news24.com/SouthAfrica/News/the-land-south-africa-speaks-first-public-hearing-on-expropriation-to-commence-20180626>>. See, Christina Murray & Lia Nijzink, *Building Representative Democracy: South Africa's Legislatures and the Constitution* (Cape Town: Parliamentary Support Programme, 2002) at 123. See Scott, “*supra* note 1172, at 86.

¹¹⁷⁸ Dolye, *supra* note 1123, at 4.

¹¹⁷⁹ Locations other than capital cities.

¹¹⁸⁰ Heinz Klung, Rosemary Proctor & Lisa Young, *Public Participation in the Legislature of Gauteng Province, South Africa* (Johannesburg: International Development Research Centre, 1996) at 74. See also, Scott, *supra* note 1172, at 82.

Interestingly, public hearing as a participatory approach is not new to Nigeria. For instance, section 47 (1) of the EPSRA¹¹⁸¹ provides that the Nigerian Electricity Regulatory Commission (NERC) “shall hold public hearing on matters which the commission determines to be of significant interest to the general public.” In section 47(2) it states,

Where the Commission is required to, or otherwise decides to, hold a hearing, all persons having an interest in such matter shall, as far as reasonably practicable, be notified of the questions at issue and given opportunities of making representations if they so wish.

Although the EPSRA is not specific as to the time frame within which notices should be issued, it appears to compel the NERC to hold public hearings and to notify all persons (such as rural women) having an interest in energy related matters. In line with section 47 of the EPSRA, the NERC has been conducting public hearings. For instance, in 2014 the NERC published a notice stating that it has “concluded a public hearing on the draft regulations on Enforcement¹¹⁸² and National content.”¹¹⁸³ At the forum which took place at the Commission’s head office in Abuja, Nigeria, the former Chairman/CEO of the commission, Dr. Sam Amadi stated that the regulations were “sent to stakeholders, the distribution and generation companies, and institutions including the World Bank, European Union, and International Monetary Fund, whom we [the commission] received comments from.”¹¹⁸⁴

Unfortunately, rural women (like the inventors of the urine-powered generating technology discussed in chapter three) were not sent these regulations, perhaps because the NERC failed to regard these women as stakeholders with significant interest. Rather, the invitation focused on private sector stakeholders such as the distribution and generation companies and foreign

¹¹⁸¹ Electric Power Sector Reform Act (EPSRA), 2005.

¹¹⁸² The enforcement “law gives the Commission the power to warn, suspend and revoke licenses even as it maintains its position as an unbiased referee for the electricity market.”

¹¹⁸³ The “regulation urges all licensees to submit employment and training plan at the end of each financial year to the Commission for review-such that qualified Nigerians are not bypassed”

¹¹⁸⁴ Faloseyi & Ekeh, *supra* note 572.

institutions. The NERC's action confirms the assertion of energy scholars in Africa (especially Nigeria) that the energy policy and law-making processes in Nigeria are heavily influenced by the private sector including foreign institutions.¹¹⁸⁵ This could be problematic to a successful implementation process because such policies, laws or regulations fall short of being influenced by local minds.¹¹⁸⁶ They are not mainly founded on the country's local circumstances and the lived experiences of the people of Nigeria.

While this is far beyond the scope of this thesis, many argue that to encourage country-specific laws that are influenced by local minds, Nigeria should become an economically and technically self-sufficient country by depending on its human resources and natural resources. Furthermore, the country must look inward in terms of local production and refining of energy resources. For instance, rather than cause destruction of local production in the oil and gas sector,¹¹⁸⁷ it is necessary and will be beneficial for the NERC to invite and send draft regulations to be discussed at public hearings to the local people of Nigeria involved in generating, distributing, and refining renewable energy resources and crude oil resources.¹¹⁸⁸ Moreover, a broad interpretation of section 47 (2) of the EPSRA appears to include interested persons having local abilities. Thus, this category (rural people) of the Nigerian public sector should be treated as crucial stakeholders. They should be notified and sent the regulations as well as given the opportunity to actively participate and influence outcomes.

¹¹⁸⁵ Clancy, *supra* note 545, at 9.

¹¹⁸⁶ *Ibid.*

¹¹⁸⁷ Eze, *supra* note 984. See also, "Nigeria Cracks Down on Illegal Oil Refineries" *supra* note 984. See, See, eNCA, *supra* note 984.

¹¹⁸⁸ Orakpo, *supra* note 569. See also, *Ibid* (Eze). See also, *Ibid* ("Nigeria Cracks Down on Illegal Oil Refineries"). See also, *Ibid* (eNCA).

Another issue with the invitation to attend public hearings in Nigeria is that in most situations, the NERC holds public hearings at the country's capital in Abuja,¹¹⁸⁹ far away from many rural communities and with no financial support for them; this can limit the attendance of crucial stakeholders. Thus, it is not sufficient for a well-meaning institution like the NERC to invite the Nigerian public without making necessary provisions for their attendance. To avoid excessive costs, it is recommended for policy-and law-making institutions to introduce the technique of "Taking Parliament to the people" as described above. Furthermore, to enable an effective stakeholder involvement, it is recommended to have extensive training sessions with rural women before conducting public hearings.

6.2.3 Sectoral Parliaments

To involve citizens, the legislatures of countries like South Africa have also introduced Sectoral Parliaments for special interest groups such as women, disabled persons, young people, workers, the elderly and residents of remote and small communities who ordinarily would be unable to access Parliament.¹¹⁹⁰ For instance, in accordance with the country's constitutional obligation to facilitate public involvement in legislative processes, the Mpumalanga Provincial Legislature has organized Sectoral Parliaments by "focusing on the following sectors: youth, workers, women, senior citizens, and people with disabilities."¹¹⁹¹ Sectoral Parliaments allow for the attendance of various stakeholders at accessible locations in smaller communities in rural areas of Mpumalanga. Effective information dissemination and communication programmes are carried

¹¹⁸⁹ Faloseyi & Ekeh, *supra* note 572. See also, Michael Faloseyi & Samuel Ekeh, "Invitation to a Public Hearing on the Draft "Nigerian Electricity Supply and Installation Standards (NESIS) Regulations" (2014) Online: Nigerian Electricity Regulatory Commission < <https://nerc.gov.ng/index.php/media-library/public-notices/242-invitation-to-a-public-hearing-on-the-draft-nigerian-electricity-supply-and-installation-standards-nesis-regulations> >.

¹¹⁹⁰ Nomaindy Mfeketo, *Sectoral Parliaments for Youth, Women and Rural South Africans* (Cape Town: the Parliamentarian, 2013) at 10.

¹¹⁹¹ Mpumalanga Provincial Legislature, ""Sectoral Parliaments" of the Mpumalanga Legislature" (2017) online: Mpumalanga Provincial Legislature <<http://www.mpuleg.gov.za/sectoral-parliaments.html#operationalizationofsectoral>>. See also, Mfeketo, *supra* note 1081, at 10.

out using local media, theatres, schools, municipal fora etc.¹¹⁹² The government creates a budget from taxes to allocate funds to the Sectoral Parliaments to pay their bills.¹¹⁹³

As a further example, in 2016 the Gauteng Provincial Legislature (GPL) convened a meeting of its Youth Sector Parliament titled “Partnering with our youth for improved local governance: the years past and the years ahead.”¹¹⁹⁴ In November 2018, the North West Legislature announced that it would be hosting a meeting of its Health Sector Parliament under the theme “Celebrating the Centenary and Legacy of Mama Sisulu.”¹¹⁹⁵ One of the objectives was to create a platform for communities and healthcare providers to engage with members of provincial legislatures on access to health care.¹¹⁹⁶

While these events generate a lot of interest, reflect the exuberance of people voicing their ideas, talents and resilience, and are generally marked by high levels of active participation; legislative stakeholders have commented that the Sectoral Parliaments could be better used if participants were prepared and the issues raised were followed up on their mock Parliamentary debates.¹¹⁹⁷ This again emphasizes the need for training, skills development and education among other measures discussed in the first section of this Chapter.

¹¹⁹² Public Participation and Provincial Legislatures, *supra* note 1158, at 34.

¹¹⁹³ Mcebisi Ndeletyana & David Maimela, *Essays in the Evolution of the Post-Apartheid State: Legacies, Reforms and Prospects* (Johannesburg: Real African Publishers, 2013) at 130. See also, Len Verwey, *Budget Guide for Members of Parliament* (Pretoria: Institute for Security Studies, 2015) at 13-14.

¹¹⁹⁴ South African Government, “Gauteng Legislature Convenes Annual Sector Parliament for Youth, 10 Jun” (June 9, 2016), online: Gauteng Provincial Legislature <<https://www.gov.za/speeches/gauteng-provincial-legislature-convenes-annual-sector-parliament-youth-9-jun-2016-0000>>.

¹¹⁹⁵ South African Government, “North West Legislature Hosts Health Sectoral Parliament, 7 Nov” (November 6, 2018), online: North West Provincial Legislature <<https://www.gov.za/speeches/north-west-legislature-host-health-sectoral-parliament-bakgatlagate-moruleng-6-nov-2018>>.

¹¹⁹⁶ *Ibid.*

¹¹⁹⁷ Public Participation and Provincial Legislatures, *supra* note 1158, at 31. At the Mock Parliamentary Debate, participants play the role of the two houses of the Parliament. They assume and discharge the functions of the members of Parliament by presiding over the session. As stated, issues in the interest of country and society at large are discussed and addressed in the session.

Nigeria has not yet embraced the practice of Sectoral Parliaments. Since Sectoral Parliaments serve as a platform for Members of the legislative institution to interact with different sectors of the society,¹¹⁹⁸ it is recommended that the legislatures consider adopting this technique. This could be done by establishing committees in charge of Sectoral Parliaments. These committees will need to organize seminal events with the goal of producing outcomes that can influence policies and laws. Before an actual event, the committees could collaborate with grassroots women's organizations in the renewable energy field. The role of grassroots women's organizations will be to prepare rural women (for instance, to help them understand thematic areas¹¹⁹⁹ to be discussed) before the event. These organizations should also encourage rural women to attend and actively participate in the various thematic areas.

However, to maximize the full potential value of mobilization, it is crucial for Sectoral Parliaments to be conducted in conjunction with the relevant local governments in each state. It is also imperative to ensure equitable representation of the participants in terms of gender. Also, the selection process of rural women representatives could be by a vote by participants who attend organizational meetings or workshops. This method of selecting which rural women represent the community can apply to all the participatory techniques discussed in this section.

6.2.4 Constituency Offices

The constituency office can be a powerful vehicle to enable Members of Parliament to reach out and interact with people in their constituencies. This is so because such offices serve to bridge the divide between the seat of Parliament and the people. Through workshops, the

¹¹⁹⁸ Mpumalanga Provincial Legislature, "Who may Attend Sectoral Parliaments" online: Mpumalanga Provincial Legislature <<http://www.mpuleg.gov.za/assets/oversight%2C-committees-tri-fold-english.pdf>>.

¹¹⁹⁹ Thematic areas could include energy efficiency, energy pricing, energy supply, household energy consumption etc.

constituency office can play a critical role in communicating the programmes of government. In addition, it provides a structure to listen to the concerns of the public on the delivery of services by government institutions.¹²⁰⁰ Due to the criticism that one administrator is mostly assigned to each office, in South Africa, administrative support has been identified as a challenge facing constituency offices; as a result, 91% of people rarely or never make enquiries at these offices.¹²⁰¹ This issue could be partly addressed by training and employing local women as administrators.

Similarly, in Nigeria, the level of interface between constituents and the legislators is low,¹²⁰² and lack of awareness of constituency offices is one reason. For instance, in an interview conducted in Enugu State in 2018, while 61.5% of the interviewees stated that they are aware of the presence of the constituency offices in the state, 38.5% stated that they lacked knowledge of such offices.¹²⁰³ Such lack of knowledge could be reduced through awareness raising activities.

The absence of elected officials is another reason.¹²⁰⁴ In the same interview, 90.4% of the interviewees confirmed that the representing legislators have never visited their constituency offices.¹²⁰⁵ Fidelis Mac-Leva's report on several constituency offices supports this finding. The report reveals that many legislators in Enugu State, including Udi Local Government Area, Awgu Local government, Aguata Local Government etc. lack a functional constituency office despite the funding they receive from the government for this purpose. His report further reveals that most of the constituency offices studied are functional only during election campaigns, as a result,

¹²⁰⁰ Public Participation and Provincial Legislatures, *supra* note 1051, at 35.

¹²⁰¹ Yolanda Sadie, "The Implications of Current and Potential future Electoral Options for Political Diversity and Broad Political Representation in Our Democratic Institutions" in *The Future of South Africa's Constituency System* (Rietvlei Dam: Saint George Hotel, 2000) at 29. See also, Fin24, "'Impossible to Confirm' if Constituency Offices of MPs Actually Exist – Oversight Body" Fin 24 (April 25, 2019), Accessed June 1, 2020 <<https://www.fin24.com/Economy/impossible-to-confirm-if-constituency-offices-of-mps-actually-exist-oversight-body-20190425>>.

¹²⁰² Dan-Azumi & Okereke, *supra* note 1162 at 1, 4.

¹²⁰³ *Ibid* at 1, 4, 10.

¹²⁰⁴ Benjamin S. A., *An Appraisal of the Functions of Federal Legislature Constituency Offices in Nigeria: A study of Nasarawa, Niger, Kogi, Kaduna States and FCT Abuja* (Abuja: Policy Analysis and Research Project (PARP), National Assembly, 2010). See also, *Ibid* (Dan-Azumi).

¹²⁰⁵ *Ibid* (Dan-Azumi) at 12.

constituents “don’t go there because they are unsure of being attended to if they leave written requests.”¹²⁰⁶

On the part of constituents, further reason for the lack of interest is linked to lack of public trust in elected officials.¹²⁰⁷ This is in line with the above assertion by Omadia & Egwemi that legislators tend to take partisan positions rather than the positions of the communities they represent.¹²⁰⁸ Therefore, to increase the participation of rural women through constituency offices it is recommended to have these offices as add-ons rather than as a stand-alone participatory approach.

6.3 Directions for Future Research

For future research, it will be helpful to test the measures and techniques proposed in this thesis through quantitative and qualitative methods, such as participant observation, to establish whether they increase the participation of rural women; also, to measure how the participation of these women will influence outcomes. These methods of research will also help to identify underlying power structures and how they impact policy- and law-making.

Furthermore, research questions could focus on understanding why the barriers discussed in chapter three exist. For instance, questions could address why grassroots women’s groups on renewable energy do not exist at present and how such organizations will make a difference in addressing rural women’s participatory issues. These questions are important because there is

¹²⁰⁶ Mac-Leva, *supra* note 1161.

¹²⁰⁷ *Ibid.*

¹²⁰⁸ Omadia & Egwemi, *supra* note 520.

reason to believe that rural women are more likely to have the passion to lobby and adequately represent their own interests in decision-making rather than depending on others to do so.

In addition, further investigating how rural women in Nigeria could participate in the implementation and evaluation of renewable energy policies and laws are critical areas for future research. Lastly, in this era of the Coronavirus (COVID-19) pandemic where physical distancing among persons is required and in-person participation may be nigh impossible, it will be interesting to investigate other ways of including rural women participants or stakeholders in legal decision-making, to consider the energy issues they face. This will raise to the forefront issues of lack of basic infrastructure to enable virtual participation which is the new normal.

6.4 Summary and Conclusion

To develop a blueprint for an inclusive renewable energy policy- and law-making process that enhances the participation of rural women in general, this Chapter examined measures and techniques for increasing the active and effective participation of these women. On the one hand, measures examined included: financial capability, consciousness raising, developing grassroots women's organizations, trainings, and legal empowerment. On the second hand, techniques investigated were comparatively analyzed, they included: public hearings, "Taking Parliament to the People": committee meetings and house sittings, sectoral Parliaments, and constituency offices. The Chapter concludes that both the Constitutional provisions, and the jurisprudence of the Supreme Court of South Africa on the right to participate provide pathways for participatory success.¹²⁰⁹ Although there could be considerable institutional resistance to participatory approaches in Nigeria, including on time and cost grounds, the thesis concludes that "not paying

¹²⁰⁹ *Doctors for Life International, supra* note 712.

attention to the social organization aspects of [law-making processes] clearly has a high cost in terms of project failure.”¹²¹⁰ This is even more true about policy and law failure. Thus, introducing these measures and techniques can help Nigerian policy- and law-makers save costs and time incurred from un-implementable renewable energy policies and laws. Finally, enhancing the participation of rural women through renewable energy policies and laws is key to achieving energy justice and sustainable development.

¹²¹⁰ Baden, *supra* note 138, at 3.

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