

Enhancing National Security in Nigeria: Energy Perspective

Ikwuebene B. Chukwutem, Ashimedua G. Ogochukwu, Kebodi C. Ekene & Utulu, N. Azuka

. Department of Mechanical Engineering
Delta State Polytechnic
Ogwashi Uku
Delta State, Nigeria

E-mails: chuksejro@yahoo.com, Godwin.ashimedua@yahoo.com, Chikarotonx73@gmail.com

Phone: +2348061513917, +2348148417733, +2348038816097

ABSTRACT

Energy security as the continuity of energy supplies relative to demand. It is one of the main targets of energy policy. However, there are need for commitment to energy policy to avert the threat on national security, and to emphasize that commitment certain terms has to be clearly defined, which makes it easier to measure and balance difficulties against other policy objectives towards the growth of Nigeria. In this paper it is imperative to review some of the definitions of energy security, some sources of risk factors that contributes to energy security , the measure of the impacts, Energy security can be tackled by more clearly separating between security of supply of energy and other policy objectives.

Keynotes: National security, Energy security, Energy security risk

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1. INTRODUCTION

National security refers to the security of a nation state, including its citizens, economy, and institutions, and is regarded as a duty of government. Originally national security is conceived as protection against military attack, national it is now widely understood to include non-military dimensions, including economic security, energy security, environmental security, food security, cyber security etc. Similarly, national security risks include, in addition to the actions of other nation states, action by violent non-state actors, narcotic cartels, and multinational corporations, and also the effects of natural disasters.

Governments rely on a range of measures, including political, economic, and military power, as well as diplomacy. They may also act to build the conditions of security regionally and internationally by reducing transnational causes of insecurity, such as climate change, economic inequality, political exclusion, and militarisation. The concept of national security remains ambiguous, having evolved from simpler definitions which emphasised freedom from military threat and from political coercion (Michael Ruppert 2009). Among the many definitions proposed to date are the following, which show how the concept has evolved to encompass non-military concerns. In the classical formulation, security was about how states use force to manage threats to their territorial integrity, their autonomy, and their domestic political order, primarily from other states. Traditionally, the State has been the model of security. The State assumes the responsibility to protect its citizens and demands their loyalty. "A nation has security when it does not have to sacrifice its legitimate interests to avoid war, and is able, if challenged, to maintain them by war." (Walter Lippmann, 1943) According to Walter Lippmann (1943), "A nation is secure to the extent to which it is not in danger of having to sacrifice core values if it wishes to avoid war and is able, if challenged, to maintain them by victory in such a war". This simply means that Security as defined by Lippmann is when a state does not have to forfeit its foreign policy and national interests to achieve peace and if there is war, it is the ability to attain victory.

"National security then is the ability to preserve the nation's physical integrity and territory; to maintain its economic relations with the rest of the world on reasonable terms; to preserve its nature, institution, and governance from disruption from outside; and to control its borders." Harold Brown. (1981) "National security is best described as a capacity to control those domestic and foreign conditions that the public opinion of a given community believes necessary to enjoy its own self-determination or autonomy, prosperity and wellbeing." (Charles Maier, 1990)

"National security is the measurable state of the capability of a nation to overcome the multi-dimensional threats to the apparent well-being of its people and its survival as a nation-state at any given time, by balancing all instruments of state policy through governance... and is extendable to global security by variables external to it." (Prabhakaran Paleri, 2008)/

"[National and international security] may be understood as a shared freedom from fear and want, and the freedom to live in dignity. It implies social and ecological health rather than the absence of risk... [and is] a common right." (Ammerdown Group, 2016)

2. NATIONAL SECURITY IN NIGERIA SINCE THE 21ST CENTURY

With the end of the cold war, the conceptualization of national security has shifted from a state-centric perspective to a broader view that places premium on individuals, in which human security that embodies elements of national security, human rights and national development is now a major barometer for explaining the concept. Human security is an emerging paradigm for understanding global vulnerabilities whose proponents challenge the traditional notion of national security by arguing that the proper referent for security should be the individual rather than the state. Human security holds that a people-centered view of security is necessary for national, regional and global stability.

Since its emergence, the concept now includes a multi-disciplinary understanding of security involving a number of research fields, including development studies, international relations, strategic studies, and human rights. The United Nations Development Programme's 1994 Human Development Report is considered a milestone publication in the field of human security, with its argument that insuring "freedom from want" and "freedom from fear" for all persons is the best path to tackle the problem of global insecurity (National Research Council, 2010). Dr. Mahbulul Haq first drew global attention to the concept of human security in the United Nations Development Programme's 1994 Human Development Report and sought to influence the UN's 1995 World Summit on Social Development in Copenhagen.

The UNDP's 1994 Human Development Report's definition of human security argues that the scope of global security should be expanded to include threats in seven areas:

- ❖ **Economic security** — Economic security requires an assured basic income for individuals, usually from productive and remunerative work or, as a last resort, from a publicly financed safety net.
- ❖ **Food security** — Food security requires that all people at all times have both physical and economic access to basic food.
- ❖ **Health security** — Health Security aims to guarantee a minimum protection from diseases and unhealthy lifestyles. In developing countries, the major causes of death traditionally were infectious and parasitic diseases, whereas in industrialized countries, the major killers were diseases of the circulatory system. Today, lifestyle-related chronic diseases are leading killers worldwide, with 80 percent of deaths from chronic diseases occurring in low- and middle-income countries.
- ❖ **Environmental security** — Environmental security aims to protect people from the short- and long-term ravages of nature, man-made threats in nature, and deterioration of the natural environment.
- ❖ **Personal security** — Personal security aims to protect people from physical violence, whether from the state or external states, from violent individuals and sub-state actors, from domestic abuse, or from predatory adults.
- ❖ **Community security** — Community security aims to protect people from the loss of traditional relationships and values and from sectarian and ethnic violence.
- ❖ **Political security** — Political security is concerned with whether people live in a society that honors their basic human rights. According to a survey conducted by Amnesty International, political repression, systematic torture, ill treatment or disappearance was still practiced in 110 countries. Human rights violations are most frequent during periods of political unrest. Along with repressing individuals and groups, governments may try to exercise control over ideas and information.

The security of any state now embodies a notion of order, or of the conditions necessary to maintain the smooth functioning and reproduction of an existing society. Pogoson (2013) submits that the security of any nation is predicated on two central pillars. On the one hand, it entails the maintenance and protection of the socio-economic order in the face of internal and external threats. On the other hand, it entails the promotion of a preferred international order, which minimizes the threats to core values and interests, as well as to the domestic order of nations.

Security is therefore time-bound and malleable. It implies protection against, or safety from, a future risk of severe deprivation, injury or death, and requires rules, order and impartial adjudication and application. As this study have tried to show above, while the concept of national security largely refers to the security of the state against armed attack or insurrection, the "referent object" of the broader concept of human security (which includes overlapping systems of security at individual, national and international levels), is the security of the individual in his or her personal surroundings and within the community (Ul-Haq, 1999).

The new concept was also inculcated in Nigeria's national security when President Olusegun Obasanjo, while presenting his grand strategy declared that the primary objective of national security shall be to strengthen the federal republic of Nigeria; to advance her interest and objectives; to contain instability; control crime, eliminate corruption, enhance genuine development, progress and growth; improve the welfare and well-being and quality of life of the citizenry (Obasanjo, 2000). The Grand Strategy further defined Nigeria's National Security as the aggregation of the security interests of all individuals, communities, ethnic groups, political entities and institutions which inhabit the territory in Nigeria. It also specifically states that paramount importance is attached to safety, security and the prosperity of individuals and institutions within Nigeria and what belongs to Nigeria.

Human security could be said to further enlarge the scope for examining the causes and consequences of underdevelopment, by seeking to bridge the divide between development and security. Too often, militaries didn't address or factor in the underlying causes of violence and insecurity while development workers often underplayed the vulnerability of development models to violent conflict. An illustration of this idea manifests when there is a gap between the level of value expectation and the level of value attainment, due to lack of capability to establish a congruence between both levels, tension builds up due to the pressure of an unfulfilled aspiration or an unsatisfied urge or need. This, when not arrested in time, leads to frustration. Frustration, when it builds up, leads to the rising up of suppressed emotions of anger, which is often directed against the party considered to be the source of deprivation of satisfaction. This strong emotion finally finds an outlet through aggressive and invariably violent disposition towards the environment (Afinotan and Ojkorotu, 2009).

The potential for collective violence varies strongly with the intensity and scope of relative deprivation among members of a collectivity. If there is a significant discrepancy between what they think they deserve and what they think they will get, there is a likelihood of rebellion. Just as frustration produces aggressive behavior on the part of an individual, so does relative deprivation predict collective violence by social groups (ibid). The armed insurrection against military and civilian targets in the Niger Delta, by militant youths, directed against government and the foreign oil companies is viewed in this perspective. Thus, human security springs from a growing consensus that development and security needs to be more fully integrated in order to enhance security for all.

3. ENERGY SECURITY

In the case of energy security these threats are related to, i.e. caused by having an impact on the energy supply chain. The common idea behind all the different definitions of energy security can thus be described as "the absence of, protection from or adaptability to threats that are caused by or have an impact on the energy supply chain". It is immediately obvious that the number of threats that could be considered under this definition is huge (Gnansounou 2008). Studies therefore usually limit the analysis to a subset from the list of possible threats. Energy security is the association between national security and the availability of natural resources for energy consumption. Access to (relatively) cheap energy has become essential to the functioning of modern economies. However, the uneven distribution of energy supplies among countries has led to significant vulnerabilities.

Renewable resources and significant opportunities for energy efficiency exist over wide geographical areas, in contrast to other energy sources, which are concentrated in a limited number of countries. Rapid deployment of renewable energy and energy efficiency, and technological diversification of energy sources, would result in significant energy security and economic benefits. (Sovacool & Brown, 2010).

3.1 Energy Threats

The modern world relies on a vast energy supply to fuel everything from transportation to communication, to security and health delivery systems. Energy plays an important role in the national security of any given country as a fuel to power the economic engine. Some sectors rely on energy more heavily than others. Threats to energy security include the political instability of several energy producing countries, the manipulation of energy supplies, the competition over energy sources, attacks on supply infrastructure, as well as accidents, natural disasters, terrorism, and reliance on foreign countries for oil. (Christian Winzer 2011)/

Foreign oil supplies are vulnerable to unnatural disruptions from in-state conflict, exporters' interests, and non-state actors targeting the supply and transportation of oil resources. The political and economic instability caused by war, insurgent or other factors such as strike action can also prevent the proper functioning of the energy industry in a supplier country. Exporters may have political or economic incentive to limit their foreign sales or cause disruptions in the supply chain. Terrorist attacks targeting oil facilities, pipelines, tankers, refineries, and oil fields are so common they are referred to as "industry risks". Infrastructure for producing the resource is extremely vulnerable to sabotage. New threats to energy security have emerged in the form of the increased world competition for energy resources due to the increased pace of industrialization in countries such as India and China, as well as due to the increasing consequences of climate change. (Mathew M. 2006). Although still a minority concern, the possibility of price rises resulting from the peaking of world oil production is also starting to attract the attention of at least the Nigerian government. Increased competition over energy resources may also lead to the formation of security compacts to enable an equitable distribution of oil and gas between major powers. However, this may happen at the expense of less developed economies.

The sources of risk of energy security describe which types of risk are considered by a study. Therefore it is important to distinguish between three broad categories. For instance for supply chain endogenous technical risk sources are the failure of infrastructure components such as transmission lines, power plants or transformers due to a failure of interdependent infrastructure such as communication networks, or due to mechanical or thermal failure. Examples for human risk sources are events such as demand fluctuations, strategic withholding of supplies, capacity underinvestment, sabotage and terrorism, political instability and geopolitical risks like wars and export embargos. Examples for natural risk sources are events such as stochastic intermissions of renewable energy supplies, the depletion of fossil fuel stocks and natural disasters. The others include natural and human risk sources have been pointed out as different aspects of supply security in (Kruyt et al. 2009; Intharak et al. 2007), where they are referred to as 'availability' and 'accessibility'.

The scope of the impact measure describes how energy security is measured. These can be distinguished into four broad categories. The majority of risks that have an impact on the supply chain affect the continuity of the commodity supplies by changing the availability or the price of energy commodities such as oil, gas, coal or electricity. Depending on the resilience of the end-consumer devices to interruptions of input commodities, changes in the availability and price of different commodities affect the continuity of service supplies by changing the availability or the price of energy services such as heating, lighting, communication or transport. Depending on the disutility of service disruptions and repercussions throughout the economy, changes in the availability and price of energy services eventually have an impact on the economic continuity of a country. Apart from influencing the economy, the provision and consumption of energy commodities will also have an impact on human safety and environmental sustainability, for example in the form of water pollution. (Kruyt et al. 2009; Intharak et al. 2007),

4. INCREASING ENERGY SECURITY

4.1 Long-term security

Long-term measures to increase energy security center on reducing dependence on any one source of energy, increasing the number of alternative energy suppliers, exploiting native fossil fuel or renewable energy resources, and reducing overall demand through energy conservation measures. It can also involve entering into international agreements to underpin international energy trading relationships, such as the Energy Charter Treaty in some country like Europe. All the concern coming from security threats on oil sources long term security measures will help reduce the future cost of importing and exporting fuel into and out of countries without having to worry about harm coming to the goods being transported. The impact of the 1973 oil crisis and the emergence of the OPEC cartel was a particular milestone that prompted some countries to increase their energy security. Countries like Japan which almost totally dependent on imported oil, steadily introduced the use of natural gas, nuclear power, high-speed mass transit systems, and implemented energy conservation measures. Nigeria can follow same to drive the desired economic growth. In other countries energy security has historically been a lower priority. following the oil price increases since 2003, the development of biofuels has been suggested as a means of addressing this challenges. Increasing energy security is also one of the reasons behind a block on the development of natural gas imports in some countries. Greater investment in native renewable energy technologies and energy conservation is envisaged instead.

4.2 Short-term security

Petroleum

Petroleum, otherwise known as "crude oil", has become the resource most used by countries all around the world including Nigeria, Russia, China (actually, China is mostly dependent on coal (70.5% in 2010)) and the United States of America. With all the oil wells located around the world energy security has become a main issue to ensure the safety of the petroleum that is being harvested. In the middle east oil fields become main targets for sabotage because of how heavily countries rely on oil. Many countries hold strategic petroleum reserves as a buffer against the economic and political impacts of an energy crisis. (Margaret Baker,2010)

Natural gas

Compared to petroleum, reliance on imported natural gas creates significant short-term vulnerabilities. Natural gas has been a viable source of energy in the world. Consisting of mostly methane, natural gas is produced using two methods: biogenic and thermogenic. Biogenic gas comes from methanogenic organisms located in marshes and landfills, whereas thermogenic gas comes from the anaerobic decay of organic matter deep under the Earth's surface. Russia is the current leading country in production of natural gas (Joskow, Paul. 2005)

One of the biggest problems currently facing natural gas providers is the ability to store and transport it. With its low density, it is difficult to build enough pipelines in Nigeria to transport sufficient natural gas to match demand. These pipelines are reaching near capacity and even at full capacity do not produce the amount of gas needed. (Joskow, Paul. 2009.)

Nuclear power

Uranium for nuclear power is mined and enriched in diverse and "stable" countries. These include Canada (23% of the world's total in 2007), Australia (21%), Kazakhstan (16%) and more than 10 other countries. Uranium is mined and fuel is manufactured significantly in advance of need. Nuclear fuel is considered by some to be a relatively reliable power source, being more common in the Earth's crust than tin, mercury or silver, though a debate over the timing of peak uranium does exist. Nuclear power reduces carbon emissions. Although a very viable resource, nuclear power can be a controversial solution because of the risks associated with it. Another factor in the debate with nuclear power is that many people or companies simply do not want any nuclear energy plant or radioactive waste near them.but it has great adverse effect when not properly managed.(wiki 2009)

Renewable energy

The deployment of renewable technologies usually increases the diversity of electricity sources and, through local generation, contributes to the flexibility of the system and its resistance to central shocks. For those countries where growing dependence on imported gas is a significant energy security issue, renewable technologies can provide alternative sources of electric power as well as displacing electricity demand through direct heat production. Renewable biofuels for transport represent a key source of diversification from petroleum products. Davis, Sarah (2008).

As the resources that have been so crucial to survival in the world to this day start declining in numbers, countries will begin to realize that the need for renewable fuel sources will be as vital as ever. With the production of new types of energy, including solar, geothermal, hydro-electric, biofuel, and wind power. With the amount of solar energy that hits the world in one hour there is enough energy to power the world for one year. With the addition of solar panels all around the world a little less pressure is taken off the need to produce more oil. Geothermal can potentially lead to other sources of fuel, if companies would take the heat from the inner core of the earth to heat up water sources we could essentially use the steam creating from the heated water to power machines, this option is one of the cleanest and efficient options. Hydro-electric which has been incorporated into many of the dams around the world, produces a lot of energy, and is very easy to produce the energy as the dams control the water that is allowed through seams which power turbines located inside of the dam. Biofuels have been researched using many different sources including ethanol and algae, these options are substantially cleaner than the consumption of petroleum. "Most life cycle analysis results for perennial and ligno-cellulosic crops conclude that biofuels can supplement anthropogenic energy demands and mitigate green house gas emissions to the atmosphere". Davis, Sarah (2008)

5. CONCLUSION

The aim has been to present a conceptual approach to energy security, linking it to an alternative definition as a subset of national security concepts. The notion of energy security can be defined in one of two ways. It can be viewed as an economic concept or as a subset of national security. Viewed as a subset of national security, it allows for processes such as vulnerability of Nigerian to the insecurity of Energy, the non compliance to energy policy, the accessibility of Energy to pivot the need economic growth and development in Nigeria, and some of these treats can have national and international implications for a country's energy security.

REFERENCES

1. Afinotan, L.A & Ojakorotu. V (2009). *The Niger Delta Crisis: Issues, challenges and prospects*. Monash University, Johannesburg.
2. Ammerdown Group (2016). "Rethinking Security: A discussion paper" (PDF). rethinkingsecurity.org.uk. Retrieved 2017-12-17.
3. Brown, Harold (1983) *Thinking about national security: defense and foreign policy in a dangerous world*. As quoted in Watson, Cynthia Ann (2008). *U.S. national security: a reference handbook*. Contemporary world issues (2 (revised) ed.). ABC-CLIO. p. 281. ISBN 978-1-59884-041-4. Retrieved 24 September 2010.
4. Chris Flaherty & Walter Leal Filho (2012) *Energy Security as a Subset of National Security*, Soane Point, 6-8 Market Place, Reading, UK.
5. Christian Winzer. 2011) *Conceptualizing Energy Security* Cambridge University Working Paper in Economics.
6. CNN: Oil majors question Bush biofuel plan, February 15, 2007 Archived February 22, 2007, at the Wayback Machine.
7. Cordesman, A. (2006). "Global Oil Security". Center for Strategic and International Studies.
8. Davis, Robert T. (2010). *U.S. Foreign Policy and National Security: Chronology and Index for the 20th Century*. Praeger Security International Series (Illustrated ed.). ABC-CLIO. pp. xiii–xiv. ISBN 978-0-313-38385-4. Retrieved 25 September 2010.
9. Davis, Sarah (2008). "Life-cycle analysis and the ecology of biofuels" (PDF). Cell Press. Archived from the original (PDF) on 25 June 2013. Retrieved 3 October 2012.
10. *Ethanol fuels: Energy security, economics, and the environment*. *Journal of Agricultural and Environmental Ethics*. **4**: 1–13. doi:10.1007/BF02229143.
11. Farah, Paolo Davide; Rossi, Piercarlo (2011). "National Energy Policies and Energy Security in the Context of Climate Change and Global Environmental Risks: A Theoretical Framework for Reconciling Domestic and International Law Through a Multiscalar and Multilevel Approach". *European Energy and Environmental Law Review*. **2** (6): 232–244. SSRN 1970698 .
12. Farah, Paolo Davide (2015). "Sustainable Energy Investments and National Security: Arbitration and Negotiation Issues". *Journal of World Energy Law and Business*. **8** (6). Ssrn 2695579 .
13. Filho W.L. and Voudouris V. (2013.), *Global Energy Policy and Security*, Lecture Notes in Energy 16, DOI 10.1007/978-1-4471-5286-6_2, © Springer-Verlag London.
14. Gnansounou, Edgard. 2008. "Assessing the Energy Vulnerability: Case of Industrialised Countries." *Energy Policy* 36 (10) (October): 3734-3744. doi:doi: DOI: 0.1016/j.enpol.2008.07.004.
15. Herberg, Mikkal (2014). *Energy Security and the Asia-Pacific: Course Reader*. United States: The National Bureau of Asian Research.
16. Intharak, Narumon, (2007) etal. *A Quest for Energy Security in the 21st Century*.AsiaPacificEnergyResearchCentre.http://www.ieej.or.jp/aperc/2007pdf/2007_Reports/APERC_2007_A_Quest_for_Energy_Security.pdf.
17. Jackson, T (2009). *Prosperity without growth: economics for a finite planet*. London: Earthscan. ISBN 9781849713238. OCLC 320800523.
18. Joskow, Paul. 2009. "The U.S. Energy Sector: Prospects and Challenges, 1972- 2009." *Dialogue* 17 (2) (August).
19. Joskow, Paul. 2005. *Supply Security in Competitive Electricity and Natural Gas Markets*. In *Utility Regulation in Competitive Markets*.Edward Elgar Publishing Ltd. <http://econ-www.mit.edu/files/1183>.
20. Kruyt, Bert, D.P. van Vuuren, H.J.M. de Vries, and H. Groenenberg. 2009. "Indicators for Energy Security." *Energy Policy* In Press, Corrected Proof.doi:doi:DOI:10.1016/j.enpol.2009.02.006.
21. Lippmann, W. (1943), *US Foreign Policy: Shield of the Republic* Boston: Little, Brown.
22. Matthew A. Wasniewski (2004) *Walter Lippmann, Strategic Internationalism, The Cold War, and Vietnam, 1943-1967* Dissertation submitted to the Faculty of the Graduate School of the University of Maryland, College Park, in partial fulfillment of the requirements for the degree of Doctor of Philosophy.
23. Mathew Maavak (2006) *Panoptic World: "Globocops of Energy Security"*, originally published in *The Korea Herald*.
24. Margaret Baker.(2010) "Reauthorization of the Energy Policy & Conservation Act". Agiweb.org.
25. Michael Ruppert (2009).International Energy Agency (2012). "Energy Technology Perspectives 2012" (PDF).

26. Sovacool, B. K.; Brown, M. A. (2010). "Competing Dimensions of Energy Security: An International Perspective". *Annual Review of Environment and Resources*. **35**: 77. doi:10.1146/annurev-environ-042509-143035.
27. Parthemore, C. (2010). "Fueling the Force: Preparing the Department of Defense for a Post-Petroleum Era". Center for New American Security.
28. Prabhakaran Paleri. (2010). *National Security: Imperatives And Challenges*. New Delhi: Tata McGraw-Hill. p. 521. ISBN 978-0-07-065686-4. Retrieved 23 September 2010.
29. Rogers, P (2010). *Losing control : global security in the twenty-first century* (3rd ed.). London: Pluto Press. ISBN 9780745329376. OCLC 658007519.
30. Wikipedia, Energy Security as National Security: Defining Problems Ahead of Solutions. "Cameco Uranium". U.S. Energy Legislation May Be 'Renaissance' for Nuclear Power Archived at the Wayback Machine.. 2009-06-26