

NIGERIA'S SPACE POLICY: DEFENCE AND SECURITY IMPACT ASSESSMENT

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Abstract

This study examines the strategic impact of Nigeria's National Space Policy on strengthening national defence and security. It explored how the country's space policy, as a crucial component of national power, has contributed to addressing multidimensional security threats in Nigeria. The study is guided by the theory of functionalism, which views the space sector as an integral part of Nigeria's security infrastructure. Through a comprehensive review of secondary sources of data, including academic articles, policy documents, government reports, and news publications, the study analyses the impact of Nigeria's space policy on national security, particularly in counterterrorism, intelligence gathering, and military operations. The findings reveal that Nigeria's space initiatives, including the deployment of satellites for surveillance and communication, have significantly bolstered the country's defence capabilities. Notable successes include the use of satellite imagery in combating the Boko Haram insurgency and supporting peacekeeping missions in Mali. However, the study also identifies limitations, such as the reliance on foreign countries for satellite launches and insufficient training of indigenous manpower in utilizing satellite and space data for security purposes. The launch of DELSAT-1 in 2022, Nigeria's first military satellite, represents a significant step toward overcoming these challenges and enhancing the country's defence posture. The study recommends that Nigeria sustains its investment in space technology, as it is vital for addressing emerging security threats and promoting national stability.

Keywords: Space, Policy, National Defence, Security

Introduction

Space policy encompasses a comprehensive framework of legislation, regulatory frameworks, strategic actions, and funding priorities that govern space exploration and operations within the domain of outer space by a governmental authority. This encompasses both civilian and military applications, outlining the nation's commitment to the responsible utilization of space resources. Space exploration and technology have witnessed significant advancements in the late 1990s with countries worldwide recognizing its potential contributions to various sectors such as the economy, communication, navigation, and national security (Heard et al., 2022).

Nigeria, as a country, recognizes the importance of space activities and has developed its own National Space Policy to guide its endeavours in this field. Nigeria's space policy serves as a guiding framework that outlines the nation's commitment to responsible and constructive use of space, promotion of a robust commercial space

industry, leadership in exploration, and defence of the state's interests in space (Okeke, 2022). The adoption of the space policy in Nigeria was driven by the objective of fostering indigenous expertise in the areas of developing, designing, and constructing suitable hardware and software such as transportation systems and equipment like satellites, telescopes, and antennas for space technology.

This initiative is regarded as a critical asset for promoting socio-economic development and improving the overall standard of living among Nigerian citizens. The Nigerian space policy outlined various ways in which space capabilities will be utilized in Nigeria. These include but not limited to the effective management of natural resources, accurate prediction and mitigation of disasters, enhancement of information and communication systems, and strengthening national security and defence capabilities along with support for security and law enforcement agencies.

As a nation that is faced with multidimensional security threats, Nigeria's space policy plays a crucial role in enhancing national defence and security. As outlined by the National Space Policy document, Nigeria's space activities can contribute to strengthening defence capabilities and safeguarding the country's national security interests by proactively implementing strategies such as advanced communication, early warning systems, remote sensing, border delineation, resource identification, and monitoring of suspicious activities or individuals involved in potential incidents, the nation can effectively enhance its preparedness (National Space Research and Development Agency, 2000). In addition, one of the objectives stated in the policy document is to strengthen regional peacekeeping operations and combat crime by improving command control and executing tactical and strategic operations within the Nigerian armed forces (National Space Research and Development Agency, 2000). By leveraging space technology and applications, Nigeria can enhance its situational awareness, intelligence gathering, and surveillance capabilities, leading to improved decision-making processes in the field of defence and security. To address one of the under-researched and under-reported aspects of Nigeria's space policy, this article will focus on the defence and security impact assessment of the country's space initiatives.

Methodology

A comprehensive review of secondary sources was done generate data. This involve analysing academic articles, policy documents, government reports, and media publications to gain insights into the strategic objectives, implementation, and impact of Nigeria's space policy on national defence and security. The data gathered from these secondary sources was systematically analysed to identify key themes and trends on the effect of Nigeria's space policy on national defence and security.

Theoretical Framework

The study adopts theory of functionalism. The theory was propounded by sociologists such as Emile Durkheim and Talcott Parsons. It posits that the various parts of a social system, like the different organs of a living organism, are interdependent and contribute to the overall functioning and stability of the system (Akpan and Udofia, 2019). This perspective is particularly relevant in the context of Nigeria's space policy, as it can help elucidate the interconnected nature of the various components of the space sector and their role in maintaining the country's defence and security.

Nigeria's quest for space capabilities has been driven by a range of factors, including the desire to enhance its military and security operations, improve communication and surveillance capabilities, and contribute to the overall economic and technological development of the nation (Oyewole, 2020). The emergence of new security threats, such as terrorism, insurgency, and transnational crime, has further underscored the importance of Nigeria's space program in providing critical support for defence and security operations (Oyewole, 2020).

The linkages between Nigeria's space policy and its defence and security implications can be understood through the lens of functionalism. The space sector, as a vital component of the country's overall security infrastructure, performs various functions that contribute to the maintenance of national security. For instance, the use of satellite technology for communication, intelligence gathering, and monitoring of border areas can enhance the effectiveness of Nigeria's military and security agencies in responding to security challenges.

Literature Review

Literature on space policy mainly focuses on the importance of space activities in projecting national power and enhancing national defence and security. According to Harding (2016), the launch of Sputnik by the USSR in 1957 prompted other countries to recognize space as a factor in power dynamics, security concerns, and foreign policy development. Subsequently, nations have come to view space exploration not only as an indicator of national strength but also as a symbol of prestige, leading them to allocate more resources toward their respective space programs.

Relatedly, Mallik (2016) remarked that most space exploration initiatives and advancements in space technology have historically been driven by national security concerns, often with a focus on military objectives. In his submission, Akpuru-Aja (2020) reasoned that the securitisation of space exploration is because space has emerged as a new dimension of warfare, in addition to land, sea, and air, thus leading to its weaponization and militarization. The literature highlights that space capabilities are increasingly being integrated into defence strategies, as they offer advantages in areas such as communication, intelligence gathering, surveillance, and missile defence.

While contributing to the discourse, Menshikov (2003) observed that the objective of nations to obtain military-strategic advantages in space is due to the unique features and conditions it offers. As well as the significance of space as an arena for attaining objectives of armed conflict, and the importance of space in contemporary military doctrine and approaches to national security. Oyewole (2020) noted that the growing interest in acquiring space capabilities by African nations is largely informed by security concerns and strategic objectives. According to Lukaszczyk (2011), there are various benefits associated with space capabilities in the socio-economic sphere, such as disaster management, resource exploration, healthcare, education, food security, and navigation. In consensus, these scholars emphasized that for outer space to be sustainably utilized for maximum benefit to humanity, effective cooperation between states, international governmental organizations, and the private sector is crucial. This collaboration should focus on building capacity and ensuring responsible and peaceful use of outer space.

Overview of Nigeria's National Security Threats

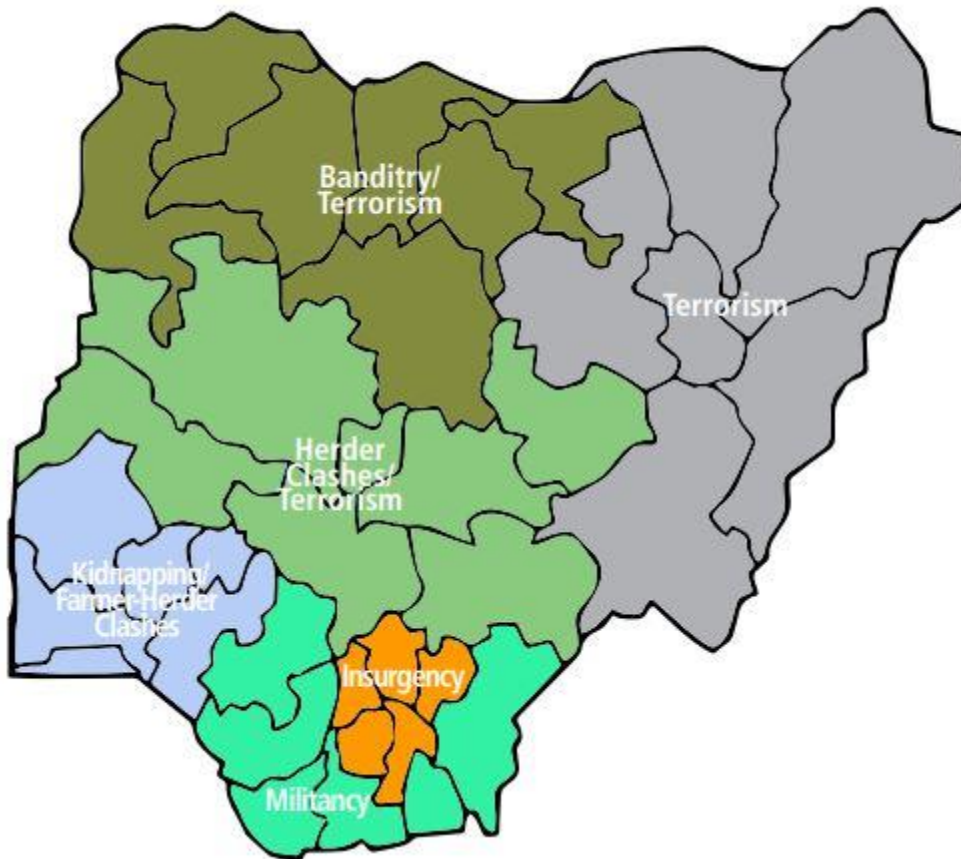
A more robust understanding of a security threat is anything – something, somebody, action, event, issue, or entity – that portends to destabilise peace, stability and progress at individual, community, corporate, national, regional, continental, and global levels (Onuoha, 2021).

Nigeria, like many other countries, faces a range of national security threats. These security threats have continued to persist, posing a threat to the overall stability of the nation. While some of these challenges have existed prior to the formation of present-day Nigeria, there has been a surge in new obstacles since 2009 that have further intensified the country's conflict landscape (Agora Policy, 2022).

The complexity of contemporary security issues stems from a variety of factors, including socioeconomic and political inequalities, ethno-religious conflicts, perceived marginalization, and instances of actual or perceived injustice. As a result, addressing these concerns requires a multi-faceted approach (Agora Policy, 2022). Various forms of instability are present across the six geopolitical zones, posing a threat to overall stability and exacerbating divisions within the country. In certain parts of the North-West and North-Central regions, rural communities remain under the control of bandits, resulting in areas labelled as "ungoverned spaces" due to minimal government presence (Ojo et al., 2023).

Instances of separatist agitation are widespread in the South-East region, with evident acts targeting government institutions and individuals who are perceived to have a lack of support for the secessionist movement (Nwangwu, 2022).

Map depicting multidimensional security threats in Nigeria by Geo-political zones



Source: Agora Policy, 2022

The North-East region of Nigeria has been embroiled in a protracted conflict due to the insurgency led by Boko Haram. Despite the splintering of the group into ISWAP, JAS, and Ansaru, their violent actions have persisted, leading to widespread abductions, killings, destruction, and a severe humanitarian crisis (European Union Agency for Asylum, 2021). The influence of jihadists has expanded into the previously plagued region of North-West Nigeria by bandits. As a result, an alliance between jihadists and bandits is swiftly emerging, leading to the looting of towns, food insecurity, and widespread displacement (Ojewale, 2021).

The North-Central, also known as the Middle Belt, is home to an avalanche of ethno-religious confrontations, herder-farmer conflict (Brottem, 2021), and growing terrorist acts because of the expansionist agenda of some of the terrorist groups. The South-South region of Nigeria continues to experience significant challenges, including militancy that poses a threat to the country's main source of revenue - crude oil. Meanwhile, the South-West is

facing an alarming increase in incidents of ritual killings, cultism, and conflicts between herders and farmers (Onuoha, 2021).

Addressing Nigeria's multifaceted security challenges requires more than relying on military intervention. The Federal and state governments have implemented various kinetic and non-kinetic measures to combat these challenges. This includes conducting security operations across all states of the federation and establishing task forces dedicated to addressing insurgency, armed banditry, and militancy in different regions such as the North East, North Central, North West, and Niger Delta (Robert-Okah, 2014). Additionally, international collaboration has been sought through initiatives like the Multinational Task Force to tackle insurgency while also implementing non-military strategies such as humanitarian operations and Operation Safe Corridor aimed at encouraging defection among insurgents (Alufoge & Duruji, 2020). The Federal Government has implemented various measures to address the impact of insecurity in Nigeria, including the creation of the Niger Delta Development Commission, North East Development Commission, and Amnesty Programme. These initiatives reflect a soft approach aimed at alleviating the consequences caused by security challenges within the country. However, there are still significant gaps in the implementation of these programs, which have been plagued by corruption, inefficiency, and lack of coordination (Adegoke, 2020; Epron, 2019).

At the regional level, certain state governments have implemented a range of laws to enforce harsher penalties for kidnapping and related offenses (Umego, 2019), as well as regulating open grazing (Ekpendu, 2020) in order to address ongoing conflicts between farmers and herders. Additionally, some state governments have established their own security networks to supplement the work of regular law enforcement agencies (Thisday, 2020), while others have pursued diplomatic discussions with armed groups in an effort to negotiate peaceful agreements.

Space Policy and its Strategic Importance for National Defence

Space policy occupies a strategic place in the national defence of any country. It is part of grand strategy; which is the integration of elements and discipline of national power in pursuit of a national objective.

The Defense Space Strategy of the US Department of Defense recognizes the significance of space for national security. Space-based capabilities are essential not only in the United States but also globally, acting as a crucial component of military strength. Ensuring these capabilities remain accessible is vital in establishing and sustaining superiority across all domains, particularly against countries like China and Russia who pose a significant strategic threat by developing counter-space abilities alongside their military doctrines involving space warfare (Department of Defense, 2020).

The European Union places great importance on space capabilities for defence and security purposes. Recognizing the crucial role of space in security infrastructure, the EU argues that it is essential to address global challenges effectively. Given the increasing

reliance of armed forces on surveillance, intelligence gathering, positioning, and communications through space-based assets, any disruption to these services poses significant vulnerabilities. As a result, the EU has adopted a comprehensive strategy focused on safeguarding these assets and ensuring their uninterrupted operation while also striving to prevent an arms race in outer space. Anchored by this understanding of its significance for security and defence domains, the EU's space strategy aims to protect its interests and promote peace and stability (Muñoz and Portela, 2023).

Space plays a vital role in enabling Defence operations in the United Kingdom. It offers global command and control capabilities, surveillance and intelligence gathering, missile warning systems, as well as support for deployed Joint forces. This includes activities like delivering precision weapons through the UK Carrier Strike Group with F35 aircraft, conducting mine clearance operations, and engaging in humanitarian missions (UK Ministry of Defence, 2021).

Successes and Limitations of Nigeria's Space Policy in National Security and Defence

In 2001, Nigeria launched its National Space Policy, signifying the country's commitment to space exploration and utilization. Since then, Nigeria has made notable progress in developing its space capabilities, including the launch of several satellites for various purposes such as communication, weather observation, and surveillance. Notably, Since the establishment of its space program, Nigeria has successfully launched a total of 7 satellites namely NigeriaSat 1 NigeriaSat 2, NigeriaSat X, NigComSat-1, NigComSat-1R, and Nigeria EduSat-1nd DELSAT-1. (Defence Space Administration, 2023).

Table 1: Showing various satellites launched by Nigeria, years launched, purpose and their status

Satellites	Year launched	Purpose	Status
NigeriaSat-1	2003	Disaster Monitoring	Inactive
NigComSat-1	2007	Communications Satellite	Inactive
NigeriaSat-X	2011	Earth Observation	Active
<u>NigeriaSat-2</u>	2011	Earth observation	Active
NigcomSat-1R	2011	Communications Satellite	Active
EduSat-1	2017	<u>Technology demonstration/</u> <u>Earth observation</u>	Inactive
DELSAT-1	2022	Military and Security operations	Active

Source: (Moyo, R. 2022; Iderawumi, M. (2021). Tabulated by the author

The National Space Policy outlined the establishment of a Defence Space Command to oversee and carry out the defence and security elements of the National Space Policy for national security improvement. In line with this policy, the Defence Space Agency, now referred to as the Defence Space Administration, was created on October 9th, 2014. Thus, Defence Space Administration is responsible for offering durable and cost-effective space capabilities for Nigeria's military as well as other security and law enforcement entities. Defence Space Administration utilizes space products and services to assist in addressing the security issues confronting the nation. The establishment of the Defence Space Administration in Nigeria demonstrates the country's recognition of the importance of space in enhancing national defence and security.

The use of satellite imagery for defence and security purposes has had a significant impact on Nigeria's counterterrorism efforts and military interventions in conflict zones. In support of Nigeria's counterterrorism efforts, satellites were used to provide a 10-metre digital elevation simulation map and vegetation density map of Sambisa Forest, the epicentre of the Boko Haram insurgency for Armed Forces operations using NigeriaSat-X. These satellite images were instrumental in identifying the locations of Boko Haram camps, as well as monitoring their movements and activities. In 2013, Nigeria deployed troops to Mali to support peacekeeping operations (Chizea, 2017). Nigerian satellites collected data and satellite imagery of the conflict-ridden region in South-West Mali during the civil war between Southern and Northern Mali. The topographic map derived from this satellite imagery provided valuable geographical information to Nigeria and West African peace-keeping forces operating in the crisis zone (*Space in Africa*, 2019). Ultimately, these satellite images played a crucial role in facilitating effective military intervention efforts in Mali. Additionally, to support internal security operations of armed forces and security agencies, the vulnerability maps of major cities in Nigeria are generated. The generation of vulnerability maps for major cities in Nigeria is another important aspect of the Nigerian space policy's support for the armed forces and national security. These maps provide valuable information on critical infrastructures and potential vulnerabilities, allowing for better planning and preparation in the event of emergencies or security threats (Nwachukwu et al., 2022)

While some high points have been scored, the Nigeria's space policy in relation to defence and security still have its limitations. For instance, in the aspect of border surveillance and security the policy has left more to be desired in addressing irregular migration, a major source of national security threats in Nigeria. While space technology has been used in the fight against Boko Haram insurgency in the North-East geopolitical zone, its effectiveness in other theatres of military operations across the country where the armed forces and other security agencies are currently fighting banditry, kidnapping, secessionist movements and militancy is yet to be felt. Another limitation of Nigeria's space policy in relation to defence and security is the reliance on external sources for satellite launches. Nigeria had relied on foreign countries to launch its satellites. Nigeria had

overtime relied on UK, Russia and China to launch various satellites into space. This can lead to delays in receiving information and may limit Nigeria's ability to respond quickly to emerging security threats. Furthermore, the dependency on external sources for space capabilities may also expose Nigeria's defence and security operations to potential vulnerabilities.

Another limitation of Nigeria's space policy in relation to defence and security is the lack of training and capacity building for utilizing satellite data and imagery. Without proper training and capacity building, Nigeria may not be able to fully harness the potential of satellite data and imagery for defence and security purposes. This can hinder Nigeria's ability to effectively analyse and interpret satellite data, limiting its ability to make informed decisions and take proactive measures in response to security threats (Chima et al., 2017).

However, in 2022, Nigeria's Defence Space Administration successfully launched DELSAT-1, marking the country's inaugural military satellite. DELSAT-1 was launched to enhance the operational capacity of the Nigerian armed forces against insecurity, thus, the satellite will assist in strengthening the Nigeria's national defence, counter-terrorism, and public safety strategies. DELSAT-1 will be applied in geospatial intelligence, monitoring and tracking of adversaries, mapping and terrain analysis, vulnerability assessment, search and rescue operations, and monitoring offshore infrastructures. DELSAT-1 is expected to contribute to addressing the various threats to Nigeria's national security, such as terrorism, transnational organized crime, crude oil theft, ethno-religious conflicts, farmer-pastoralist conflicts, and the proliferation of small arms and light weapons (Moyo, 2022).

Conclusion

Nigeria's space policy has emerged as a crucial instrument with far-reaching implications for the nation's defence and security. The recognition of space as an integral component of national security and its importance in addressing multidimensional security threats is evident in Nigeria's strategic approach. The country has made significant progress in the development and deployment of space technology, launching multiple satellites for various purposes. These endeavours have greatly enhanced the nation's defence and security capabilities, enabling more effective operations and intelligence gathering.

The use of satellite imagery for military interventions and counterterrorism efforts has demonstrated the tangible impact of Nigeria's space policy on its defence and security landscape. The ability to access vital information through satellite technology, including vulnerability maps and geospatial intelligence, has proven invaluable in identifying threats, planning military operations, and responding to emergencies. It has not only facilitated peacekeeping efforts in Mali but has also been instrumental in addressing the Boko Haram insurgency and other security challenges within the country.

While Nigeria's space policy has witnessed notable successes, there remain some limitations, such as the reliance on external sources for satellite launches and the need for further training and capacity building. These challenges highlight the importance of

continued investment in space capabilities and the development of indigenous expertise. The launch of DELSAT-1, Nigeria's inaugural military satellite in 2022, is a significant step towards addressing these limitations and strengthening the nation's defence and security posture.

In light of the ever-evolving security landscape in Nigeria, it is imperative that the country continues to harness the potential of space technology for defence and security purposes. The strategic use of space capabilities, as outlined in Nigeria's space policy, will be pivotal in addressing current and emerging security threats, enhancing situational awareness, and improving decision-making processes in the field of defence and security. Nigeria's commitment to space exploration and utilization, when effectively leveraged, has the potential to contribute significantly to the nation's overall security and defence strategies, ultimately fostering peace, stability, and progress in the country.

References

- Adegoke, S. G. (2020). Insurgency, armed banditry, and corruption in Nigeria: The bane of socio-economic underdevelopment. *International Journal of Advanced Academic Studies*, 2(1), 17-26.
- Agora Policy. (2022). *Understanding and tackling insecurity in Nigeria*. The Agora Policy Report No. 2, November 2022. <https://nairametrics.com/wp-content/uploads/2022/11/Agora-Security-Paper-Full-Report.pdf>
- Alufoge, O. K., & Duruji, M. M. (2020). Multinational Joint Task Force's fight against insurgency in the Lake Chad Basin region. *WSEAS Transactions on Environment and Development*, 16, Article 82. <https://doi.org/10.37394/232015.2020.16.82>.
- Akpan, M.G., & Udofia, A.F. (2019). THE MASK, MASKING AND CURTAILMENT OF DOMESTIC TERRORISM IN IKA THROUGH AKAKUM PERFORMANCE OF NTO USOH PEOPLE IN AKWA IBOM STATE. *International Review of Humanities Studies*.
- Akpuru-Aja, A. (2020). *Policy fields and contemporary strategic studies: Demystifying the nature and dynamics of global security and strategy*. Checks Consult and Publishers.
- Brottem, L. (2021). The growing complexity of farmer-herder conflict in West and Central Africa (No. 39). *Africa Security Brief*, a publication of the Africa Center for Strategic Studies. <https://africacenter.org/publication/growing-complexity-farmer-herder-conflict-west-central-africa/>
- Chima, C. I., Trodd, N., & Blackett, M. (2017). Assessment of Nigeriasat-1 satellite data for urban land use/land cover analysis using object-based image analysis in Abuja, Nigeria. *Geocarto International*, 33(9), 893–911. <https://doi.org/10.1080/10106049.2017.1316778>
- Chizea, F. D. (2017). Space technology development in Nigeria. Presentation at the United Nations/South Africa Symposium on Basic Space Technology: "Small Satellite Missions for Scientific and Technological Advancement," Stellenbosch, South Africa.

- [https://www.unoosa.org/documents/pdf/psa/activities/2017/SouthAfrica/slides/Prese-
ntation11.pdf](https://www.unoosa.org/documents/pdf/psa/activities/2017/SouthAfrica/slides/Prese-
ntation11.pdf).
- Department of Defense. (2020). *Defense space strategy summary*. Department of Defense.
[https://media.defense.gov/2020/Jun/17/2002317391/-
1/1/1/2020_DEFENSE_SPACE_STRATEGY_SUMMARY.PDF](https://media.defense.gov/2020/Jun/17/2002317391/-
1/1/1/2020_DEFENSE_SPACE_STRATEGY_SUMMARY.PDF)
- Ekpendu, C. M. (2020). Open grazing prohibition legislation in Nigeria: A panacea for
conflict
and insecurity. *International Journal of Law and Clinical Legal Education (IJOLACLE)*, 1, 159-
164.
[https://www.nigerianjournalsonline.com/index.php/IJOLACLE/article/viewFile/2177
/2126](https://www.nigerianjournalsonline.com/index.php/IJOLACLE/article/viewFile/2177
/2126).
- Epron, S. (2019). Emerging security threats: Factors and implications for Nigeria's socio-
economic development 2015-2019. *Journal of Economics and Development Studies*,
7(2), 141-149.
<https://doi.org/10.15640/jeds.v7n2a11>
- European Union Agency for Asylum. (2021). Boko Haram, including JAS, ISWAP and
Ansaru.
[https://euaa.europa.eu/country-guidance-nigeria-2021/131-boko-haram-including-jas-
iswap-and-ansaru](https://euaa.europa.eu/country-guidance-nigeria-2021/131-boko-haram-including-jas-
iswap-and-ansaru).
- Harding, R. C. (2016). *Space policy in developing countries: The search for security and
development on the final frontier*. New York: Routledge.
- Heard, B. R., Kerxhalli-Kleinfield, M., & Holmes, K. J. (2022). Beyond a single stimulus:
How to leverage the federal government to advance clean energy innovation?
iScience, 25(6), 104366. <https://doi.org/10.1016/j.isci.2022.104366>.
- Iderawumi, M. (2021). Replacing Nigerian Satellite Gone Past Design Life; The Journey So
Far. Africanews. space. Retrieved from [https://africanews.space/replacing-nigerian-
satellite-gone-past-design-life-the-journey-so-
far/#:~:text=Of%20Nigeria's%20six%20satellites%3A%20NigeriaSat,X%2C%20an%20
Earth%20observation%20satellites](https://africanews.space/replacing-nigerian-
satellite-gone-past-design-life-the-journey-so-
far/#:~:text=Of%20Nigeria's%20six%20satellites%3A%20NigeriaSat,X%2C%20an%20
Earth%20observation%20satellites)
- Lionel, E. (2023). Nigeria's first military satellite DELSAT-1 to counter threats to national
security. *Military Africa*.
[https://www.military.africa/2023/01/nigerias-first-military-satellite-delsat-1-to-
counter-threats-to-national-security/](https://www.military.africa/2023/01/nigerias-first-military-satellite-delsat-1-to-
counter-threats-to-national-security/)
- Lukaszczyk, A. (2011). Space policy – What is it and why do emerging space states need it?
Secure World Foundation (SWF).
[https://swfound.org/media/50812/al%20iac%202011%20sp.%20policy%20in%20emrg.
%20sp.pdf](https://swfound.org/media/50812/al%20iac%202011%20sp.%20policy%20in%20emrg.
%20sp.pdf)
- Mallik, A. (2016). *Role of technology in international affairs*. Institute for Defence Studies and
Analyses. Pentagon Press.
- Moyo, R. (2022). *Nigeria inaugurates integrated satellite, DELSAT-1*. Space in Africa.
[https://spacein africa.com/2022/12/27/nigeria-inaugurates-integrated-satellite-delsat-
1/](https://spacein africa.com/2022/12/27/nigeria-inaugurates-integrated-satellite-delsat-
1/)

- Muñoz, R. G., & Portela, C. (2023). The EU space strategy for security and defence: Towards strategic autonomy? *Non-Proliferation and Disarmament Papers* No. 83. EU Non-Proliferation and Disarmament Consortium.
https://www.sipri.org/sites/default/files/2023-06/eunpdc_space_paper_no_83_0.pdf
- National Space Research and Development Agency (NASRDA). (2000). *National space policy*. National Space Research and Development Agency (NASRDA).
<https://dsa.mil.ng/assets/download/nspp.pdf>
- Nwachukwu, M. A., Nwachukwu, J., Babatunde, A., Anyanwu, J., Ekweogu, C., & Nwachukwu, A. N. (2022). Geospatial Intelligence Training Concept for Terrorism Surveillance, Nigeria to Infusive Sub-Saharan African Countries. *American Journal of Geospatial Technology*, 1(1), 44–51.
<https://doi.org/10.54536/ajgt.v1i1.537>
- Nwangwu, C. (2023). Neo-Biafra separatist agitations, state repression and insecurity in South-East, Nigeria. *Society*, 60 (1), 40-53.
<https://link.springer.com/article/10.1007/s12115-022-00782-0>
- Ogunlesi, T. (2023). Rebuilding and repositioning Nigeria's armed forces: The 2015-2023 journey. *The Cable*.
<https://www.thecable.ng/rebuilding-and-repositioning-nigerias-armed-forces-the-2015-2023-journey>
- Ojo, J. S., Oyewole, S., & Aina, F. (2023). Forces of terror: Armed banditry and insecurity in North-west Nigeria. *Democracy and Security*, 1-28.
<https://doi.org/10.1080/17419166.2023.2164924>
- Okeke, C. (2022). Articulating a new national space policy for Nigeria. *Business Day*.
<https://businessday.ng/opinion/article/articulating-a-new-national-space-policy-for-nigeria/>
- Onuoha, F. C. (2021). Prevalence and consequences of security threats in Nigeria. Presentation delivered at the "Multidimensional Security Threats in Nigeria: Drivers, Dimensions and Deficiencies in Response" conference, organized by the Friedrich Ebert Stiftung Nigeria, Sheraton Hotel, Abuja.
- Oyewole, S. (2020). The quest for space capabilities and military security in Africa. *South African Journal of International Affairs*, 1-26.
<https://www.tandfonline.com/doi/abs/10.1080/10220461.2020.1782258>
- Robert-Okah, I. (2014). Strategies for security management in Nigeria: A roadmap for peace and national security. *An International Multidisciplinary Journal, Ethiopia*, 8(3), 1-17.
<https://doi.org/10.4314/afrev.v8i3.1>
- Space in Africa. (2019). How much has NASRDA contributed to Nigeria's economic growth and development?
<https://africanews.space/how-much-has-nasrda-contributed-to-nigerias-economic-growth-and-development/>
- Thisday. (2020). 23 states run local security outfits as groups demand decentralized policing.

<https://www.thisdaylive.com/index.php/2020/01/13/23-states-run-local-security-outfits-as-groups-demand-decentralised-policing>

UK Ministry of Defence. (2022). *Defence space strategy: Operationalising the space domain*.

UK Ministry of Defence.

[https://assets.publishing.service.gov.uk/media/61f8fae7d3bf7f78e0ff669b/20220120-UK Defence Space Strategy Feb 22.pdf](https://assets.publishing.service.gov.uk/media/61f8fae7d3bf7f78e0ff669b/20220120-UK_Defence_Space_Strategy_Feb_22.pdf)

Umego, C. (2019). Offence of kidnapping: A counter to national security and development. SSRN. <https://ssrn.com/abstract=3337745>