AVAILABILITY OF GROUND RADAR TECHNOLOGY AND UNIMPEDED INTELLIGENCE GATHERING OF FARMER-NOMADIC PASTORALIST IN CONFLICT ZONES IN NIGERIA

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ABSTRACT

This study examined the availability of ground radar technology and unimpeded intelligence gathering of farmer-nomadic pastoralist in c2onflict zones in Nigeria. Two specific research objectives were formulated to guide the study. The research design was exploratory research design. 72 respondents, made up of heads of operation with assistants and heads of administration with assistants were selected using non-proportionate stratified sampling technique and used for the study. The instrument known as "Ground Radar Technology and Unimpeded Intelligence Gathering Questionnaire (GRTUIGQ)" was used to collect the data. The instrument (GRTUIGQ) was subjected to reliability test, using test-retest method and it produced high average reliability coefficient of 0.89 to justify the use of the instrument. The findings revealed that there is very little extent of availability of Ground Radar Technology equipment in conflict zones in Nigeria. It was observed that Ground Radar Technology equipment can significantly facilitate unimpeded Intelligence gathering of farmer - nomadic pastoralist in conflict zones in Nigeria. The conclusion was that there is no Ground Radar Technology equipment in the warring zones and that Ground Radar Technology if adequately installed and utilize can significantly facilitate unimpeded Intelligence gathering of farmer - nomadic pastoralist in conflict zones in Nigeria. One of the recommendations was that the Nigerian government should endeavour to adopt and install Ground Radar Technology to monitor, minimize or completely stop the issues Farmer-Nomadic Pastoralist conflict and insecurity in Nigeria.
Keyword: *Ground radar technology, intelligence gathering, farmer-nomadic pastoralist conflict*

INTRODUCTION

It is obvious that rural farmers and livestock breeders are the primary sources of the food in Africa, particularly for the urban areas of most countries including Nigeria. Of recent, livestock breeders particularly Transhumant Pastoralist and sedentary/migrant farmers have engaged each other in an internecine warfare that is threatening the peace and stability of our country. Williams (2005) noticed that the conflict had been primarily about resource use, damage to crops, blocking of transhumant corridors, farming along the valleys and stream/river banks and uncomplimentary agricultural policies by government. However, of recent, the conflict has assumed a dangerous dimension with the infusion of ethnic, religious and political factors into it. Cattle rustling, availability of dangerous weapons, intra-pastoralist conflicts, mercenary elements and dangerous drugs has all added to the combustion.

Abdu (2010) stated that over the past three years, north central Nigeria has been experiencing a lingering conflict between herdsmen and farmers. While the crop farmers accused the herdsmen of destruction of their crops and contamination of community water points while

the herdsmen accuse the crop farmers of denying them access to grazing areas and occasionally rustling their cattle. The cause for concern is the invasion of vast areas in the region by armed mercenaries under the cover of herdsmen, leading to the desolation of rural villages and displacement of rural dwellers in several areas as well as heightening insecurity. These conflict zones in North-Central Nigeria are Benue, Plateau, Nasarawa, Southern Kaduna and Taraba States where the intensity is much felt. The attendant consequences of these clashes are better imagined than described in communities where they occurred. Ayih (2003) and Gyuse and Ajene (2006), argued that these conflicts have become pervasive to the extent that virtually every area in North-Central has unresolved conflict at various stages of escalation or de-escalation.

Ground radar technology can play a critical role in strengthening Nigeria's National security against potential future attacks. Specifically, it enables the local government, state government, the nation at large and its security apparatus to identify potential threats, share information more readily, provide mechanisms to protect the nation, and develop response capabilities. Ground radar technology is a Surveillance system that has the capabilities to monitor most sensitive equipment's and public places of farmer - nomadic pastoralist.

The recent security challenges in Nigeria have accentuated the deep schism in the polity and the conflicts in some of our neighbouring countries have led to the availability of illegal and sophisticated weapons. To adequately address Nigerian security challenges, modern intelligence gathering devices such as Ground Radar Technology must be acquired and deployed by security services, deliberate and conscious efforts must be put in place so that socio economic activities can prosper. This research therefore addresses the role of ground radar technology in security surveillance of farmer–nomadic pastoralists' from the perspective of unimpeded intelligence gathering.

Statement of the Problem

Insecurity is a primary area of concern in most parts of Nigeria for more than a decade. A large percentage of the population has fallen victims of the insecurity concerns. The most affected of all are the nomadic pastoralists and the farmers in the north central parts of Nigeria. Other proposed solutions seem not to work, but the surveillance system is proving a significant option. Technology has come to stay, though expensive, it has been tested across the globe. Nigeria will sink into trouble if adequate measures are not put in place. The problem of this study lies on the premises of the availability of ground radar technology and unimpeded intelligence gathering of farmer-nomadic pastoralist in conflict zones in Nigeria.

Research Questions

The following research questions will be answered:
1. Is Ground Radar Technology equipment adequately available in number in the warring zones?
2. To what extent will Ground Radar Technology facilitate in unimpeded Intelligence gathering of farmer - nomadic pastoralist in conflict zones in Nigeria?

Objectives of the Study

The main objective of this study is to examine the availability of ground radar technology and unimpeded intelligence gathering of farmer-nomadic pastoralist in conflict zones in Nigeria. The specific objectives of the study are as follows:
1. To find out if Ground Radar Technology equipment are adequately available in number in the warring zones.
2. To examine the extent to which Ground Radar Technology facilitate in unimpeded Intelligence gathering of farmer-nomadic pastoralist in conflict zones in Nigeria.

Statement of Hypotheses
The following hypotheses will be tested:
1. Ground Radar Technology equipments are not adequately available in number in the warring zones.
2. Ground Radar Technology do not significantly facilitate unimpeded Intelligence gathering of farmer - nomadic pastoralist in conflict zones in Nigeria.

LITERATURE REVIEW

The Concept of Ground Radar Technology

Varadarajan (2013), noted that Ground Radar Technology has inbuilt electronic sensors that play a vital part in enabling Armed Forces and security agencies to gather information or intelligence about the enemy. Ground Radar Technology is an electromagnetic (EM) sensor system used for detection, location tracking, imaging and classification of targets such as man-made objects like aircraft, ships, ground moving vehicles and natural environment including ground features and moving men. It is an important sensor for the commanders' battle space awareness. Modern battles and crime fighting has transformed into network centric with unified battlefields spread across multi theatres of operation. With the advent of microelectronics, radiofrequency (RF) management and unprecedented growth in processing power and computation, Ground Radar Technology or radar technology has transformed into a complex, advanced and intelligent sensor.

Ground Radar Technology has a sophisticated in-built software to detect, track and classify targets like crawling man, single walking man, group of walking men, moving jeep-size vehicle, and moving heavy vehicles at various distances. It comprises an in-built interface for automatic transfer of target data and Doppler audio to remote locations, integrated image sensors to enhance the ability to identify and classify the targets. The entire system can be carried by three soldiers and is tripod mounted while in operation. An infantry soldier can install the radar and bring it into operation, within 5 min. This radar is a potential ground-based e-sensor for Border Security Force, Coast Guard and Police, for surveillance of designated areas, such as farmer – nomadic pastoralist conflict zones and can be configured as an effective perimeter sensor for domestic and military airports, large industrial establishments, or other infrastructures.

Similarly, Ground Radar Technology is a technology that uses pulses of electromagnetic radiation to penetrate the surface of the ground, and go below to reveal any anomalies in soil or other materials. Ground Radar Technology uses microwave band frequencies, generally from 10 MHz to 1 GHz. According to Daniels (2004), Ground Radar Technology (GRT) is a geophysical method that uses radar pulses to image the subsurface. David (2000) asserted that the performance of a radar system can be judged by the following: (1) the maximum range at which it can see a target of a specified size, (2) the accuracy of its measurement of target location in range and angle, (3) its ability to distinguish one target from another, (4) its ability to detect the desired target echo when masked by large clutter echoes, unintentional interfering signals from other "friendly" transmitters, or intentional radiation from hostile jamming (if a military radar), (5) its ability to recognize the type of target, and (6) its availability (ability to operate when needed), reliability, and maintainability.

However, there are the different forms of ground radar technology in tackling the menaces of the pastoralist farmers conflict, in the words of Varadarajan (2013) he made clear that, Battlefield Surveillance Radar–Short Range (BFSR-SR) is a lightweight, man portable, user-friendly surveillance electronic sensor developed for the Indian Army. The radar is capable of searching a specified sector and performing track-while-scan (TWS) for multiple ground surface targets to provide all-weather surveillance against intrusion. BFSR is a fully coherent

pulse Doppler radar. The low peak power provides the radar a low probability of intercept (LPI), making it difficult to intercept by enemy sensors. Aerial surveillance is the gathering of surveillance, usually visual imagery or video, from an airborne vehicle-such as an unmanned aerial vehicle, helicopter, or spy plane. Military surveillance aircraft use a range of sensors (e.g. radar) to monitor the battlefield (Kelly and Carol, 2008).

The Concept of Security Surveillance

Surveillance is the monitoring of behavior, activities, or other changing information for the purpose of influencing, managing, directing, or protecting people (Leighton & Martin, 2014). This can include observation from a distance by means of electronic equipment (such as closed-circuit television (CCTV) cameras) or interception of electronically transmitted information (such as Internet traffic or phone calls). It can also include simple no- or relatively low-technology methods such as human intelligence agents and postal interception. The word surveillance comes from a French phrase for "watching over" (Sur means "from above" and Veiller means "to watch") and is in contrast to more recent developments such as surveillance (Clarke, 1988). Surveillance is used by governments for intelligence gathering, prevention of crime, the protection of a process, person, group or object, or the investigation of crime. It is also used by criminal organizations to plan and commit crimes, such as robbery and kidnapping, by businesses to gather intelligence, and by private investigators.

Surveillance can be viewed as a violation of privacy, and as such is often opposed by various civil liberties groups and activists. Liberal democracies have laws which restrict domestic government and private use of surveillance, usually limiting it to circumstances where public safety is at risk. Authoritarian government seldom have any domestic restrictions, and international espionage is common among all types of countries (Marx, 2015). Surveillance techniques are not created equal; among the many biometric identification technologies, for instance, face recognition requires the least cooperation. Unlike automatic fingerprint reading, which requires an individual to press a finger against a machine, this technique is subtle and requires little to no consent (Philip, 2003).

In this new approach to security and surveillance, the priority seem to have been reassigned to territorial integrity, yet with a new emphasis on pre-emptive action, anticipation of threats and risk management. In this controversial trajectory, the roles played by the shifting nature of global security threats and the national reactions to terrorism and transnational organize crime have been largely studied. Yet, little work has been done on the role played by the massive and often indiscriminate development and deployment of surveillance-oriented security technologies and their consequences for our democracies. In fact, there seems to exist a mutually constitutive relationship by current concepts of statehood, pre-emptive security and surveillance-oriented security technologies.

Farmer

According to Wendell (2013), farmer can be defined as someone who grows plants and raises animals for human use, work very hard and long hours in order to be successful. The work of farmers is essential for human survival. In a similar vein, a farmer is someone who works under the umbrella of agriculture, producing a variety of food products for human and animal consumption.

Berry, (2013) opined that, there are several kinds of farmers ranging from farmers who raise animals to farmers who grow crops. Wendell (2013), argued that, "Farmers farm for the love of farming. They love to watch and nurture the growth of plants. They love to live in the presence of animals. They love to work outdoors. They love the weather, maybe even when it is making them miserable." A farmer's main goal is to produce a good crop and/or healthy animals in order to make a living and to feed the population. Farmers are

responsible for all crops and livestock that are needed for us to survive. Without food, the world would slowly die, and farmers work hard every day to keep plenty of crops and animal products in the market to prevent that from happening. He outlined the various types of farmers such: Organic Farmer - produces fruits, vegetables, grains, or livestock without the use of pesticides, herbicides, or chemical fertilizers. Grain and Forage Crop Farmer - grows grains such as wheat, barley, canola, oats, rye, flax, peas and specialty crops or forage crops. Dairy Farmer- owns or manages a farm where cows are raised for the production of milk and other dairy products. Poultry Farmer - raises domesticated birds such as geese, ducks, turkeys or chickens. Rancher - raises livestock such as cattle or sheep, or less common livestock such as elk, bison, ostrich, emu or alpacas. Beekeeper - keeps honey bees, and produces honey, pollen, royal jelly and beeswax. Vermi-culturist - breeds worms and uses the worms to convert waste products such as uneaten food, feces, grass clippings, and spoiled fruit and vegetables into healthy, nutrient-rich soil and organic fertilizer. Alligator Farmer- breeds and raises alligators.

Nomadic Pastoralist
According to Blench (2001), Nomadic Pastoralism is a form of pastoralism where livestock are herded in order to find fresh pastures on which to graze. Strictly speaking, true nomads follow an irregular pattern of movement, in contrast with transhumance where seasonal pastures are fixed. However this distinction is often not observed and the term nomad used for both in historical cases the regularity of movements is often unknown in any case. In the early days, research was all about establishing typologies.
The herded livestock include cattle, yaks, sheep, goats, reindeer, horses, donkeys or camels, or mixtures of species. Nomadic pastoralism is commonly practiced in regions with little arable land, typically in the developing world (Zarins and Juris, 1992). Pastoralists raise different types of livestock. The characteristics of the animals and local environmental conditions determine the number and composition of the herds (Ahmed, 2009). Pastoral production systems are by large, a product of climatic and environmental factors. The objective of the pastoralist is to accumulate and maintain as much wealth as possible in terms of livestock. Pastoralists have been able to carve out a living from the harsh and unpredictable environment for centuries.

Conflict
Many scholars in the field of conflict resolution and peace building process have defined conflict in a way that enables us to understand its meaning. Hence, Fisher (1990) defined conflict as an incompatibility of goals or values between two or more parties in their relationship combined with attempts to control the antagonistic feelings of each other. Conflicts are mean to solve and overt complete fission; thereby preserving some kinds of unity (Gemechu, 2007).
Conflict refers to some form of friction, or discord arising within a group when the beliefs or actions of one or more members of the group are either resisted by or unacceptable to one or more members of another group. To take another definition of conflict, Michael (1992) defines it as an activity which takes place when conscious beings (individuals or groups) wish to carry out mutually inconsistent acts concerning their wants, needs or obligations.

Ground Radar Technology and Unimpeded Intelligence Gathering
Romano (2014) in his study posit that the Soviet Union used a number of radar-equipped ocean reconnaissance satellites (RORSAT), which used strong radar systems, powered by an onboard nuclear reactor to gather intelligence and to visualize vessels. The result of this study is that these operated in the "push broom" manner, scanning a swath straight down. US radar

satellites, however, have emphasized SAR and ISAR. To aid the U.S. Border Patrol in the time-consuming and difficult task of locating smuggling tunnels, MITRE has designed a prototype system to boost the capability of ground-penetrating radar.

Fein (2014) in his study on ship based radar stated that the AN/SPQ-11 Cobra Judy radar, on USNS Observation Island (T-AGM-23), could also be guided by the COBRA BALL electro-optical sensors on an RC-135. Cobra Judy was supplemented by Cobra Gemini on USNS Invincible (T-AGM-24) starting around 2000 and was replaced by Cobra King in 2014 on USNS Howard. Lorenzen (T-AGM-25). In the write-up on Africa and South America, Missile and Space talked about who is Building New Surveillance Radars in Cuba? Why North Korea, Russia and China are All Prime Suspects and the report made was that a new surveillance radar installation has been detected near the town of Bejucal in Western Cuba, as part of a sizeable new signals intelligence facility being built in the area. The facility, located just a few miles from the United States mainland, is in an ideal location to gather valuable intelligence on American activities. The facility is reportedly capable of intercepting signals, tracking ballistic missiles and even monitoring U.S. space launches, providing invaluable data to whichever party is operating it.

Securitization Theory by Weaver (2004)

This theory is an analytical framework intended to increase understanding about how traditional and non-traditional security threats are perceived and managed chiefly by states. The main argument of securitization theory is that security is an (illocutionary) speech act, that solely by uttering 'security' something is being done. Weaver (2004) asserts that it is by labelling something a security issue that it becomes one. By stating that a particular referent object is threatened in its existence, a securitizing actor claims a right to extraordinary measures to ensure the referent object's survival. The issue is then moved out of the sphere of normal politics into the realm of emergency politics, where it can be dealt with swiftly and without the normal (democratic) rules and regulations of policy-making. For security this means that it no longer has any given (pre-existing) meaning but that it can be anything a securitizing actor says it is. Security is a social and inter-subjective construction.

The application of this theory to the study draws on the analytical strength of this approach which is based on its ability to situate a community at the heart of security. This therefore means that the welfare of the people affected by the nomadic pastoralist conflict should be paramount. In other words, the physical security of people as well as the socio-economic wellbeing of the people should be prioritized by the state. The scope of global security should be expanded to include threats in seven areas such as human security which requires using ground radar technology to monitor the activities in conflict zone.

METHOD

Research Design
Exploratory research design was adopted in the study. This design was appropriate for the study as it assess the opinions of various group of people for in-depth knowledge of the issues at hand.

Area of the Study
The study was conducted in Plateau State, Benue State and Taraba State in the Northern Nigeria.

Population of the Study
The population of the study comprised the all staff of Operation Save Haven Plateau State,

Operation Whirl Stroke Benue State and Operation Whirl Stroke Taraba State in Plateau State, Benue State and Taraba State respectively.

Sample and Sampling Technique
72 respondents were randomly selected for the study using non-proportionate stratified sampling technique, where 4 people were randomly selected from each of the 6 operations in each of the three states.

Instrumentation
The main instrument meant for use in this study was a research questionnaire tagged: 'Ground radar technology and security surveillance of farmer - nomadic pastoralists in conflict zone Questionnaire (GRTSSFNPCZQ).

Validation of the Instrument
The instrument was face content validated by the researcher's supervisor and one expert from test and measurement and evaluation as well as security and strategic department lecturers from the department also scrutinized the instrument.

Reliability of the Instrument:
In the trial testing, 40 respondents who were not part of the main study were randomly selected from two organizations and the instrument administered on them. The same procedure was repeated on the same subjects after one week. Data collected from the respondents were subjected to test-retest statistical analysis using Crumbach Alpha for justification of the instrument and it produced the coefficient index of 0.89 proving the instrument reliable for the study.

Administration of Instrument
Administration of the instrument took a process of time to go through. This was done personally in collaboration with five trained research assistants who were carefully selected and trained for the exercise by the researcher. In each organization, the researcher called on the head and explained his mission and thereafter solicited the cooperation of the respondents. The researcher explained that their responses would be treated with strict confidence for the purpose of the research only.

Method of Data Analysis
This study used descriptive statistics such as percentage analysis to analyses the data in respect of the research questions. However, for the hypotheses the researcher used Simple Regression Analysis to test them. Test for significance was done at 0.05 alpha level.

RESULTS
Research Question
What is the extent of the availability of Ground Radar Technology equipment in the warring zones. Table 1was used to answer the research question.

Table 1
Descriptive analysis of the extent of the availability of Ground Radar Technology equipment in the warring zones.

Responses	Freq	%	Ranking
Very Little Extent	67	93.06	1st
Little Extent	5	6.94	2nd
TOTAL	72	100%	

SOURCE: Field Survey

The table 1 presents the extent of the availability of Ground Radar Technology equipment in the warring zones. From the result, it was observed that 67(93.06) of the respondents affirmed very little extent of availability of Ground Radar Technology equipment while 5(6.94%) of the respondents affirmed little extent of the equipment.

Research Question Two
To what extent will Ground Radar Technology facilitate in unimpeded Intelligence gathering of farmer - nomadic pastoralist in conflict zones in Nigeria? Table 2 was used to answer the research question.

Table 2:
Descriptive analysis of the extent to which Ground Radar Technology will facilitate in unimpeded Intelligence gathering of farmer - nomadic pastoralist in conflict zones in Nigeria.

Responses	Freq	%	Ranking
Very great extent	28	38.89	1st**
Great extent,	21	29.17	2nd
Average	11	15.28	3rd
Little extent	8	11.11	4th
Very little extent	4	5.56	5th*
TOTAL	72	100%	

** The greatest extent
** The least extent
Source: Field Survey

The table 2 shows the extent to which Ground Radar Technology will facilitate in unimpeded Intelligence gathering of farmer - nomadic pastoralist in conflict zones in Nigeria. From the result, it was observed that 28(38.89)% of the respondents affirmed that very great extent while 4(5.56)% of the respondent affirmed very little extent. The result therefore means that Ground Radar Technology will facilitate in unimpeded Intelligence gathering of farmer - nomadic pastoralist in conflict zones in Nigeria to a very great extent when adequately installed and used.

Hypothesis One
There is no significant extent of the availability of Ground Radar Technology equipment in the warring zones. In order to answer the hypothesis, One Sample t-test was used to analyze the data, (see table 3).
Table 3:
One sample t-test analysis of the of the extent of availability of Ground Rader Technology in the warring zones

Responses	Observed mean	Observed SD	t
	Expected mean	Expected SD	
Observed	20	1.87	
			61.96*
Expected	12.73	1.74	

*Significant at 0.05 level; df = 71; N= 72; critical t-value = 2.000

As shown in Table 3 the calculated t-value is 61.96. This value was tested at 0.05 level with 71 degree of freedom. The obtained t-value (61.96) is greater than the critical t-value (2.000). Hence, the result was significant. The result therefore means that there is insignificant extent of the availability of Ground Radar Technology equipment in the warring zones.

Hypothesis Two

The null hypothesis states that Ground Radar Technology cannot significantly facilitate unimpeded Intelligence gathering of farmer - nomadic pastoralist in conflict zones in Nigeria. In order to test the hypothesis ordinal regression analysis, incorporating chi-squared analysis, was performed on the data, (see table 4).

TABLE 4
Model Fitting Information of the Analysis of how ground radar technology can facilitate unimpeded intelligence gathering of farmer-nomadic pastoralist in conflict zones in Nigeria.

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	51.15			
Final	29.41	21.74	2	.000

*Significant at 0.05 level; N= 72; df = 2, critical X^2-value = 5.99
The table shows that the calculated X^2-value (21.74) at the final model was greater than the critical X^2-value of 5.99 at 0.5 alpha level with 2 degree of freedom. This means that ground radar technology can facilitate unimpeded intelligence gathering of farmer-nomadic pastoralist in conflict zones in Nigeria. It was also deemed necessary to find out the extent to which ground radar technology can predict unimpeded intelligence gathering of farmer-nomadic pastoralist in conflict zones in Nigeria, (see table 5).

TABLE 5
Pseudo R-Square of how ground radar technology can predict unimpeded intelligence gathering of farmer-nomadic pastoralist in conflict zones in Nigeria.

Cox and Snell	.261
Nagelkerke	.285
McFadden	.122

Link function: Logit.

The above table presents the extent of ground radar technology prediction on unimpeded intelligence gathering of farmer-nomadic pastoralist in conflict zones in Nigeria, showing three Pseudo R-Square values 0.261 for cox and snell, 0.285 for Nagelkertke and 0.122 for McFadden. From the above three Pseudo R-Square values it was observed that ground radar technology can predict between 12% and 26.1% of unimpeded intelligence gathering of farmer-nomadic pastoralist in conflict zones in Nigeria.

DISCUSSION OF THE FINDINGS

The results of the data analyses in tables 1 and 3 were significant due to the fact that the obtained t-value (61.96) was greater than the critical t-value (2.000) at 0.05 level with 71 degree of freedom. The result implies that there is insignificant extent of the availability of Ground Radar Technology equipment in the warring zones. The result therefore was in agreement with the research findings of Williams (2005) who noticed that conflict had been primarily about resource use, damage to crops, blocking of transhumant corridors, farming

along the valleys and stream/river banks and uncomplimentary agricultural policies by government, he further said that the conflict has assumed a dangerous dimension with the infusion of ethnic, religious and political factors into it. Cattle rustling, availability of dangerous weapons, intra-pastoralist conflicts, mercenary elements and dangerous drugs has all added to the combustion. It also agrees with the findings of *Fein (2014) that stated that* Ground Radar Technology equipment is reportedly capable of intercepting signals, tracking ballistic missiles and even monitoring U.S. space launches, providing invaluable data to whichever party is operating it. The significance of the result caused the null hypotheses to be rejected while the alternative one was accepted.

The results of the data analyses in tables 2, 4 and 5 were significant due to the fact that the calculated X^2 - Value 21.74 was greater than the critical R-value of 5.99 at 0.05 level with 2 degree of freedom. The result implies that Ground Radar Technology can facilitate unimpeded intelligence gathering of farmer-nomadic pastoralist in conflict zones in Nigeria. The result therefore was in agreement with the research findings of Romano (2014) who in his study posit that the Soviet Union used a number of radar-equipped ocean reconnaissance satellites (RORSAT), which used strong radar systems, powered by an onboard nuclear reactor to gather intelligence and to visualize vessels. The significance of the result caused the null hypotheses to be rejected while the alternative one was accepted.

Conclusions

Based on the findings of the research work, it was concluded that there is very little number or no Ground Radar Technology equipment in the warring zones and that Ground Radar Technology if adequately installed and utilize can significantly facilitate unimpeded Intelligence gathering of farmer - nomadic pastoralist in conflict zones in Nigeria.

Recommendation

The following recommendations are deemed necessary:
1. The Nigerian government should endeavour to adopt and install Ground Radar Technology to monitor, minimize or completely stop the issues Farmer-Nomadic Pastoralist conflict and insecurity in Nigeria.
2. The Ground Radar Technology installed should be able to facilitate unimpeded intelligence gathering
3. There should be regular maintenance of the facilities in order to overcome the problems of being breached.

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