

Eco-Jihad: Islamic Extremist Groups in Africa Recruit Owing to the Environment

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This article examines factors of natural and human environment used by Islamic Jihadist groups in Africa, in recruitment. The methodology is a comparative study to multiple cases applied deductively from qualitative data. A comprehensive use of primary and secondary sources is used as the data. Each section starts with a quote from Islam's holy book, the Quran, to show the relevancy of the environment in Islam used in militant recruitment by Jihadist groups in Africa. The cases in four sections start two centuries ago showing that this is not a new phenomenon. The first section details the Jihadists of Sokoto in pre-colonial West Africa (ca. 1800-1840). In recruitment they used civilization / wilderness divides across intellectual and colloquial discourses of common soldiers and political leaders; that included glorification of horses and camels as a recruitment moto associated with authentic Islamic warfare in the style of Prophet Muhammad. The second section provides examples of Islamic Jihadist groups in the Sabel where recruitment applied the symbiotic relationship of environmental shocks, insecurity, chronic hunger, malnutrition, and violent extremist organizations. The third section examines the materialist political ecology approach detailing Jihadist groups in Mali in their peasant / pastoral logics for recruitment. This is compared to the devolution of natural resources and security governance in Nigeria and the specific means applied by Al Shabab in Somalia who has banned single-use plastic bags projecting an environmental friendly image. The fourth section examines specific circumstances in various countries showing how recruitment is furthered by climate change. These are the Maghreb countries Algeria, Morocco, and Tunisia, and the Lake Chad Basin and Mali. The thematic line drawn, and common denominators in all the sections are that people under stress who have nowhere to turn to,

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arising from situations resulting from environmental stress, are the targets for militant recruitment. It is fair to state then as a bottom line from the cases in the African context that Islamic Jihadist groups exploit the environment to recruit. This comes naturally for environmental concerns are part and parcel of Islamic religion, military strategy, and politics.

Keywords: *Islam, violent extremist groups, Jihadists, Africa, terrorism, recruitment, environment, climate change.*

INTRODUCTION

This article examines factors of natural and human environment used by Islamic Jihadist groups in Africa, in recruitment. The methodology is a comparative study to multiple cases applied deductively from qualitative data. A comprehensive use of primary and secondary sources is used as the data. The relevant religious justifications are quoted from the holy book of Islam, the Quran, their relevancy to each case outlined and this linked to the environment and militant recruitment. This Introduction provides definitions and details the cases and structure of the remainder of the article, while also justifying this topic as a contribution to the field and to the literature. The Conclusions sum up the findings and policy implications and future research extensions are discussed.

Definitions

The definitions that this article relies upon are introduced by Schleifer, S. A. (1983, 117) who defines the word Jihad in Islam to describe three different kinds of struggle. These are: a believer's internal struggle to live out the Muslim faith as well as possible; the struggle to build a good Muslim society; and a Holy war (Jihad) or the struggle to defend Islam, with force if necessary. Whilst the political and military elements for a Jihad may well have been the most frequently addressed in academic literature, this article contributes to the field by also examining the first two. It does so by examining the factor of the natural and human environment as a subliminal marketing means to recruit to the faith and society. Ultimately the goal is recruitment for a violent Jihad.

The natural and human environment (hereafter the environment) in Islam has a broad meaning. Nevertheless, the Quran provides a definition that guides on global common resources. Humans are only one part of nature, that must be shared. The quote used as a definition is (Quran, Surat Al- Hijr, 15:19, 20) "As for the earth, we spread it out, planted firmly set mountains therein, and we produced therein all kinds of things in due balance. And we provided means of livelihood for you and those for whom you are not responsible (you are not required to feed)."

Moneim (2023, 51) analyses and explains this definition showing that Islam advocates an environmental conscious religion. In this Muslims must act with

respect for the environment. If they do this then their ability as a responsible citizen in society is enhanced. This is not unique to Islam. Mufid et al., (2023) have uncovered areas of agreement among different religious faiths that show similar interaction between humans and the environment. They share many perspectives on environmental preservation. The religions they examined were Christianity, Islam, Judaism, Buddhism and Hinduism.

Leading on from such findings, Stoddard (2023) sought to narrow down the distinctness of environment in Jihadist Islam, to define how it differed from other religions and mainstream Islam. He found that they aimed to win the hearts and minds and recruit people through the topic of the environment specifically for violent activities. This was competitive and population control-based. Specifically, to control through the establishment of a predictable system of order. That system is Islamic life harmonious with nature, an eco-system. The difference from the others is that the recruitment and system of order for Jihadists was in support of a military strategy; in essence a competitive eco-system of violence.

Methodology and Structure

The structure of this article has four sections each examining different geographical and thematic groupings of Africa that have experienced the phenomena of Islamic militant recruitment and the environment. These are: the Jihadists of Sokoto in pre-colonial West Africa who recruited using the civilization / wilderness divides across intellectual and colloquial discourses of common soldiers and political leaders (that included glorification of horses and camels as a recruitment moto associated with authentic Islamic warfare in the style of Prophet Muhammad); the Sahel where recruitment applied the symbiotic relationship of environmental shocks, insecurity, chronic hunger, malnutrition, and violent extremist organizations; and specific circumstances in various countries showing how recruitment is furthered by climate change - these are the Maghreb countries Algeria, Morocco, and Tunisia, and the Lake Chad Basin and Mali. The thematic line drawn, and common denominators in all the sections are that people under stress who have nowhere to turn to, arising from situations resulting from environmental stress, are the targets for militant recruitment.

The contribution that this article makes to the literature and to the field is to go beyond the existing academic literature focussed on the means of Jihadist groups recruitment. It adds perspectives on the ways in which Islam, and especially Jihadi Islam, gains followers. The conclusions of the article deduce that it is fair to state as a bottom line from the cases in the African context that Islam exploits the environment to recruit. This comes naturally for environmental concerns are part and parcel of Islamic religion, military strategy, and politics. It is shown that people throughout many parts of Africa who are under environmental stress, and who have nowhere to turn to, are the targets for recruitment. In the recruitment process three elements of Islam are applied. The first two are common to non-violent Islam being

a believer's internal struggle to live out the Muslim faith as well as possible; and the struggle to build a good Muslim society. In doing so respect for the environment is instilled as a daily religious practise. This is through the teaching of the Quran that the entire universe is a gift from Allah. However, the Jihadists go further instilling that to defend Islam, force or a Jihad is essential.

JIHADISTS OF SOKOTO RECRUITMENT: THE ROLE OF THE CIVILIZATION / WILDERNESS

The relevant verse from the Quran (6:38) for this first section is to respect all creations and that is quoted as "And there is no creature on [or within] the earth or bird that flies with its wings except [that they are] communities like you. We have not neglected in the Register a thing. Then unto their Lord they will be gathered." This is explained by Gharebaghi, et al. (2007) that Allah uses umma (communities) to bridge the similarities between animals and humans. Namely that animal rights must be respected.

Setting the Scene

Setting the scene for the implementation of this in recruitment has two parts. The first is about the unique nature of the Sokoto Caliphate. The second is on the environmental issues at that time which helped Othman Dan Fodio and his people to recruit. For the first Bradford (2016) details that the Sokoto Caliphate was a Sunni Muslim caliphate in West Africa established under the leadership of Usman Dan Fodio, an Islamic cleric, in the 19th century. It was an important chapter in West Africa's history. Its existence highlighted social inequalities, religious concerns and political grievances. Fodio was born in 1754 in the Hausaland region of present-day Nigeria. He advocated for reforms to bring societies back to the tenets of the Quran and Hadith. By 1837, the Sokoto state had a population of around 10-20 plus million people. That made it the most populous empire in West Africa. It was also the most developed state of pre-modern Sub-Saharan Africa. Islamic scholarship was a crucial aspect of the Caliphate from its founding. There was substantial economic growth. It was dissolved when the British, French and Germans conquered the area in 1903. The influence of the Sokoto Caliphate can be seen in extremist groups like Boko Haram that seeks to establish an Islamic state governed by strict Sharia law.

For the second part Islahi (2008) details the relevant environmental issues through an economic study. Before Sokoto there was an imposition of unfair taxes, the seizing of land by force, unauthorized grazing of other people's crops, extraction of money from the poor, and imprisonment on false charges. The difference in Sokoto was a focus on different types of land management to recruit through reforms. For example, Fodio divided lands into two categories *ma`mur* (useable and inhabited) and *mawat* (dead land, uninhabited and uncultivated). When he conquered land

he established rules for *hima* (distribution, allocation, grants, endowment, or enclosure). He allocated the former to those recruited giving them a livelihood that they didn't have under previous rulers. This was an incentive to join and follow him.

Collins (1990) provides a second historical source to confirm the same evidence linking this background for the implementation of the above verse of the Quran as a means of militant recruitment in the Sokoto state. He shows how Fodio, in dispute with secular rulers from 1790, set up his own Muslim community. This was the period before European colonization that also introduced Christianity through missionaries into the same region.

Collins (1990) continues to provide the timeline. By 1804 the situation became such that Fodio felt he had no alternative but to declare a holy war as defined in the Koran, a Jihad, against them. All sides sought support from the population. Many local peasantries supported Fodio as he promised to get rid of the arbitrary taxation of the secular overlords. Islamic Sharia law and its economic system were less of a burden for them. There was a domino effect and others established additional Muslim emirates elsewhere. The significance of the Jihad was to establish the Sokoto Caliphate, an Islamic state, that was an amalgamation of these emirates.

Leading from this Ochon (2015) details the connection of militant recruitment to Islam in relation to this verse of environment from the Quran (6:38) for this case. The Jihadists of Sokoto in pre-colonial West Africa for the period roughly 1790-1817 had a well-defined self and other. They were the Muslim self where the other was pagan. Detailed are the specifics of militant recruitment in the Sokoto Caliphate, when the leadership refused to integrate traditional hunting societies that they had conquered into their military. They were not considered to be the Muslim self and so constructed those defeated in battle as the barbarian and wilderness of the other.

Smaldone (2010, 38) notes that the military structure and composition in Sokoto was similar to that of feudal England. It was an agrarian community of herders and crop growers, who took to arms when needed rather than a professional army. Weapons, tactics, and military organization were rudimentary. There was little or no differentiation between military and civil roles. The acknowledged leaders of the scattered Muslim communities were also their military commanders.

Both the Jihad and recruitment for it using this notion of who was civilised and who was barbaric analogous to wilderness or agrarian settlement were applied when the Sokoto Caliphate expanded using military force. This was eastwards and southwards into regions identified in today's geography as Nigeria and Cameroon. This expansion required transport where horses and camels were the mode of the day. The use of these animals introduced another element related to nature. The Muslim self clearly emerged in several ways relating to these.

Smaldone (1970) in his doctoral dissertation finds that at the fore at the Sokoto Caliphate was glorification to all animals following beliefs of the Quran. This was utilized in recruitment that detailed horses and camels as authentic Islamic warfare logistics tools solely in the style of the Prophet Muhammad. The random killing of

wild animals was subsequently also largely discredited. Meat was consumed from that raised in domestic herds to such a purpose. That placed an emphasis of care on the ecological environment.

Here a study of the Nupe military organization within the Sokoto Caliphate by Banfield (1905,) shows a few extra salient points of these animals, in war and peace. In war these animals were ridden by the elite units and most senior officers. They were a symbol of strength and pride, and when compared to adversaries who lacked them, were used as a magnet to recruit the impoverished. But they were more than this for Islam was a daily way of life. With the expansion came agrarian settlement and less frequently military campaigns. In these settlements the owners of animals were symbols of political and religious power. Horses and slaves were very valuable strategic, commercial, and currency articles.

Eco-Jihad and Animals

The adherence to this awe and respect for animals, an ecological environment, and the religious following of this is further detailed in the Quran as “O mankind, eat that which is lawful and wholesome on earth, and do not follow the footsteps of Satan” (Holy Quran, Al-Baqara, 2:168). Muhammad et al. (2010, 41) interprets this as the “inner Jihad” – the struggle to break bad habits and to align with a purer way of living. This was intertwined through Jihad recruitment in the Islamic aspect of the Sokoto military life as noted by Smaldone (1977). He informs that Islamic law and practices were applied to the conduct of war, including battle formations, tactics, logistics, the seizure and distribution of booty, the disposition of captives, and frontier defence.

Within this conduct of war, al-Bakri (1965) details that horses and camels played an important role in the logistics of warfare. Their domestication and training were specific for this role. This in turn fed back into daily life of the agrarian settlements for the army was a feudal army. Its size and so recruitment varied depending on campaigns. The cavalry was mobilized only when and where it was required for the largest force was infantry and archers. Here other factors effected the size of the cavalry including the welfare of the animals. For example, Kolapo (2003) found that tsetse flies infested areas led to a high mortality rate.

Drawing the historical line Reynolds (1997) links the historical practices of Sokoto to today’s military recruitment by Jihadists. He informs that through various incarnations many of the Muslim emirates in West Africa ended due to European colonial rule and then de-colonization. New sovereign states based on the European model were created by the mid and late 20th century. However, and even though the political authority of the Sokoto Caliphate is not that of a sovereign state it still exists today with considerable spiritual authority. That according to him explains the influence of Islamic religion in Nigerian politics; the source of which can be found in the Sokoto Caliphate.

That leads to a conclusion for this section that is provided by Tlili (2018). He shows how the same factors of the environment for military recruitment that were born over two hundred years are still valid for Jihadist militant recruitment today in Nigeria and the neighbouring region. He further provides details from the narratives and the discourses of the Nigerian military and its political leaders where there emerges a distinction between civilization and wilderness. Both for them and Jihadists there is an awe and evaluation of human and animal life and respect for ecological wellbeing. This is still instilled in training and tactics where combatants engage in various landscapes, wildlife, and in daily life and combat with various ethnic groups.

Dii (2024) provides examples of this in his study of the Nigerian military and sustainable development. He established that the development policies of the military in Nigeria since 1999 presented a policy disposition that were largely inspired by the libertarian and utilitarian views. The military established civil and professional trainings, and built universities that continue to contribute to educational and social sector development in the country, established primary up to tertiary healthcare services as well as medical training colleges and institutions, and introduced welfare economics. This was evident in development policies, social justice and equity questions especially in the allocation of resources, including land.

The difference between the Jihadists and the Nigerian military is that the former recruit solely to Islam, whilst as shown by Oyelade and Omobowale (2022) the latter recruits from all religions as well as pagans. They further describe that the Chaplaincy of the Nigerian Army has three units with different religious identity: Catholic, Protestant, and Islamic Affairs. Services of the clergy for the soldiers have been required at both the barracks and on the battlefield, as well as services for their families at the barracks. In sum there is a civil-military relations process where the military are expected to be professional in their service to the state, and not to their religious beliefs, perhaps echoing similar expectations in European and American military.

This example of the description of the environmental issues of over two hundred years ago, and how the Sokoto Caliphate recruited out of people being under stress and having nowhere to turn to out of environmental stress is somewhat different from the next sections. This is because the environmental issues then and now have different priorities. Then, during the Sokoto period daily life was solely agrarian and so the recruit process focussed on that, namely land and animals. In the next sections that are more contemporary, environmental issues are at the fore of local and global attention. These are more diverse resulting from industrialization and subsequent pollution. There is also a wider range of issues and awareness of them, in part due to media attention and in part to intellectual research, for example climate change.

SAHEL RECRUITMENT: SYMBIOTIC RELATIONSHIP OF ENVIRONMENTAL SHOCKS, INSECURITY, CHRONIC HUNGER, MALNUTRITION, AND VIOLENT EXTREMIST ORGANIZATIONS

The relevant verse quoted from the Quran (Holy Quran, 6:99) for this second section relating to militant recruitment and climate change in the Sahel region of Africa is “And it is He who sends down rain from the sky, and We produce thereby the growth of all things. Indeed, in that are signs for a people who believe.” Amri (2013) develops this notion from theology to a praxis of Eco-Jihad. The understanding is that only the Islamic deity’s (Allah) intricate creation and unique design can create what is perfect on this earth.

Recruitment is then a short step away for Jihadist recruitment propaganda that only Allah can rectify any woes including poverty and starvation. Putting this in context of how Jihadists utilize this is outlined by Schmiedl (2023). He details that in the Sahel region many people from diverse backgrounds are affected and suffer from a range of issues. They can be categorized into natural and human. A lack of stable sustainable governance by secular authorities is most salient for Jihadist recruitment as it can be blamed for services such as electricity and running tap water not being provided with failed economics and no provision of education. When added to numerous environmental issues there is clearly fruitful ground for Jihadist recruitment as people seek alternatives.

Setting the Scene

As a geographic background the writings of Organ et al. (2023) inform that the term Sahel is translated and means shore in Arabic. It is used to describe the transitional region below the Sahara Desert and above the savannas of North-Central Africa. Sahel thus is the shore of the Sahara Desert. It is a vast stretch of Africa where there are few if any defined borders between sovereign states other than lines on maps. This sub-Saharan region stretches across the whole of Africa from Mauritania in the West to Sudan in the East. It comprises parts of northern Senegal, southern Mauritania, central Mali, northern Burkina Faso, the southernmost part of Algeria, Niger, the northernmost region of Nigeria, central Chad, central and southern Sudan, the extreme north of South Sudan, Eritrea, Cameroon, Central African Republic, and the northern reaches of Ethiopia.

Within this region there are two dominant reasons how Jihadist recruitment succeeds, one is natural and one is human. The dominant human reason is lack of stable sustainable governance by secular authorities as identified by Koren and Schon (2023). Lacking such governance scarcities including food are not addressed. That leads to a fertile ground for others than central government to step in to offer solutions. Some are international non-governmental organisations (NGO) or the United Nations, while others are criminal or terrorist. Conflict management both locally and foreign struggles to find solutions as the Sahel has become the operational

space for armed groups including traffickers of drugs, weapons and people, and corruption. That offers an opening for Jihadists to recruit.

Climate change is a dominant natural reason identified by Schmiedl (2023) as it induces scarcities including food. The United Nations Office for the Coordination of Humanitarian Affairs (2024) provides some relevant data and information on the status of the climate change in the Sahel. Information provided is that climate change is symptomatic of the symbiotic relationship of environmental shocks, chronic hunger, and malnutrition. It informs that most of the population have no professions and rely on subsistence farming including semi-nomadic cattle herders. These struggle for a daily existence as the region is struck by global climate change.

Data provided informs that the Sahel as an eco-climatic zone with a population of 180 million is dominated by drought and famine where many are dependent on international food aid. To be sure the agenda on climate change is like that on other reasons on the risk of wars and that includes competition over scarce resources including food. It is like competition over more big-ticket natural resources and that is also a cause of wars. The differences lie in that the latter is more evident in inter-state wars while the former in both inter-state wars and civil wars. Clearly then the combination of natural and human reasons merges environmental security and political ecology into a singular campaign for Jihadist recruitment.

Eco-Jihad and Climate Change

Supporting climate change as a cause for Jihadist recruitment Koren and Schon (2023) provide further details how it acts as a multiplier of menaces. Poverty, high unemployment, and weak educational and social infrastructures are continual. Climate change is an ongoing major upshot for increased sufferings from socioeconomic and political grounds. An example in context is violence that increases proportional to the measure of the local cash crop productivity. It increases by about tenfold in cash crop-producing locations during peak productivity months. The reason offered is that armed groups seek to control local sources of nutrition and revenue. They use this to offer supply-based incentives to further their objectives among the local population.

Cline (2023) adds that this is linked to recruitment by the Jihadists who are one of these armed groups. Progressively over the last decade there has been a Jihadist insurgency. The two main forces in the Sahel are both Sunni led by al-Qaeda's Sahelian branch *Jama'at Nusrat al-Islam wal-Muslimin* (JNIM) and the Islamic State Sahel Province (IS Sahel). They both promote that Jihad is the only path for change for the better. This can solely be enabled by Allah's law supreme on earth. The recruited are offered rewards now and after death.

There are further opinions on why there is a Jihadist presence furthering recruitment in the Sahel. The first is offered by Olsen (2024) who explains this owing to global developments. The 9/11 terror attacks were a major catalyst in changing

the relationship between the Sahel and the European Union and the United States. It came with an American led global war against terrorism. Progressively Middle East extremist Islamic movements sought to spread their influence and gather support globally. That led to increased efforts including the Sahel. Simultaneously there was a focus on migration routes from Africa to Europe. The Sahel has porous borders, where the 2011 Libyan conflict further opened a territorial continuum from Islamic West Africa through Islamic North Africa and to the Mediterranean. Jihadists found this was a potentially good way to infiltrate Europe.

Data appraisal highlights the significance of Jihadist recruitment in the Sahel and their activities and intentions. The Global Terrorism Index (2023) provides data that the deadliest terrorist groups in the world are the Islamic State (IS) and its affiliates, followed by al-Shabaab, and JNIM. The Sahel region in sub-Saharan Africa is defined as the world centre of terrorism. It accounted for more acts of terrorism and fatalities in 2022 than both South Asia and the Middle East and North Africa (MENA) combined. Deaths in the Sahel constituted 43 percent of the global total in 2022, compared to just 1 percent in 2007.

Cline (2023) offers yet another opinion with a longer-term view. He informs that the largest and most active Jihadist groups in the Sahel region are local. They are the extension of pre-existing conflicts between ethnic groups that perpetuate due to these, as well as due to scarcities. For example the local population were willingly recruited by those who could even offer a meal. Notwithstanding this and whereas the global Jihadist groups have an opportunistic hit-and-run attitude, these local groups are existential movements. Examples provided are the Tuareg movements and the Fulani ethnic group. He shows how the Katiba Macina and Ansarul Islam groups have recruited to conduct major attacks not as extensions of global disputes but due to blood feuds and scarcities.

This combination of climate change sufferings, the presence of local and global Jihadist movements and the lack of solutions with ever increasing conflicts and violence highlighted why Laurent (2013) dubbed the region Sahelistan. He did so because the conditions resembled those of pre-2001 Afghanistan. Namely, a region where Jihadist groups could unchallenged open training camps to prepare terrorist attacks locally and internationally. The rural areas were global safe havens for all their activities, both in the Sahel and Afghanistan.

In sum for this section and considering the range of opinions and reasons, Zoubir (2012) found logical explanations for increased successes in Jihadist recruitment due to both human and natural reasons. This was amplified by Dankani et al. (2020, 223) when looking towards the basic common dominators in the recruitment process. They found the dominate reason being climate change where religious leaders played a significant part in the guiding, moulding, and shaping of opinion, thinking and behaviour of those around them. Jihadists influenced how the population perceived climate change and how it could be addressed through belonging to a Jihadist movement. This was used as a means of recruitment. This was substantiated

through quantitative research. Namely primary data via a structured questionnaire to 125 Islamic scholars in the Sahel in 2019. The findings of their study revealed that the majority of the respondents believed that climate change was a reality, could be changed by believing and following Allah, and by a Jihad. This was more than beliefs and words for Farida (2023) informs that the political situation in the Sahel region was indicative of this call for violent change with six coup attempts between 2021 and 2023.

RECRUITMENT IN MALI, NIGERIA, AND SOMALIA: MATERIALIST POLITICAL ECOLOGY APPROACH; PLASTIC BAGS

The applicable understanding from the Quran for this third section on political ecology relates to human responsibility on earth. The quote from the Quran (Holy Quran, 2:30) is “Remember when your Lord said to the angels, ‘I am going to place a successive human authority on earth.’” Zainuddin, and Syafi’I (2023) explain the relevancy for Jihadist recruitment as Allah has chosen and created humans in a stewardship role. They have the title of *khalifabs* (ruler or successor) over earth. That means it is humans’ responsibility to fulfil this role and this can be done through the safeguarding of the environment. That relates to two of the types of a Jihad, namely a believer’s internal struggle to live out the Muslim faith as well as possible; and the struggle to build a good Muslim society.

Hansen (2022) informs how this could smoothly and rapidly include the third type of Jihad, that being the violent one. He shows this in conjunction with the patterns of Jihadism in Mali, Nigeria, and Somalia and in their spread elsewhere in sub-Saharan Africa. That was in context of the dimension of debates over ungoverned space, and a discussion on greed, and religious incentives in political ecology. These provided the factors in understanding how Jihadist networks harnessed local ecological conditions to gain support for militant activities. It is a key to understanding Jihadist recruitment and their strategies. This section provides three examples of this in Mali, Nigeria, and Somalia.

The Example of Mali

Leading from these initial contemplations the question relating to the example is: Why do pastoralists in Mali join Jihadist groups? The answer is a political ecological explanation as given by Ajl (2023). He explains that the discipline of political ecology examines the interpretation of ecology from the perspective of political economy. That is theories and cases that associate production and consumption in human society. Notably since the 1970s it has been a popular alternative to political systems theories. It criticises Marxism’s lack of attention to ecological damage and environmental determinism. Political ecology theories reflect cycles of struggles, ecological crisis, and so too climate change.

How this is applied is delved into detail by Benjaminsen and Ba (2019) in examining the Mopti region of Mali. In doing so it strengthens from another angle the case of Jihadist militant recruitment in the Sahel examined in the previous section. In this region pastoralists suffer from climate change. These pastoralists support Jihadists because the state and its elites are predatory and corrupt resulting in a failure of the sustainable development model and process proposed by international organizations.

Mensah (2019, 3-10) explains that the entire issue of sustainable development centres around inter- and intragenerational equity anchored essentially on three-dimensional distinct but interconnected pillars, namely the environment, economy, and society. Decision-makers need to be constantly mindful of the relationships, complementarities, and trade-offs among these pillars. However, in the Mopti region of Mali they have not addressed or responded to pastoral priorities. Specifically, the rent-seeking by government officials has perpetuated conflicts over pastoral land, environmental management, and the fight against desertification. The pastoralists consequently have been easily recruited by the alternative, the Jihadists.

Further details to this are added by Rupesinghe and Bøås (2019) on how this recruitment is stimulated using local drivers of violent extremism mobilisation and radicalisation in Mopti. For example, the Katiba Macina is one of the dominant Jihadist groups there. Mopti as a region saw a dramatic increase in local support for it and reciprocally it integrated into local communities due to the shift in political ecology. That was because of droughts from 1973 through the 1980s that decimated one third of livestock in the region and so hit the economy. This climatic variability impacted productive yields, and the consequence was disadvantaged groups. Religious leaders with their preachings of radical Jihadism devised counter-narratives to tackle this, and recruitment to them increased.

This was not the whole saga as informed by Cold-Ravnkilde and Ba (2022) who detail the consequential escalation. They inform that the local drivers were exacerbated with the influx of the franchises of global Jihadist groups. There was competition between them, and with local Jihadist movements for recruitment and support. That introduced epistemic world-views into the local political ecology quagmire. For example, the newly arrived al-Qaeda and Islamic State groups' leaders framed the industrialized West as a cause of pollution and so global climate change. In the competition for recruitment of locals they offered models of Jihadist global governance to resolve the woes of the populations, with the target being international NGOs.

The Example of Nigeria

The second example of political ecology and the relevant quote from the Quran of human responsibility on earth is examined by Olumba (2024). He identifies in Nigeria's Middle Belt similar factors to Mali enabling Jihadist recruitment. There the competition for land and other resources intensified while local government

officials failed to respond. There were also nepotistic domestic policies resulting in a devolution of authority and failed security governance. The resources such as cropland and water resources were so scarce that there were daily events of mass violence, for example between nomadic Fulani herders and sedentary farmers.

This is detailed, and anchored in the political ecology perspective, in the agricultural sector of herder group /farmer group conflicts in Nasarawa State, Nigeria by Okoli and Atelhe (2014). They inform of the struggle for competitive survival and subsistence in the Lafia and Obi regions. In general, the environment was characterized by ecological scarcity and livelihood insecurity. Daily when the two groups confronted the battle mantra was “if you kill me, you take the cow.” Some farmers were forced into internal displacement resulting from both violence and in seeking a livelihood. In their new location they suffered victimization. That led Tade and Yikwabs (2019) to define the situation of how Jihadists recruited. The Jihadist groups offered protection both for the farmers and from the destruction of their livelihood, the killing of cows. An example of how this was offered was proactive policing in return for support and recruitment.

Jihadist recruitment accompanying political ecology in Nigeria is not confined to the agricultural sector as Watts (2004) uncovers. He provides the example of increased militancy by ethnic minorities in the oil-producing Nigeria Delta. They occupied some of the oil installations. The argument was over the control of local petro-revenues. The locals were impoverished and claimed compensation for 40 years of ecological destruction. To this Ndimele (2017) adds that the ecological and economic impacts of oil and gas development link the natural and human systems through the valuation of ecosystem services. This dispute has seen global Jihadist groups enter the picture to assist the local ethnic minorities. They recruited on the basis that this was a struggle against the Western led transnational oil companies.

The Example of Somalia

The third and last example of political ecology and the relevant quote from the Quran of human responsibility on earth comes from Somalia. Political ecology in Somalia as explained by Warsame, Sheik-Ali, Mohamed and Sarkodie (2022) is a diverse topic. It includes renewables and environmental degradation. They explain that mitigating environmental degradation is a global target and Jihadist groups have used it in their recruitment and activities. For example, in Somalia there are many causes and factors linked to environmental pollution. There is a nexus of renewables-institutional and quality-environmental degradation. Renewable energy and institutional quality enhancement against pollution and pollutive products is suggested as a means to improve the situation.

An example of how Jihadists apply this in recruitment is examined through Al Shabab, the Al Qaeda-linked Islamist organization, that controls large areas of Somalia. Britschgi (2018) details how it banned single-use plastic bags. News of the

ban was first published on the Al Shabab website Somalimemo.net. It was in the form of an audio recording of an Al Shabab official declaring the bags “a serious threat to the well-being of humans and animals alike.” This was rebroadcast by Radio Andalus. It is a radio station run by Al Shabab that later added to the story that Al Shabab had also banned the logging of native trees.

For observers on Jihadist movements this at first glance appears to be an incongruence with other policies and actions. McKernan, B. (2018) explains that Al Shabab is known for gun and bomb attacks with civilian victims, and illegal ivory trade. The rationale on deeper investigation is that it is a means of attracting attention and so recruitment. Al Shabab’s plastic bag policy was designed to create an impression. That it was the sole moral and just leadership. That led to an opportunistic recruitment appeal to the Somali slums and refugee camps, where there was plastic and other litter. Data shows it succeeded increasing recruitment.

In sum for this section Di Marzo and Espinosa (2023) provide a contextual appreciation that political ecology helps to better understand multi-layered conflicts. That is those types that involve marginalized communities, and conservation actors. This reveals the intricate relationship between conservation and conflict. Their analysis identifies four key themes: commodification of wilderness, the war for biodiversity, community marginalization on the periphery, and conservation biopolitics. These themes offer nuanced understandings of the conservation conflict processes driving recruitment by Jihadists as detailed in these three examples of Mali, Nigeria, and Somalia.

RECRUITMENT IN ALGERIA, LAKE CHAD BASIN, MALI, MOROCCO, AND TUNISIA: CLIMATE CHANGE

The applicable understanding from the Quran for this fourth and last section is that the climate is a blessing from above. The relevant quote from the Quran (Holy Quran, 16:65) is “And Allah has sent down rain from the sky and given life thereby to the earth after its lifelessness. Indeed, in that is a sign for a people who listen.”

Placing this in context for Jihadist recruitment Hayat et al. (2023) discuss that water is a huge life-providing theme in the Quran. Allah talks about how He creates life through water then sustains it by rain, streams, rivers, and oceans. Allah here uses the analogy of life and death for Muslims to recognise the value of water reminding believers to provide clean water for all. It is linked to the environment and climate change as these impact agriculture through water scarcity, temperature variations and desertification and so too the economy and people’s lives.

How this is applied to Jihadist recruitment has been identified by Bourekba (2021) who notes that they exploit natural crises such as water shortages in the analogy of life and death and also in the context of suicide acts for the Jihadist cause. People under stress who have nowhere to turn to are the targets for recruitment.

Life or death is to join the Jihadists for the supply of water or to die. Once recruited they are placed under further stress to fight for the Jihadists or return to a life of water shortages. That makes climate change a multiplier in recruitment efforts. This section provides examples from Lake Chad, Mali, Somalia and the Maghreb countries Algeria, Morocco, and Tunisia

The Example of the Maghreb Countries: Algeria, Morocco, and Tunisia

Three Maghreb countries Algeria, Morocco, and Tunisia have been examined by Wilner and Dubouloz (2010) who confirm the case details showing that these notions apply to them. They showed this applied to Algeria especially in the civil war that raged from 1991 to 2002, and in contemporary Morocco and Tunisia where there are ongoing Jihadist activities. For example, Al Qaeda in the Islamic Maghreb (AQIM), the Islamic State organisation (IS) and their respective affiliated groups in all three states, use climate change focussed on water shortages, to heighten personal fear to recruit individuals.

Water shortages in these three countries was identified by Bourekba (2020, 12) as being linked to other drivers to coerce recruitment. These included socioeconomic conditions highlighted by the complex interplay of poverty, and unemployment levels. This was applied in a push-pull recruitment process. People were pushed due to their living circumstances to find alternatives and pulled to Jihadist movements who offered solutions. Jihadists emphasized that climate change resulting in water shortages and so agricultural failure could not be resolved by humans. Existing political bodies and leaders had failed to provide alternative employment when agriculture failed. Jihadist groups could, where only prayer and observation to Islam would be the solution.

The Example of Lake Chad, Mali, and Somalia

Similar findings are delivered by Nett and Rüttinger (2016) when examining Lake Chad, Mali, and Somalia. To these are added the findings of the Institute for Economics and Peace (2020) that water shortages due to climate change has led to a life-or-death situation. That is evident in food and water insecurity where over one third of the population is affected. The consequences are increased competition for access to natural resources. That in turn led to a struggle for control or access to natural resources.

In all three regions Jihadists exploit this phenomenon according to Nett and Rüttinger (2016). Recruitment processes take the form of a narrative to people explaining how they are being marginalised by the authorities and so not given any resources. Only Islam offers a better deal for them.

In more detail Malley (2020) discusses the Lake Chad Basin case. There climate change, combined with food insecurity, rapid population growth and poor governance were a factor in the rise of Boko Haram. Marquette (2020) explains

the case of Mali where Jihadists posed as agents of justice and promised to address grievances of pastoral communities, especially access to food and water.

Using these means Jihadists have succeeded in recruiting more followers and will continue to do so. The cycle is detailed by the United Nations Development Programme (2020, 5). Water shortages cannot be resolved easily or quickly. This is because climate change issues are beyond human control. In these countries this will accelerate the trend of rural to urban migration. That normally leads an expansion of urban slums or squatter camps. These are characterised by appalling living conditions, crime, and unrest. That is where violent extremist narratives flourish and so provides the Jihadists with the potential to recruit further.

In sum Patterson (2023, 121-143) provides the relevancy of climate change and water shortages discussed in this section. He shows how metaphors are employed by Jihadists in their narratives to promote a world-view of us versus them, good versus bad, right versus wrong, and Islam and the rest. Once recruited the Jihadists continue to apply this analogy of life and death to their own goals in violent and extremist activities.

To this Segell (2005) adds that such narratives, recruitment means and Jihadist activities are an applicable framing of historical events and processes different from political science framework and perspective. They are a socio-religious framing where for example of 9/11 was individual heroism for the sake of the community vented in desperation and violently. It was more than a non-state terror group's asymmetrical attack against a nuclear power hegemon. It was the Islamic belief that life is a seed from nature. Jihadists see its development encompassing all definitions of Jihad where existence is a conflictual relationship between predator and prey. Absolute faith is light whilst a lack of faith is darkness. There is no grey areas between the two. A Jihad is seen as a better human environment for all, where only Allah can improve the natural environment. This is the motto of Jihadist recruitment efforts.

CONCLUSIONS

This article has examined and provided evidence that the environment plays a role in Islam through quotes from the Quran. For the most part this is benign. However, cases were given showing that Jihadist groups in Africa use various aspects of the human and natural environment for militant recruitment, an Eco-Jihad.

Moreover, a direct link between the environment and Jihadist recruitment was substantiated with specific evidence provided by examples across 200 years historically in Sokoto and contemporarily in Nigeria, Algeria, Lake Chad Basin, Mali, Morocco, across the Sahel, Somalia, and Tunisia. In each of these details were cited of how local Jihadist groups endured, proliferated, and competed in recruitment efforts. Details were also cited on an emerging religious-ideological global franchise emanating from the Middle East that recruited in these countries.

The four sections of the article drew a thematic line where the common denominators were how aspects of the environment were utilized in Jihadist recruitment. These in sum demonstrated the wide appeal of the religious rationale for the environment in Islam as a cause and means for such recruitment. In the four sections the environment as linked to Islam and Jihadist recruitment was respectively sounded as: Islam prescribes the entire universe is a gift from Allah; the glorification of animals including horses and camels are authentic Islamic warfare in the style of the Prophet Muhammad; climate change applied from theology to a praxis of Eco-Jihad; humans responsibility to fulfil the stewardship role that Allah chose for them; and that this could be achieved through the safeguarding of the environment including by means of a militant Jihad.

How the Jihadist groups used ecological threats to the environment to recruit new members was spelled out in this article as opportunistically capitalizing on failed governance by others. This had not addressed scarce resources such as water shortages and grazing land. People lived in poverty, famine and starvation and feared for their lives. Islam was the alternative preached to resolve this with the various elements from the environment exemplified as including civilization / wilderness, the glorification of animals, environmental shocks, insecurity, chronic hunger, malnutrition, materialist political ecology, pastoral logics, the devolution of natural resources and security governance, the ban on single-use plastic bags, and water shortages and climate change.

This article having cited over 60 peer-reviewed academic sources leaves no doubt that the links between Jihadist recruitment and the environmental crisis across many parts of Africa are undeniable. Evidence was cited that such crises has intensified the drivers and conditions that encourage despair and a turn to extreme measures for survival. Jihadist groups have exploited this to propagandise, and to recruit. In many of the cases Jihadist recruitment was a short step away for the next meal for most, offering solutions to existential problems arising from environmental challenges. Using propaganda political elites were depicted as the ones who had brought socioeconomic and political woes and hunger. Turning to Islam and Allah was narrated to recertify this.

That is not to say that there was any evidence that the Jihadist groups were more successful than others in government or governance in resolving environmental crises. To be sure, any amelioration of these might well have been contrary to their goals and motives as they thrived in situations of anarchy and chaos. One issue is certain as the bottom line in this article is that in militant recruitment the Jihadists applied environmental crises as being existentially life or death and wished to perpetuate this for their own goals beyond recruitment but also in violent and extremist activities.

It is fair to state then in conclusion that this recruitment due to environmental issues is an Eco-Jihad. All three types of Jihads as defined at the start of this article have been shown to be applicable, namely: a believer's internal struggle to live out

the Muslim faith as well as possible; the struggle to build a good Muslim society; and a Holy war (Jihad) or the struggle to defend Islam, with force if necessary

Future research that can build upon this article or critic it can include to focus on human actions to address both the deteriorating state of the environment and conflict management of violent and extremist organizations including Jihadists. Novel approaches at improving individuals' lives needs to examine relationships between religion, the environment and conflict management in Africa in a comparative evaluation of many regions and religions. That is beyond Islam and the specific countries addressed in this article. That will further the understanding of the foundational principles (whys) and the application principles (hows) of Eco-Jihad.

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