

## The Aesthetics of Conserving environment on the Pearl of Africa:

*Uganda's right to sustainable development.*  
**“Welcome to Uganda the Pearl of Africa, the Land of Joy”**



**Babirye Annet Jasmine  
2024**

The United Nations goal 13 in the 2030 Agenda is to develop and enhance integrated approaches to sustainable development approaches that will demonstrate how improving the health of the environment will bring social and economic benefits. Aiming at reducing environmental risks and increasing the resilience of societies and the environment as a whole, United Nations Environment action fosters the environmental dimension of sustainable development and leads to socio-economic development.

Uganda is truly the pearl of Africa due to the abundant biodiversity, color, profusion, brilliant life and its serene beauty. The term pearl of Africa was

popularized by Winston Churchill in 1908, who visited the country in 1907 and was captivated by its scenic splendor. The country is gifted with lakes, rivers, equator, mountains, the rift valley, hills, hot springs among others. Victoria which Africa's biggest lake sits right in Uganda, and the source of River Nile hence this has made the country to grow into Africa's most coveted travel sojourns.

The pearl of Africa is famously well known as the best hospitable country with friendliest people on the continent. Meaning in every part of the country you visit, worthily you are welcomed. The people of Uganda have embraced tourism and love to show visitors their beautiful country and share their culture. The fact remains that Uganda's environment is incredibly favorable and each of part of country, God has gifted it with different tourism and cultural heritages. Uganda has embraced the call of the United nations in giving priority to environmental conservation, through supporting the efforts to recover the tourism sector through greener development pathways to create jobs for the youth, women, and men and to rebuild resilient livelihoods. It has also promoted recovery of micro, small and medium enterprise, supporting strategic

reorientation of tourism policy towards inclusive green recovery, enhancing capacities of national systems to boost the tourism industry, and building an active innovation ecosystem with accelerated digital transformation.



Mining and nature conservation are very important to the people of Uganda. Recognizing that all activities resulting from the above aspects are essential to the tourist infrastructure of the country, many steps have been taken to protect natural resources as well as the many other diverse plant and animal species found in the country.

**Cnt Page 4**

### The Message from Bonn



How long however can the blessings of nature still be enjoyed by us humans and by the whole of God's creation?

**Pg.2**

### A 2023 recap from the secretary general desk KASEA Kenya



A snapshot of the year 2023 KASEA activities shows a progressive open-minded group of scholars.

**Pg.3**

### Kiswahili Corner



Nguzo ya afya ya binadamu ulimwenguni ni uhifadhi wa mazingira yao

**Pg.8**

### The role of spatial technology in resource harmonization



The role of spatial technology in resource harmonization

**Pg.9**

### A publication of the SOK office



The making of a Society: Sok's expedition from initiation to maturation

**Pg.10**

# EDITORS NOTE.



Diana Kabaka  
Editor -in-Chief

Dear esteemed KASEA newsletter readers,

Shalom and happy new year 2024. It is my pleasure to welcome you to this year's

edition of our magazine. In this edition, we delve into the intricate interplay at the nexus of mining, environment, health and conservation. In their usual blended diversity, our articles explore the complex relationships, challenges and innovations that arise when these realms

intersect.

The host chapter this year welcomes us to the beautiful pearl of Africa with Miss Jasmine Babirye's piece on the Aesthetics of Conserving Environment on the Pearl of Africa. Dr. Wangai delves into the intricacies of Natural resource endowment and conflict resolution in East Africa. Miss Mumo Eda gives a geospatial perspective on resource harmonization. David Mbuvi passionately reminds us We Matter and should therefore make others matter.

Join us in unraveling the dynamic tapestry of issues and solutions shaping the delicate balance between resource

extraction, environmental sustainability and the imperative to conserve our planet's precious ecosystems in this year's edition. As always, I hope this year's edition serves as a catalyst for meaningful conversations, inspiring initiatives and positive change in our KASEA family. May this year's seminar rekindle the spirit and the joys of KASEA physical interactive sessions. Happy reading!

With utmost gratitude

Diana Kabaka  
Editor -in-Chief

## MESSAGE FROM BONN



Dr. Marko Kuhn  
KAAD head of African department

Dear KASEA members,  
When we were holding our KASEA seminar in Uganda last time – it was in Entebbe in 2021 –

someone asked: “Can we do it

in Uganda every year?”. This showed how much the Ugandan hospitality was appreciated by the participants and how much they liked the vibes in the air. Maybe some excitement was also mixed in this statement coming from the joy of being able to hold our annual seminar again face-to-face. It was like a giant relief to many of us by that time after a long taxing time of lockdowns, school closures, distancing and fear of contagion.

The defence against the Corona-Virus is largely over today and yet there is little time for feeling relieved since other problems have taken over big time.

One of them is the many conflicts and the violence inflicted on people and as true humans we are in solidarity with those who suffer. On the global scale we mostly look to the Ukraine and to Gaza and all the worrisome repercussions those conflicts have. In Uganda we currently look to the West of the country, where Militants from an Islamic State-

allied rebel group ('Allied Democratic Forces' – ADF) killed numerous people in recent attacks and that reminds me of the presentation Fr. Dr. Patrick Sunday Baluku gave during our last KASEA seminar in Uganda. He spoke of the historic background of the Bakonzo people's disenfranchisement in the kingdom of Toro and how this resulted in the Rwenzururu Uprising. Today many twists and turns have connected this to a rebel group that operates not only from the Rwenzori Mountains but also across the border areas of Congo-Uganda-Rwanda.

With our KASEA annual seminar 2024 we wanted to savour the scenic landscape in the Western Part of Uganda around Kasese. Many of us, including me, were looking forward to exploring this beauty and connecting this with the many networks of the chairlady of KASEA Uganda, Dr. Catherine Biira, who hails from this region.

After the situation of insecurity due to the attacks got more serious however, our Ugandan hosts and organizers decided to shift the seminar to the East of the Pearl of Africa. We shall now meet at Mbale – in few of the majestic Mt. Elgon and in the wake of its natural blessings.

How long however can the blessings of nature still be enjoyed by us humans and by the whole of God's creation? The threats posed by pollution, accelerated climate change and of the loss of biodiversity pose a serious challenge to life on this planet and many of the adverse effects can be felt on the African

continent in a more severe manner than elsewhere. What we are faced with is the tension between economy and ecology – or rather the question how economic prosperity and continuation of livelihoods can be organised in such a way that nature and life is not destroyed. The mining sector and how the minerals are extracted from the soil play a very big role in this field. Greed and carelessness are the order of the day in this sector and citizens need to stand up in order to protect the very basis of their survival.

As Christians and as Catholics, we can point to the strong words that Pope Francis has used against such exploitation and ruthless capitalist destruction, particularly when he wrote the encyclical “Laudato Si”.

During our seminar this year we shall hear more about this very pertinent topic and have this grounded in local experience and real-life examples. Of course we shall also sample the beautiful nature of Eastern Uganda ourselves and enjoy the greatness of God's creation.

When we do that we shall even more be aware of our task to help in protecting it.

I wish all of the participants a fruitful and enjoyable KASEA Seminar 2024 in Uganda!

Marko Kuhn

Truly yours,  
Marko Kuhn

# A 2023 RECAP FROM THE SECRETARY GENERAL DESK KASEA KENYA



Dr. James Mwangi  
KASEA KENYA Secretary General

A snapshot of the year 2023 KASEA activities shows a progressive open-minded group of scholars. Indeed, scholars ought to be critical thinkers able to analyse issues objectively, identify gaps and propose solutions to complex challenges in the society. KAAD scholars have

never shied away from discussing complex issues and seeking answers to hard questions. This is reflected in the topics lined up for discussion during 2023 thematic meetings. Topics such as: The Church and the LGBTQ Community; Genetically Modified Organisms (GMO); The science of tithing; The Church and State Politics: Climate change represent just but a few of the issues the society is contending with.

In July 2023, KASEA members from the three sister countries converged in Nakuru for the Annual Seminar. The theme of the seminar dubbed “Integrating the Minorities – Theological, Pastoral and Social Considerations” elicited heated debate among the scholars. At some point, the much-anticipated seminar left the organizers rethinking about the choice of the theme amid mixed reaction by the participants.

The seminar kicked off with a presentation by Dr. Carol Nyathama on inclusion of persons with disability. She highlighted the challenges faced by PLWD in their quest for equity, inclusion and justice. She discussed the barriers that hinder full inclusion of PLWD in the society. Listening to Mr. Dancan Otieno - a SOK scholar, sharing his personal experiences as a PLWD in Kenya evoked emotions. It is a concern that PLWD are still striving to achieve equal opportunity in education, physical and social inclusion. There is an urgent need to address the deep-rooted systemic inequalities and create an accessible and more accommodative communities for all.

On his part, Mr. Elema talked about the plight of marginalized communities in Kenya. Their struggle to access education, healthcare, transport, security and communication infrastructures more than six decades after independence. He demonstrated how marginalization of the minority members of the society has been perpetuated

by the previous government regimes. Such communities have had marginal participation in the integrated social and economic life of Kenya-they feel neglected entirely. The climax of the seminar was a presentation by Fr. Odomaro. He raised pertinent questions on the Theological and Social perspectives on LGBTQ. This topic has continued to divide the society and the universal church. Recently, Pope Francis released a pastoral letter entitled 'Fiducia Supplicans; On the Pastoral Meaning of Blessings' that has elicited mixed reactions among the faithful. The LGBTQ topic split the house long in the middle, a section of scholars was strongly opposed to the discussion. Reflecting on the topic and guided by the scripture, the speaker reminded us that Jesus came to redeem sinners but not for the righteous (Luke 5:32). He added that we should not judge others (Luke 6: 37) rather we should show love as commanded by Jesus (John 15:12). The speaker invited us to learn from Jesus who welcomed and associated with the condemned and excluded people such as the lepers (Luke 5: 12-14) and the tax collectors (Luke 5: 27-32).

The seminar ended with a visit to the Nakuru national park and later a visit to the Marian Shrine-Subukia for personal reflection and prayer.

As we gather together again in Uganda for the 2024 Annual Seminar, lets continue the discourse on matters of national interest, lets enlighten ourselves on various issues facing our society. And above all let's think on how these discourses can go beyond the boardroom to educate the public and influence policies in our countries.

May you have a productive annual seminar 2024



KASEA group at Marian Shrine Subukia

By Dr. James Mwangi  
KASEA KENYA Secretary General

# KASEA KENYA CHAIRPERSON NOTE



**Dr. Veronica Mwangi.**

It is that time of the year that yet again we look forward to our annual major gathering, the KASEA seminar. Our annual magazine has become one of our flagship items during the seminar and it is always exciting to learn of the many things that have taken place within and outside the association. Last year was a good year for KASEA Kenya as we continued to meet in person and virtually during our thematic meetings. We are steadily

resuming in-person gathering. We are grateful to our patron, Fr. Kaigua for the support he continues to accord us. Through him, we were able to hold our quarterly meeting at the St. Paul's University Chapel. I continue to urge members to make effort to attend the meetings at St. Paul's. Whereas, digitalization has offered us the option to connect while in faraway places, benefits of meeting in-person abound. The bonds created by meeting physically are not possible virtually. As Paul Axtell puts it, "In-person meetings provide a sense of intimacy, connection and empathy that is difficult to replicate via video." Still, I wish to take this opportunity to thank members for their active participation in our meetings. We in particular had a wonderful gathering at St. Mary's Pastoral Centre, Nakuru. Special thanks to all those who attended the annual seminar and made the discussions lively. We had a great excursion to the Lake Nakuru

National Park, one of the premium parks in Kenya. But perhaps, and somehow unexpected was the appreciation that came with the visit to the Subukia Shrine where we had a time of reflection. The after seminar survey indicated that majority of the seminar participants found the trip to the shrine refreshing and fulfilling. This perhaps underlines one of the common factors in the group; the catholic faith. We look forward to many more exciting seminars. We are two weeks away to our annual seminar in Mbale, Uganda. I am sure it will be fun-filled as has been the case before. Uganda is rich in scenic beauty and I always look forward to enjoying the Ugandan cuisine. See you in the land of Matoke or is it the land of beauty!

**Chairperson KASEA Kenya Note.**  
**Dr . Veronica Mwangi**

## Cnt from page 1

Uganda vision 2040, Natural development plan and related sectoral properties give a frame which will improve future tourism development with quality,



diversification and sustainability. The 2040 vision aims at transforming the country from a predominantly peasant and low income economy to a competitive upper middle income economy through promotion of sustainable development and employment

opportunities leading to socio-economic transformation.

Focusing on implementation of the right to development in promoting the sustainable development goals in Agenda 2030: Being mindful of dependency on nature amidst development projects promotes health environment, addresses



poverty issues, population growth, economic growth, Urbanization and resource use. As change

makers, in promotion of environmental justice, we look for ways to maintain the green economy, raise tourism, mining and conservation of resources through a sustainable development agenda, which provides an opportunity for social, health and economic development.

In a wrap text, Uganda remains the richest land of joy in Africa, with outstanding largest features of freshwater lakes on the continent, the source of the longest river, strongest water fall, the largest number of primates, and the highest number of mountain gorillas worldwide.

*"Enjoy Uganda the Pearl of Africa, enjoy the Land of Joy"*  
Annet Jasmine Babirye

# Natural resource endowment and conflict resolution in East Africa



Dr. Peter Wangai  
Secretary General  
On behalf of the SOK Governing Council

## Introduction

The relationship between humankind and the natural world could be traced back in the Antiquity. The Antiquity was followed by a period of curious and critical Philosophers of the pre-Socratic era of the 5th century BC, and the Plato and Aristotle time in the 4th -3rd century BC, who articulated their thoughts about humans and non-humans. After critical inquisition for several centuries, Rene Descarte, a philosopher of the 17th C, coined nature as a resource. This acted as a catalyst for resource overexploitation under the capitalistic system of economy in the 18th C. In 19th C, mining, transportation, agriculture, manufacturing, and technology intensified in the Great Britain. The activities spread in Europe, North America and to the whole world, hence marking the historic massive extraction of natural resources from nature. In the early 20th C, scientists recognized the deterioration of environment in terms of soil erosion, deforestation, loss of biodiversity, pollution and declined land productivity. In 1935, Arthur Tansley coined the concept of ecosystem (“...a dynamic complex of plant, animal, and microorganism communities and the nonliving environment interacting as a functional unit”) for the first time in the scientific field. In 1960s, Lovelock had popularized the Gaia Theory-a view of Earth and Life as inseparable entities that are tightly intertwined. In 1970s, there was a demonstrated consciousness of the finite nature of natural resources. By 1970s, most African countries had gained independence from colonial administration, and started mapping resources and establishing tenure systems

related to land and other natural resources. Although there are historical and contemporary arguments supporting either the 'resource curse' or 'resource blessing' theory in Africa, the article does not attempt to delve into the bifurcation of the two, rather focuses on resource endowment, conflicts and possible solutions to ensure socioeconomic and ecological transformation in Kenya, Uganda and Tanzania.

## Natural resource endowment

“A natural resource is anything [or material] that occurs naturally on the earth or universe whose worth has been appraised by humans and has potential to address human needs under technological, economic and social circumstances”(Schrijver, 2008, P. 12). Natural resources in East Africa, that is, Kenya, Uganda and Tanzania, have commonalities and some are shared along the national administrative boundaries. In this article, reference is given to Lake Victoria waters, wildlife, forests, and minerals. Lake Victoria is the second largest freshwater lake in the world occupying a surface area of about 68,800 km<sup>2</sup>. The lake is shared among the three countries where (together with its extended basin in Burundi and Rwanda) it supports livelihoods for over 40 million people. The livelihoods are connected to fishing, tourism, transportation, mining, farming, textile, hydro-electric power, conservation and research. In a nutshell, the lake has been a strong pillar for realizing Sustainable Development Goals by mainly alleviating poverty (SDG1), addressing food insecurity and good health (SDG2 & 3), accessing clean drinking water (SDG6), and tackling unemployment (SDG 8). The socioeconomic contribution of the lake is estimated at about USD 1.14 million. According to the World Bank report 2021, the estimated forest cover of the total land area in Uganda, Kenya, and Tanzania is 11.5%, 6.3%, and 51.1% respectively. Forests provide food, fibre and energy materials to communities, especially those living in the rural areas. In Kilwa region of Tanzania, for example, community-based forest management strategy has improved livelihoods by embedding access, use and ownership rights on local communities, where family income from forest products, including ropes, grass, honey, wildmeat, logs and charcoal increased between 2011-2014

(Corbera et al. 2020). In Kenya, the co-management of public forest was introduced through the 2005 Act of Parliament. Communities' active role in decision-making and management of forests is further captured in the Participatory Forest Management Act 2016, that prescribes benefit sharing between government and community forest associations (CFAs). It is estimated that 3 million people live adjacent to forests and that their livelihoods rely fully either directly or indirectly on timber and non-timber products. In Uganda, over 40% of rural population benefit from forest-based income and materials. Material benefits include wildmeat, wild fruits and berries, proteins from white ants, honey, mushrooms, fibre, and herbal medicine. Indeed, forests in the three countries have also supported cultural and religious roles of the rural communities, for example, the sacred Kaya Forest and the Mijikenda community in coastal Kenya, the Bakonzo community of the sacred Rwenzori Mountains, and the sacred forests among the Bena of Njombe, Tanzania. Moreover, participation of Kenya, Uganda and Tanzania in the UNFCCC's REDD+ programme has supported national and local economies, while at the same time reducing global carbon emissions. Biodiversity is a crucial resource supporting livelihoods through the tourism industry. In Kenya, tourism and hospitality is the second largest foreign currency earner after agriculture. National parks, national reserves, community-based conservancies, zoos, wildlife sanctuaries and lodges contribute to about 12% of employment and cater for 11% of the Kenya's GDP. Similarly, tourism in Tanzania is the second largest contributor to the economy amounting to an estimated 4.7% of the total GDP and employing more than 4% of the total national labour force. Wildlife is one of the transboundary natural resources in Kenya, Tanzania and Uganda. The Maasai Mara National Reserve and the Serengeti National Park in Kenya and Tanzania respectively are example of transboundary natural resources that require joint management strategies to protect wildlife from illegal poaching, degradation and mismanagement. Uganda is equally endowed with wildlife resources, and it is the only country of the former British East Africa Protectorate that enjoys the presence of gorillas. The unique forest ecosystems suitable for gorilla habitats make Uganda a unique tourist destination.

By 2016, the tourism sector contributed about 3.7% of the total GDP and employing approximately 178,000 personnel in wildlife-based enterprises. The three countries are endowed with mineral resources. Although none of the countries has commercialized petroleum extraction, reports indicate unexploited crude oil. In Kenya, oil was discovered by the Tullow Oil company in 2012 in Turkana County. The discovered oil wells were estimated to hold 250 million barrels, hence creating optimism to turn Kenya into an oil producing country. Although the Kenya geological survey of 1969 presented over 50 types of minerals and rare elements, it is not an important global player in minerals trade because mineral exports account for less than 3% of the country's total exports and that exploiting most minerals is not economically viable. However, mining of fluor spar, diatomite, limestone, alluvial gold, titanium and soda ash has significantly contributed to the national and local economy. In Uganda, oil exploration is reported in Kampala, Hoima, Masindi, Pakwach, Acholi and Arua. The country is also endowed with minerals such as Beryl in Mbarara, Bismuth in Kisoro and Kabale, Pyrochlore in Tororo and Manafwa, limestone for the construction industry, Copper-cobalt in Kasese, gold in Buhweju and Bushenyi districts, et cetera. Similarly, minerals in Uganda contribute to about 1% of the country's total GDP, whereas most minerals are in small quantities and under exploration. Natural resource conflicts and potential resolutions.

Transboundary resource conflicts have been reported in East Africa. Disputed sharing of Lake Victoria-based resources between Kenya, Uganda and Tanzania has in the past interfered with fishing, water extraction and navigation activities. The borderline resource disputes escalated to almost full-blown conflict and diplomatic tension between Kenya and Uganda over the Migingo Island in 2009. To date, the three countries remain on the 'water wars' radar due to the potential conflict between Egypt and the riparian countries of river Nile on the utilization of Lake Victoria waters. On the other hand, Kenya and Tanzania have

had transboundary conflicts over pastureland, where livestock and pastoralists face restricted movement and arrested by security forces, while at the same time interfering with the north-south wildlife migration between the two countries. Apart from the interstate conflicts, intrastate friction between actors over oil resource control and management emerges. For example, the state control on oil extraction via a contractual deal with the international Tullow Oil company, indicates how communities such as Turkana could be disenfranchised and marginalized in major decision-making and benefit sharing. Consequently, the scenario in Turkana precipitated a conflict between the devolved county government and the national government. In Tanzania, conflicts between farmers and herders over land resources have been reported in Mwamalole and Kilosa regions. In Uganda, intrastate conflicts are manifested in the form of state-community, community-community, private-community, private-state and private-private.

Notably, the fundamental drivers of resource conflicts in the three countries are population growth, vague transboundary resource policy, conflicting mandates of state organs, different national policies, poorly coordination institutions, poor resource management strategies, land use change, and climate change. This recognizes the need for institutional and legal frameworks that clearly define various right bundles and obligations relating to resource access, withdrawal, exclusion, management and alienation. For example, there has been efforts to promote water diplomacy to address the perceived exclusive right of utilizing the Nile water resource by Egypt, which is traced back to the Barcelona Treaty and Geneva Convention of 1921 and 1923 respectively.

For both the interstate and intrastate conflicts in Kenya, Uganda and Tanzania, avoidance, negotiation, mediation, arbitration, and adjudication are some of the approaches used to resolve resource conflicts. For intrastate conflicts, community-based institutions have been used to resolve common pool resource conflicts. That is, contestations owing to benefit sharing, entitlements and jurisdictions have been amicably addressed by community leaders for continued

societal harmony. Interstate resource conflicts have been resolved via bilateral and multilateral political agreements. Further, attempts are made to develop transboundary resource management policies, and promoting co-learning, co-creativity and joint action against national and global challenges such as climate change that pose threats to natural resources.

### **Constitutional Bulwarks Against Ethnic Marginalisation**

In its Preamble, the Constitution declares: "We, the people of Kenya –

*PROUD of our ethnic, cultural and religious diversity, and determined to live in peace and unity as one indivisible sovereign nation".*

Such recognition is an important step towards mandating "the State to acknowledge the ethnic plurality that characterises the society it seeks to govern" (Fressha, 2010).

By dint of Article 2 (5) and (6) of the Constitution, general principles of international law and conventions on ethnic marginalisation ratified by Kenya form part of Kenyan law. Substantively, Article 56 of the Constitution mandates the State to put in place affirmative action programs designed to ensure that minorities and marginalised groups: -

- a) Participate and are represented in governance and other spheres of life;
- b) Are provided special opportunities in education and economic fields;
- c) Are provided special opportunities for access to employment; and
- d) Have reasonable access to water, health services and infrastructure.

One way of realising the above objectives is through devolution whose aim is to 'protect and promote the interests and rights of minorities and marginalised communities.' (Article 174, CoK 2010). To this is added the Equalisation Fund established under Article 204 of the Constitution and aimed at providing basic services to enable marginalised areas to 'catch up' with the rest of the country.

# YOU MATTER, MAKE OTHERS MATTER.

The Earth holds valuable resources created by God. This suggests that the act of extracting these resources for human use is part of the divine plan. The act of creation involved more than just the formation of the physical world. It involved the



**David Mbuvi**  
PhD Student

the establishment of order, purpose, and the inherent value of the elements within it. Two keywords stand out in mining: 'Extraction from' and 'useful material.'

The third thing is value that you hold in high regard. In the beginning, when nothing existed, John writes there was the Word, and the Word was with God and that Word was God. Nothing existed without the Word. As God created the world, in the earth were minerals, and precious metals. His comment everyday of creation was, it was good.' Way later, Moses speaking about Canaan, writes in Deuteronomy 8:9-10, "There you will never go hungry or ever be in need. Its rocks have iron in them, and from its hills you can mine copper. You will have all you want to eat, and you will give thanks to the LORD your God for the fertile land that he has given you." The description of Canaan's abundance, including its rocks with iron and hills with copper, to the goodness of God's creation suggests that mining and the extraction of resources are part of the blessings promised to the people. Mining is intricately connected or at the heart of God. It is part of God's instructions to Adam, to produce, multiply and have dominion over everything in earth. The Earth holds valuable resources created by God. This suggests that the act of extracting these resources for human use is part of the divine plan.

Mining is about exploring, being set apart, and getting deep into the core of life, the earth. It is not only a practical and necessary human activity but also a part of God's design and plan for the Earth. It emphasizes the responsibility of humans to steward resources wisely and acknowledges the inherent value in the materials extracted from the Earth. God's instructions to Adam to "produce, multiply and have dominion over everything in the earth" reinforces the idea that mining, as a means of extracting resources from the Earth, is part of humanity's responsibility and authority over the created world. The Book of Job further underscores the connection between mining and human experience and its place in the divine plan. Job writes, "There are mines where silver is dug; There are places where gold is refined. We dig iron out of the ground and melt copper out of the stones. Miners explore the deepest darkness. They search the depths of the earth and dig for rocks in the darkness. Far from where anyone lives or human feet ever travel, they dig the shafts of mines. There they work in loneliness, clinging to ropes in the pits. (Job

28:1-4).

The description of miners exploring the deepest darkness, searching the depths of the earth, and working in loneliness while clinging to ropes in the pits paints a vivid picture of the challenges and dedication involved in extracting valuable resources from the Earth. This imagery aligns with the notion that mining requires a deep and intimate engagement with the Earth's core, echoing the idea that humans, as stewards, are called to delve into the depths of creation to uncover its hidden treasures responsibly. Furthermore, Job's verses emphasize the remoteness of mining locations, highlighting the isolation and dedication of those who undertake this labor. This isolation could also be seen as a metaphor for the separation and consecration associated with mining—an activity set apart for a specific purpose. Incorporating Job's perspective into the broader discussion strengthens the theme that mining is intricately woven into the fabric of creation, reinforcing the responsibilities and authority given to humans in managing and utilizing the Earth's resources in accordance with divine principles.

Mining is a vital economic development pillar for most countries in the world today. It is the start of many countries supply chain according to the International Council of mining and metals. The main question is do we realize we as individuals, who benefit from the economic growth, and prosperous Canaan, have a duty to take distinct positions in the 'Canaan.' Therefore, as we reflect on nexus towards mining, the question is how best is 'Canaan'?

KAAD scholars, we became the mines. We were extracted, the usefulness in us restored in society. We have equally become miners too. We have the mandate to identify, and refine others, influence policies and legal frameworks, nurture other spiritually, to be able to good and useful in God's vineyard. To others, we have become the agents of protection. We undertake life transforming research that digs deeper into our human nature and provides solutions to 'Canaan' life threats and risks such as ignorance, disease, poverty, climate change, inequality, and injustice. The truth, like any unmined resource, we once did not deserve who we have become. Like gold, diamond in the ground untapped and unmined, we had no value, but someone saw the treasure and invested to produce something useful. We are highly privileged; we know the Lord. "To be wise, you must have reverence for the Lord. To understand, you must turn from evil." (Job 28:28)

A story is given of a young man who collected something on his livestock rearing expeditions. He could sense this is unique but how, he could not tell. That evening, he showed his newfound treasure to his father. His father was astonished but hardly showed it on his face. He told his son, tomorrow morning I will help you understand what you have. Early morning, he sent the boy to a neighbor. The instructions were, ask for its value and return. The neighbor said, "Well, I can give you twenty dollars for this, I do not

fully understand what's it is, but your father is my friend." The boy came back and reported. On the second day, he was sent to a shopkeeper. The shopkeeper was amazed. Young man, where did you get this? He said, "I can get you two hundred dollars." The boy reported back. The third person was a renowned goldsmith who resided in their community. On seeing what the boy had, he shouted, young man you are so lucky. Kindly give me this for two thousand dollars, I can make the deal better if you do not mind. Can I come with you to your father?

The third day, the boy was surprised as he asked his dad, why did the three different people give me three different offers? Well son, not all people around you understand the value in you, just like what you have in your hands. The better they do, the more willing they will pay for the same. Many like the shopkeeper are out to exploit others, you must be careful with them.

Dear KASEANs, the mining concept has an intertwine spiritual guidance, personal development, and community service, emphasizing the importance of understanding one's value, refining oneself, and contributing positively to the world. This encourages a sense of purpose and responsibility in living up to one's potential while fostering a supportive and appreciative community. Let us move out and mine more copper in our areas of influence. Let us be more refined to be pure gold, for God said, when you were conceived as he told Jeremiah, this is good. He is proud of our value, "May those who want to see me acquitted shout for joy and say again and again, how great is the LORD! He is pleased with the success of his servant." (Ps 35:27). The pursuit of excellence aligns with divine approval. God values and desires purity in His creation. Mining more copper suggests a call to explore and extract the valuable qualities within ourselves and your communities. This aligns with the idea of refinement, striving for personal and collective improvement. We have a duty to make 'Canaan' a better place to live. We have a responsibility to contribute positively to the environment and society. We must serve with our hidden treasures as everyone has unique talents and qualities that can contribute to the betterment of society. Let us recognize and utilize these hidden treasures for the greater good. Let us make 'Canaan' a better place to live as we make God prouder of our hidden treasure as we serve.

@david#itswell

## UHIFADHI WA MAZINGIRA KWA MUSTAKABALI WA AFYA YA BINADAMU.

**N**guzo ya afya ya binadamu ulimwenguni ni uhifadhi wa mazingira yao. Kikawaida, mazingira huwa tulivu kila mara ila binadamu katika shughuli zake za kujiendeleza wao huyachokoza mazingira. Mazingira yalipizapo kisasi umati wa watu hubaki kwa majuto kwani mali nyingi huharibika, uhai wa watu hupokwa na makao yao kuharibiwa. Insi hao husalia maskini wa hali na mali. Waama, suala la ubwana baina ya mazingira na binadamu ni kitendawili ambacho kama kile cha ni nini kilichotangulia kati ya kuku na yai bado hakijawahi kutatuliwa.

Bila shaka uhifadhi wa mazingira huandamana uimarishaji wa afya ya binadamu. Kwa hivyo ni suala muhimu linalohusisha kujenga usawa kati ya maendeleo ya kiuchumi ya binadamu na ulinzi wa mazingira ya binadamu hao wenyewe. Mazoea mapya na endelevu katika sekta mbalimbali kama vile kilimo, viwanda na nishati ni muhimu katika kuzuia uharibifu wa mazingira unaoweza kusababisha madhara kwa afya ya binadamu. Wanazaraa wazidi kutumia teknolojia ya kisasa kuhakikisha kuwa shughuli zote za

kilimo hazina madhara kwa mazingira. Kwa kweli, iwapo mazingira yatakuwa shwari basi rutuba haitapungua katika shamba nao wakulima watafurahia mazao chungu furika kila baada ya msimu wa upanzi. Aidha utandawazi umesaidia pakubwa kueneza mbinu faafu za ukulima wa kisasa. Duniani kupitia teknohama.

Hata hivyo, inasikitisha kuwa mataifa yanayoongoza katika ujuzi wa teknolojia kama vile Marekani na Uchina ndiyo yanayochangia uharibifu wa mazingira kwa asilimia kubwa sana ulimwenguni. Kwa mujibu wa Lisa Friedman katika New York Times Julai 20, 2023, mataifa ya Marekani na Uchina yanaharibu mazingira kwa asilimia kubwa kupitia viwanda vyao ambavyo ndivyo utajiri wao. Kwamba kwa kuwa mataifa haya yanaongoza katika teknolojia yakiungana katika juhudi za kupunguza uharibu wa mazingira kupitia hewa chafu basi yatasaidia ulimwengu pakubwa kupunguza athari za ongezeko la joto duniani.

Ingawa bara la Afrika halichangii pakubwa katika uharibifu wa mazingira ya ulimwengu ndilo linaloathirika pakubwa na

uharibifu huu. Kwa hivyo Waafrika watumie mbinu zote kuyakashifu mataifa yaliyoendelea kiuchumi kwa athari zake kwa mazingira. Wasikimye hata kidogo kwani japo kelele za chura hazimzui tembo kunywa maji huenda zikamkera sana. Wanaharakati wa mazingira pamoja na wasomi wawe kipaumbele katika kuhamasisha umma dhidi ya uharibifu wa mazingira. Aidha wawahimize watu kuungana katika shughuli zote za kuhifadhi wa mazingira kwa lengo la kusitiri mandhari maridadi ya bara la Afrika. Isitoshe elimu ya jamii pamoja na sera zenye mwelekeo wa kuhifadhi mazingira ni muhimu kukuza maisha bora na afya imara kwa vizazi vya sasa na vijavyo.



*Diana Kabaka*

*Mhariri Makala ya Kiswahili*

*Kiswahili Corner*

*Celebration Corner*



**Joan Mutahi**

**KAAD** has given me a lot! The community, joyful moments, amazing friends, and so much more!

It was tough completing my studies considering the COVID-19 global pandemic.

Furthermore, pursuing Clinical Psychology meant that I had to first deal with my mental health before I could deal with anyone else's.

Having this community to always come to when things got tough made it possible and for this I am forever grateful!

**Asante sana my KAAD family**

Joan Mutahi  
MSc Clinical Psychology  
University of Nairobi 2022- December



# The role of spatial technology in resource harmonization



Eda Mumo  
Geospatial Scientist, KASEA Kenya Treasurer.

**T**he KASEA community has a diverse network of experts, and our 2024 seminar theme focusses on optimizing resources in the realms of mining, environment, health, and conservation. Recognizing the pivotal roles each member plays in fostering the growth of our East African community, there is a collective need to explore strategies for harmonizing our resources effectively. As a geospatial scientist, my focus is on the use of spatial technology in health and environmental conservation. Over time, spatial concepts have been instrumental in visualizing location-based data through maps. Advanced echnology, exemplified by platforms like Google Maps, has facilitated the creation of interactive and dynamic maps, significantly enhancing public communication.

## **Health**

In the field of health, geospatial science is instrumental in addressing critical "where" questions related to disease surveillance, public health

emergency response, and the implementation of health interventions. These "where" questions include:

1. *Where are the people requiring help; those at risk?*
2. *What environmental factors are leading to increased disease prevalence?*
3. *Where are the health facilities located?*
4. *Which are the most efficient access routes to use?*

These questions serve as a foundation for strategic decision-making during the planning and implementation process. For instance, the successful implementation of health interventions, such as the piloting of the Malaria Vaccine RTS,S in Western Kenya, relied on spatial analysis to target areas where malaria was prevalent, ensuring that the interventions reached those who were most in need. The harmonization of health-based resources can be initiated through spatial analysis, as demonstrated by interventions such as the distribution of long-lasting insecticide nets (LLINs) also in the Western Region.

## **Environmental conservation**

In environmental conservation, spatial technologies play a crucial role in diverse applications, including change detection, resource inventory and management, and environmental monitoring. Mapping aids in establishing climatic trends, monitoring environmental changes, and informing decision-making processes. This is particularly

evident in tracking forest cover, assessing deforestation and reforestation, and monitoring wildlife habitats to protect endangered species in national parks and reserves.

Moreover, advanced spatial analysis helps mitigate disaster risks by identifying areas prone to natural and man-made disasters, such as flooding, earthquakes, and cyclones. Informed by such analyses, national governments and NGOs can plan preventive measures and prepare for rescue, recovery, and relief efforts in affected areas. In the pursuit of resource harmonization, the convergence of mining, environment, health, and conservation creates a distinctive opportunity for comprehensive and sustainable development. Beyond addressing crucial "where" questions, each of us plays a crucial role in supporting decision-making for health interventions, monitoring environmental changes, and optimizing resource management. By fostering collaborative efforts, engaging with the community, and advocating for policies, we can significantly contribute to the growth of the East African Community while responsibly utilizing our valuable resources. Let us collectively take initiative in striving to manage our resources effectively as we preserve our environment.

**Best wishes,**

**Eda Mumo**  
**Geospatial Scientist,**  
**KASEA Kenya Treasurer.**



*Dr. Peter Wangai*  
*Secretary General*  
*On behalf of the SOK Governing Council*

## The making of a Society: Sok's expedition from initiation to maturation

By the year 2000, the education and mentorship intervention by KAAD in East Africa through Masters and PhD programmes had accumulated nearly 200 beneficiaries. Majority of the Scholars and Alumni would regularly convene in quarterly thematic forums under the local chapter of KASEA, and once annually as the larger East African group. Regional meetings were always held in Nairobi because most of the scholars were Kenyan. It is through the plenary discussions around social topics, individual testimonies shared during refreshments time, i.e. between seminar sessions and in the social evenings, that the idea of a charitable arm of KASEA was mooted. Among the KASEA alumni, it was unanimous the intervention by KAAD had placed their social and career paths on an elevated trajectory. This had impacted their lives and families positively and a majority yearned for a platform that would facilitate the sharing of these fortunes with other deserving Kenyans. It was appreciated that while the government and its developing partners intervened at the undergraduate and basic level of education, the interventions were not adequate especially for the most needy and vulnerable students. It was therefore unanimously agreed that members should exploit available avenues to raise funds and apportion the same in facilitating undergraduate scholarships for students from needy and vulnerable backgrounds.

After the successful registration of the Society of KASEA (SoK) in the year 2005, members were very excited and immediately set their first agenda of fundraising to pool resources. In the same year, a bank account was opened at the then Kenya Rural Enterprise Programme (KREP) bank that later changed its name to Sidian Bank. At the foundational stages of SoK, discussions only took place as part of any other business during KASEA meetings. Notably, most of the founding members led by Chairman Dr. Andrew Ndonga and General Secretary Steve Kiema were accustomed to the then popular public fund raiser (locally known as Harambee). It was then assumed that the method would successfully help pool the required resources. Therefore, two consecutive public fundraisers were organized between 2007 and 2008 with local political, academic and religious leaders being invited to help boost the contributions. However, since most members were at the nascent stages of both career and family development, they had little time allocated to the event planning and logistics. Similarly, they hardly had any experience in holding such events, hence various service providers exploited the group's weaknesses and naivety. The service providers were mainly event organizers and entertainers who ended up carting away huge chunks of the funds that were raised, to the consternation of members. To complicate matters, the first beneficiary of the proposed scholarship programme was also reviewed and allocated funds hastily, and only to be found undeserving much later.

The piling mishaps progressively led to a major fall out within the leadership that also negatively affected participation in KASEA activities, especially by the alumni. The most active SoK leader at the time was the Secretary General Mr. Steve Kiema, who had to carry the blunt of members' disappointments and had ultimately to step aside. He requested Mr. Patrick Murigi the then acting Organizing Secretary to take over the helm. Having previously enjoyed a similar intervention under Save the Children Funds in his undergraduate programme, Patrick was very eager to see the scholarship program work. Being actively involved in the leadership, Patrick had observed the pitfalls with the already tested methods of fundraising and identified the most passionate proponents of the programme. He opted to approach a few individuals privately to establish if they could support a different approach based on a small beginning. By the time the first meeting was held in September 2009, 10 KASEA members had already individually committed to regular monthly contributions to SoK to start off the programme. In that inaugural meeting it was unanimously agreed that every willing KASEA alumnus would be encouraged to evaluate their financial capacity and commit to a monthly subscription that they could freely sustain ranging from Ksh. 500 and above.

It was also agreed that a survey be conducted within the student community at the University of Nairobi. The survey aimed to establish an annual financial intervention that would provide sufficient upkeep to a needy and/or vulnerable student for them to pursue education and achieve their full potential. University of Nairobi Catholic Chaplaincy through Fr. Patrick Kanja facilitated the process, and it was established that students who received tuition support through the Higher Education Loans Board required approximately Ksh. 36000 for upkeep i.e. Ksh. 18,000 per semester. The Chaplaincy had already vetted a student who had sought help, and he was recommended for SoK support. In the next meeting held in October 2009, members ratified the survey results and appreciated that even at the individual bare minimum contribution of Ksh. 500, the eleven already committed members had the capacity to support one student per year. With a starting balance of Ksh. 30,000 in the bank at the time, it was agreed that the recommended student be admitted to the scholarship immediately. The first bank cheque worth Ksh. 18,000 toward the scholarship programme was drawn in favour of the student and released through the University of Nairobi Catholic Chaplaincy in the same month. It was unanimously agreed that a new beneficiary would only be admitted after members had accumulated enough funds in the kitty to cover their full scholarship. This was to guarantee that even in the worst-case scenario, all admitted beneficiaries would be supported to the end of their studies. The second beneficiary was a young lady student living with disability from Kenyatta University, who completed her studies well and currently works for a local commercial bank. The Third beneficiary was an orphan pursuing Civil Engineering at Jomo Kenyatta University of Agriculture and Technology and is arguably the most successful SoK beneficiary to date. He successfully finalized his studies and subsequently received KAAD scholarship to pursue his MSc. Civil Engineering programme in Germany. He was then recruited as a tutorial fellow at Masinde Muliro University and is currently pursuing his PhD in Germany.

The scholarship programme was coordinated by Mr. Patrick Murigi from its inception in 2009 to March 2011 when Mr. Peter Wangai took over as the coordinator until year 2013 when he passed the helm to Mr. Daniel Huba. Mr. Huba coordinated the programme until January 2017. After Mr. Patrick Murigi returned from Germany after completing his PhD studies, he took over from Mr. Daniel Huba and coordinated the programme until January 2022 when a general election was held, and the full leadership establishment of the Society was put in place for the first time since SoK registration in 2005. To date, the approximated 95% of the funds already expended and currently at the disposal of the scholarship programme, have emanated from KASEA alumni's monthly contributions and, despite various challenges experienced along the way, the programme continues to grow strong in leadership structure and financial stability. A total of 23 students have so far completed their studies under SoK scholarship programme and another 4 are current scholars at different stages of their studies.

#### Categories of Scholarship:

There are three categories under which financially challenged, orphans and vulnerable students can attain scholarship:

- A. *Normal scholarship - recommendations comes mainly from the respective university chaplain, KASEA members or an entrusted university administrator.*
- B. *Marginalized Communities - Students under this category can also be considered for diploma and higher diploma studies under TVET programmes in Kenya. The highly potential ones can also be supported to progress to undergraduate courses. Recommendations channels are similar to category A.*
- C. *Students living with disabilities - They can be proposed for scholarship consideration by anyone who appreciates their deserving status; they do not have to be proposed by a chaplaincy.*

**Table 1: Scholarship Programme Beneficiaries (2018 to Date)**

No.	Name & Student No.	University	Academic Programme	Type	Entry	Completion
1.	Ms. Akinyi Lilian Odongo P15/1742/2017	University of Nairobi	Undergraduate	A	15/02/2018	11/10/2019
2.	Ms. Lucy Akinyi Mugeni ED/00462/2015	Maseno University	Undergraduate	A	15/02/2018	20/02/2019
3.	Mr. Victor Otieno Okoth ED/00477/2015	Maseno University	Undergraduate	A	15/02/2018	20/02/2019
4.	Mr. Daniel Miyengo Oluoch S11/11122/15	Egerton University	Undergraduate	A	03/07/2018	26/03/2019
5.	Mr. Duncan Onyango Ouma <sup>1</sup> (Bachelor of Special Needs Education)	Kenyatta University	Undergraduate	C	23/10/2018	07/03/2022
6.	Mr. Kiprotich Cornelli TED/191/17	Eldoret University	Undergraduate	A	04/10/2019	24/06/2021
7.	Mr. Paul Mutua <sup>2</sup> Reg. No.: 1034258	Catholic University of Eastern Africa	Undergraduate	A	04/10/2019	08/01/2020
8.	Ms Jane Wambui J25/1161/2017	Kenyatta University	Undergraduate	A	28/11/2019	16/09/2022
9.	Mr John Mwangi Maina BE108/G/5284/18	Kirinyaga University	Undergraduate	A	10/11/2020	28/04/2022
10	Mr. Donald Onduso Gekonge I63/1773/2018	University of Nairobi	Undergraduate	A	10/12/2020	14/02/2022
11	Mr. Hadan Galishom Wamaita J174/0900/2020	Kenyatta University	Undergraduate	A	10/11/2020	Suspended

12.	Ms. Sharon Nakhanu HT/M/2720/09/20	Kabarak University	Undergraduate	A	30/12/2020	Ongoing
13.	Ms. Alice Jepkorir EB2/56302/2021	Chuka University	Undergraduate	A	05/09/2023	Ongoing
14.	Ms. Mary Nyokabi AB1/62613/2022	Chuka University	Undergraduate	A	05/09/2023	Ongoing
15.	Tura Guyo HRM/104/2016	Moi University	Undergraduate	A	Pending	

A list of SOK beneficiaries from 2009 -2018 can be found in the 2024 KASEA newsletter

### Supporting the scholarship Programme

For convenience, transparency and accountability members are requested to credit the monthly subscription to the Society's bank account through direct deposit in cash, standing orders, cheques, bank transfers or through MPesa paybill services. See different payment options below:

1. A SOK alumni living with disability, who enjoyed a joint scholarship: KU Foundation Scholarship for Orphan and Vulnerable Students (Tuition), and Society of KASEA (Sustenance)
2. Was granted a one-off support after chaplaincy re-evaluated his case and found it not deserving continuation

### For Payment

**Cash Deposit, Bank Transfers, Etc**

- Account Name: **Society of KASEA**
- Account No. : **1320668291**
- Bank: **Kenya Commercial Bank**
- Branch: **Kimathi Street**

**LIPA NA MPESA**

Till Number  
**5 2 2 5 3 3**

Account No  
**7 7 2 6 4 9 3**

Name  
**Society of KASEA**

**or**

**MPESA KCB**

Paybill Business No  
**5 2 2 5 2 2**

Account  
**1320668291**

**NB: For this option SOK office does not get notification and your notification is not customized. The charges are also higher than option 2.**