



# KeSEBAE NEWS



Newsletter of the Kenya Society of Environmental, Biological and Agricultural Engineers

Volume 8. No.2

13 March 2026

## KeSEBAE Courtesy Visit to the National Irrigation Authority

By Yvonne Madahana



*(From left) Eng. Ezekiel Oranga, Eng. Shiribwa Mwamzali, Eng. Charles Muasya, Eng. Stephen Mutinda, Members of KeSEBAE and NIA Team During the Courtesy Visit.*

The Kenya Society of Engineers in Agricultural and Biosystems Engineering (KeSEBAE) leadership team, led by the Honorary Secretary, Eng. Shiribwa Mwamzali, recently paid a courtesy call to the National Irrigation Authority (NIA). The purpose of the visit was to explore areas of collaboration that would strengthen partnerships in irrigation infrastructure, technology transfer and professional development for graduate engineers. The National Irrigation Authority (NIA) is constituted under the Irrigation Act No. 14 of 2019, with its main objective being to provide for the development, management and regulation of irrigation, in support of sustainable food security and socioeconomic development in Kenya. The Authority operates under the Ministry of Water, Sanitation and Irrigation. It is headquartered at Irrigation House along Lenana Road, Nairobi. Its work is anchored in Kenya's Vision 2030, the Bottom-Up Economic Transformation Agenda (BETA), and the Authority's Strategic Plan 2023–2027, which guides its efforts to steer Kenya toward a food-secure and prosperous nation through coordinated and sustainable irrigation services. In fulfilling its mandate, NIA is tasked with developing and improving irrigation infrastructure for national and public schemes, providing irrigation support services to private, medium, and smallholder schemes in cooperation with county governments and other stakeholders and offering technical advisory services covering design, construction supervision, administration, operation and maintenance of irrigation schemes.

### DEAR READER

*Welcome to KeSEBAE Newsletter.*

*A monthly Newsletter touching on topical issues affecting our environment.*

*KeSEBAE NEWS is a Newsletter of the Kenya Society of Environmental, Biological and Agricultural Engineers (KeSEBAE)*

### Inside this Issue!

**Pg. 1**  
*KeSEBAE Courtesy Visit to the National Irrigation Authority*

**Pg. 5**  
*Call for Papers for KeSEBAE Conference 2026*

**Pg. 6**  
*KeSEBAE Conference 2026*

**Pg. 7**  
*Call for Papers to The Next Editions of JEA and KeSEBAE NEWS*

**Pg. 8**  
*Call for Membership*



Figure 1: Head office of National Irrigation Authority at Irrigation House, Lenana Road

In fulfilling its mandate, NIA is tasked with developing and improving irrigation infrastructure for national and public schemes, providing irrigation support services to private, medium and smallholder schemes in cooperation with county governments and other stakeholders; and offering technical advisory services covering design, construction supervision, administration, operation and maintenance of irrigation schemes. The Authority currently oversees a wide portfolio of irrigation programmes spanning all 47 counties, covering over 127,000 acres and benefiting approximately 70,000 farmers, with flagship projects including the Mwea Irrigation Development Project in Kirinyaga, the Galana Kulalu Irrigation Development in Kilifi and the Turkana Irrigation Development Programme, among others.



Figure 2: Galana Kulalu Food Security Project

### 1.0 Purpose of the Courtesy Call

KeSEBAE initiated the courtesy call to the National Irrigation Authority with the aim of establishing a

foundation for a mutually beneficial working relationship. The delegation presented the Society's interest in exploring both near-term and long-term collaboration across areas that align closely with NIA's mandate and KeSEBAE's professional expertise.



Figure 3: Eng. Shiribwa Mwamzali, Honorary Secretary, KeSEBAE, Presenting the Purpose for Courtesy Call to NIA

The Society conveyed its interest in engaging NIA across several complementary fronts. On the technical side, KeSEBAE expressed its capacity to support NIA in addressing engineering challenges in irrigation operations, drawing on its membership's expertise in agricultural systems, water resources, environmental management, energy systems, and food processing. The Society also highlighted its publishing platform, the Journal of Engineering in Agriculture and the Environment (JEA), as a vehicle for shared knowledge dissemination, welcoming NIA's participation as both a contributor and a partner in sustaining the journal's reach and visibility.

On career development, KeSEBAE communicated its interest in structured pathways for its graduate engineers to gain hands-on exposure within NIA's operations, particularly in irrigation systems and water infrastructure. The Society also drew NIA's attention to its upcoming 2026 Annual Conference, scheduled for 24 to 26 June 2026 at the University of Nairobi Towers, under the theme Artificial Intelligence for the Transformation of Agriculture, Industry, Infrastructure and the Environment, as an early and tangible opportunity for both organizations to be visible to each other's networks and to the broader engineering community.

Underpinning all these areas was KeSEBAE broader proposal to formalize the relationship through a structured partnership framework, with the intention of giving the collaboration clarity, continuity and direction over time.



## 2.0 Key Discussion Highlights

NIA's Chief Executive Officer, Eng. Charles Muasya, MBS, received the KeSEBAE delegation and acknowledged the visit as timely, noting that NIA is at a significant juncture in its institutional trajectory, with the Authority currently undertaking a substantial expansion of the Galana Kulalu Irrigation Scheme and advancing plans for several new dams across the country.

The Galana Kulalu Food Security Project is currently targeting 6,400 acres under active irrigation by June 2026, building on an initial pilot phase of 1,500 acres for seed maize production. The broader vision is to eventually develop up to 1.5 million acres suitable for irrigation across the Galana and Kulalu ranches, a development that, if fully realized, would significantly boost incomes, foreign exchange earnings, and create employment opportunities for young Kenyans.

Beyond Galana Kulalu, NIA is advancing several major water storage infrastructure projects. Public-Private Partnership arrangements for the implementation of five dams, namely Radat, Lowaat, Kithinu, Galana, and High Grand Falls, are at an advanced stage. Additional projects in the pipeline include the Gogo Dam, which will be critical in unlocking the full irrigation potential of the Lower Kuja Irrigation Development Project, with

the total area under irrigation expected to exceed 50,000 acres upon completion. Other mapped projects span dams at Isiolo-Barsalinga, Lowaat in Turkana, Rumuruti in Laikipia, Thuci in Embu and Tharaka-Nithi, Muhoya straddling Nyeri and Kirinyaga, Narosura in Narok and Arror in Elgeyo-Marakwet, among others across all 47 counties.

Eng. Muasya indicated NIA's receptiveness to the proposed partnership and in response to KeSEBAE's presentation, identified the following as areas the Authority would be open to engaging on:

- i. Consultancies and technical support
- ii. Publications and research partnerships
- iii. Membership and mentorship programmes
- iv. Knowledge exchange
- v. Internships and attachments for graduate engineers



Figure 4: (Third from Left) Eng. Charles Muasya, CEO of NIA

## 3.0 Meeting Outcome

The two parties agreed to establish two technical committees to advance collaboration in the following key areas:

- i. Participation of NIA in the upcoming KeSEBAE Conference.
- ii. Enhancement of future collaborations and partnerships.

4.0 Photo Gallery



Eng. Kennedy Makudiuh



Eng. Henry Ochiere



Eng. Kuria Wainaina



Eng. Stephen Mutinda



Eng. Ezekiel Oranga



Sharon Kinya



Jackline Gathoni



Discussions In Progress During the Courtesy Visit



Kenya Society of Environmental, Biological and Agricultural Engineers

# 2026 Annual CONFERENCE

 WED 24 - FRI 26 JUNE  
University of Nairobi

## Call for Papers

- **Abstracts Submission:** 30 APR 2026
- **PowerPoint Submission:** 31 MAY 2026
- **Submission of Full Papers:** 31 MAY 2026

 For more information  
**0788712156**

 [www.kesebae.or.ke](http://www.kesebae.or.ke)  
**VISIT OUR WEBSITE**



## THEME:

**Artificial Intelligence for the Transformation of Agriculture, Industry, Infrastructure and the Environment**

### Sub-Themes

1. Transforming Africa's Agricultural Systems through Engineering and Technology
2. Building Resilient Infrastructure for Sustainable Development
3. Engineering for Environment and Climate Change
4. Transformation of Africa's Energy Systems
5. Engineering Transformation of Industry in Africa
6. Biomedical Engineering Interventions for Improvement of Africa's Health Systems
7. Engineering Training in the World of AI

**Note:** The abstract should be between 250-300 words, the full paper should be 3,000-8,000 words, in Times New Roman font, size 12, spacing of 1.5 in either Word format (.doc) using APA 6th Edition citation style.

All writings should be emailed to:

[info@kesebae.or.ke](mailto:info@kesebae.or.ke)



EARN 20 PDUs

# 2026 ANNUAL CONFERENCE

**THEME:** ARTIFICIAL INTELLIGENCE FOR THE TRANSFORMATION OF AGRICULTURE, INDUSTRY, INFRASTRUCTURE AND THE ENVIRONMENT



WED 24 - FRI 26 JUNE 2026



UNIVERSITY OF NAIROBI TOWERS

## SUB-THEMES

- 1.Transforming Africa's Agriculture Systems through Technology
- 2.Building Resilient Infrastructure for Sustainable Development
- 3.Engineering for Environmental and Climate Change
- 4.Transformation of Africa's Energy Systems
- 5.Engineering Transformation of Industry in Africa
- 6.Biomedical Engineering Interventions for Improvement of Africa's Health Systems
- 7.Engineering Training in the World of AI

## KEY DATES

<b>Abstract Submission:</b>	30 APR 2026
<b>Paper Submission:</b>	31 MAY 2026
<b>Payment Deadline:</b>	24 JUNE 2026

## CHARGES

<b>Members:</b>	KES 20,000
<b>Non-members:</b>	KES 25,000
<b>Foreigners:</b>	\$250
<b>Virtual:</b>	KES 10,000
<b>Undergrad Students:</b>	KES 2,000
<b>Field Visit:</b>	KES 5,000

**LIPA NA M-PESA**

PAYBILL NUMBER  
4 0 0 2 5 7 5

ACCOUNT NUMBER  
FULL NAME

Dial \*2344 to view applicable charges

CALL FOR BOOKING



**0788712156**

For more details, visit our website or email us  
[www.kesebae.or.ke](http://www.kesebae.or.ke)  
[info@kesebae.or.ke](mailto:info@kesebae.or.ke)



# CALL FOR PAPERS

## To the Next Editions of the JEAE

## JEAE

### *Journal of Engineering in Agriculture and the Environment*

The Journal of Engineering in Agriculture and the Environment (JEAE) is a Publication of the Kenya Society of Environmental, Biological and Agricultural Engineers (KeSEBAE) through which researchers in the fields of Environment, Agriculture and related fields share research information and findings with their peers from around the globe.

The JEAE Editorial Board wishes to invite interested researchers with complete work in any relevant topic, to submit their papers for publication in the next editions of the Journal.

Manuscripts may be submitted online or via email to:

Chairperson, JEAE Editorial Board via Email: [jeae@kesebae.or.ke](mailto:jeae@kesebae.or.ke) or Online via: <https://kesebae.or.ke/journal/index.php/kesebae/about/submissions>

### Criteria for Article Selection

Priority in the selection of articles for publication is that the articles:

- a. Are written in the English language
- b. Are relevant to the application of engineering and technology in agriculture, the environment and biological systems
- c. Have not been previously published elsewhere, or, if previously published are supported by a copyright permission
- d. Deals with theoretical, practical and adoptable innovations applicable to engineering and technology in agriculture, the environment and biological systems
- e. Have a 150 to 250 words abstract, preceding the main body of the article
- f. The abstract should be followed by the list of 4 to 8 "Key Words"
- g. Manuscript should be single-spaced, under 4,000 words (approximately equivalent to 5-6 pages of A4-size paper)
- h. Should be submitted in both MS word (2010 or later versions) and pdf formats (i.e., authors submit the abstract and key words in MS Word and pdf after which author uploads the entire manuscript in MS word and pdf)
- i. Are supported by authentic sources, references or bibliography

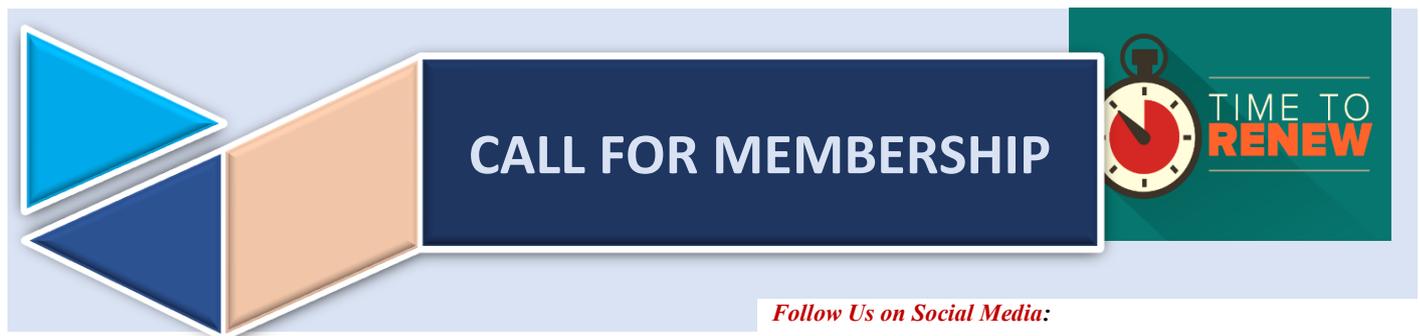
**Our Expert Reviewers are Highly Regarded Globally and Provide Fast and Rigorous Review Services** For additional details and online support visit: <https://www.kesebae.or.ke/journal/instructions.php> or visit our JEAE website at: <https://kesebae.or.ke/journal/index.php/kesebae>

### CALL FOR ARTICLES TO KeSEBAE NEWS

**KeSEBAE NEWS Editorial** wishes to call for topical articles for publication in future editions of KeSEBAE NEWS.

Please transmit the same via Email: [info@kesebae.or.ke](mailto:info@kesebae.or.ke)

**NOTE:** A payment will be made to the author of each selected article



Follow Us on Social Media:



<https://twitter.com/kesebae1>



<https://web.facebook.com/kesebae1/>

### Be a KeSEBAE Member:

The annual subscription fees, admission fees and reinstatement fees for members of all grades (except Honorary and Life Members who shall pay no dues or fees) are indicated below: The annual dues are as follows:

Members hip Category	Annual Subscrip tion (KES)	Admissi on Fees (KES)	Reinstatem ent Fees (KES)
<i>Fellow</i>	5,000	1,000	2,000
<i>Member</i>	2,000	1,000	2,000
<i>Ass. Member</i>	1,000	1,000	2,000
<i>Aff. Member</i>	500	1,000	2,000
<i>Student</i>	300	100	-

### PAYMENT DETAILS

Bank	
Bank	Absa Bank Kenya Plc
Branch	Nairobi University Express Branch
Account Name	Kenya Society of Env. Bio. & Agric. Engineers
Account No.	2038150696
Swift Code	BARCKENX
Currency	Kenya Shillings

### Membership Renewal

Members of all grades are requested to renew their 2025 membership as follows.

Membership Category	Annual Subscription Fee (KES)
<i>Fellow</i>	5,000
<i>Member</i>	2,000
<i>Ass. Member</i>	1,000
<i>Aff. Member</i>	500
<i>Student Member</i>	300

### M-PESA DETAILS

Pay Bill No.: **4002575**  
Account No: **Your Full Name**



Important Links	
<b>KeSEBAE</b>	<a href="https://www.kesebae.or.ke/">https://www.kesebae.or.ke/</a>
<b>JEAE</b>	<a href="https://www.kesebae.or.ke/journal/">https://www.kesebae.or.ke/journal/</a>
<b>EBK</b>	<a href="https://ebk.or.ke/">https://ebk.or.ke/</a>
<b>IEK</b>	<a href="https://www.iekenya.org/">https://www.iekenya.org/</a>
<b>PASAE</b>	<a href="http://www.pasae.org.za/">http://www.pasae.org.za/</a>
<b>Email</b>	<a href="mailto:info@kesebae.or.ke">info@kesebae.or.ke</a>