NIAE NEWSLETTER

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NIAE INAUGURATE ITS NEWLY ELECTED NATIONAL EXECUTIVE COUNCIL AND PUBLIC LECTURE

The inauguration of the National Executive Council and public lecture series of Nigerian Institution of Agricultural Engineers (NIAE) took place on December 13, 2025. The ceremony started with a brief welcome address by the National Chairman Engr. Prof Joshua O. Olaoye.

WELCOME ADDRESS BY THE IMMEDIATE PAST NATIONAL CHAIRMAN OF THE NIGERIAN INSTITUTION OF AGRICULTURAL ENGINEERS

Protocol

The President and Chairman in Council, Nigerian Society of Engineers, Engr. Margaret Aina Oguntala, FNSE, The President of COREN, Engr. Prof. S. Z. Abubakar, FNSE, FNIAE, FAEng, Past National Chairman, Nigerian Institution of Agricultural Engineers, (NIAE), Members of National Executive Council of NIAE, Fellows, Elders of the NIAE, and Members of NIAE, Distinguished guests, esteemed colleagues, members of the Nigerian Society of Engineers, My Lord Spiritual and Temporal, Ladies and gentlemen.

With a heart full of praises to God, as the immediate past National Chairman during this momentous occasion—the inauguration and swearing-in of our new National Chairman, Engr. Prof. Joseph Chukwuma Adama, along with other members of the Executive Council. It gives me great pleasure to warmly welcome you to this very important occasion and to reflect briefly on the achievements of this administration during the period under review.

Our collective resolve has been to strengthen the foundations of the Nigerian Institution of Agricultural Engineers while repositioning it for greater national relevance and global competitiveness.

The just-concluded International Conference, Machinery Exhibition and celebration of the 50th anniversary of the existence of our institution was a tremendous success, showcasing our commitment to advancing agricultural engineering in Nigeria and building networks that foster innovation and collaboration. I appreciate your contributions and commitments towards achieving this success.

During my tenure, we achieved significant milestones that I am proud to highlight:

Automation of Administrative Procedures

We modernized our administrative framework, making it more efficient and accessible for all members.

Successful Hosting of the First Machinery Exhibition

This inaugural exhibition not only promoted agricultural machinery but also created a platform for stakeholders to engage and collaborate.

Advocacy and Periodic Presentation of Position Papers

Our commitment to addressing pressing issues in the agricultural sector through well-researched position papers has strengthened our voice and influence.

Effective Participation in the Nigerian Society of Engineers: We actively engaged in the activities of the Society, enhancing our visibility within the engineering community.

Strengthening Partnerships with Stakeholders: We fostered relationships with key players in government and industry to advance our initiatives.

Capacity Building and Training Programs: We initiated several training programs to empower our members with the latest knowledge and tools in agricultural engineering.

Enhancement of Membership Engagement: Our administration worked tirelessly to increase member engagement through forums, webinars, and collaborative projects.

Other clear achievements of the outgoing administration include:

Full Constitution and Activation of Governance Structures

The administration successfully constituted and inaugurated all 13 Standing Committees and 8 Ad-Hoc Committees, ensuring inclusive governance, participatory leadership and effective execution of institutional programmes. Though, the full implementation of desegregation of central has not been fully implemented. Possibly the immediate implementation of this constitution provision may fast tract autonomous structure of the region for a more proactive and effective regional activities. See the attached List with details Terms of References).

Remarkable Improvement in NSE Group Dynamics Ranking

NIAE advanced from 5th position to 3rd position among over 25 NSE Divisions in the National Group Dynamics Competition—one of the most objective indicators of institutional performance within NSE.

Acquisition of Land for NIAE in Abuja

Through the Abuja Land Development Implementation Committee, the administration completed documentation and successfully acquired land in Abuja, a landmark institutional asset achievement.

Registration of NIAE Ventures and BOT Establishment

The administration completed the registration of NIAE Ventures with the Corporate Affairs Commission (CAC) and inaugurated its Board, laying the

foundation for sustainable revenue generation and public- private partnerships.

Enhanced Institutional Visibility and Media Presence

NIAE activities received extensive coverage on NTA, BRTV, print and electronic media, including jingles, press briefings, and conference reportage, significantly improving public awareness of the Institution.

Reactivation and Functional Upgrade of the NIAE Website

The Institution's official website was fully reactivated and made functional, improving information dissemination, professional engagement and digital presence.

Strengthening of the National Secretariat and Liaison Office

The administration equipped the Abuja liaison office, improved administrative facilities and reviewed the remuneration of administrative thereby enhancing operational efficiency. Special thanks to the Royal Academic of Engineers, UK in collaboration with PASAE in their numerous supports at this instance.

Significant Membership Growth Across All Cadres

During the period, the Institution recorded 623 student members, 35 affiliates, 197 corporate members and 49 fellows, representing a major increase compared to the previous year and reflecting effective membership drive strategies.

Successful Fellowship Inductions and High-Profile Public Lectures

The administration organized two Fellowship Induction Ceremonies accompanied by impactful public lectures delivered by nationally respected figures, enhancing professional prestige and intellectual discourse.

Expansion of Technical Capacity through Conferences and Technical Sessions

Over 13 technical sessions, multiple webinars, and the 3rd Regional Annual Conference in Ado-Ekiti were successfully organized, positioning NIAE as a leading technical division within NSE.

Improved Technical Publications and Knowledge Dissemination

The administration published two journal volumes, conference proceedings, and eight editions of the monthly e-newsletter, while working to make past editions available online.

Active Engagement in Codes and Standards Development

NIAE played a central role in national engineering codes and standards development in collaboration with COREN, with a special edition already published and committee work nearing completion.

Strategic Advocacy and Government Engagement

The administration undertook numerous advocacy and courtesy visits to ministries, state governments, universities and agencies, strengthening NIAE's policy relevance and stakeholder influence.

Policy Impact and Technical Advisory Contributions

NIAE submitted conference communiqués, flood disaster technical reports, and concept notes to federal and state governments, reinforcing its role as a professional advisory body.

Integration into National Development Platforms and Agricultural Mechanization Policy

The Institution achieved registration and membership of the Nigerian Economic Summit Group, enabling NIAE to contribute directly to national economic and agricultural policy discussions.

The NIAE Road MAP and Future Projections

There is need to fine-tuned plans and all members carried along in achieving the immediate plans and lay a good foundation for a 30- year strategic plan. It will focus our efforts to create opportunities for our members to practice the profession profitably, and we shall make great impact in national development and food security. The committee headed by Engr. Prof Femi Ajibola have done a great job.

There are lined up activities to conduct series of training sessions for the leadership at management level of the institution to assimilate, domesticate and own the provisions in the strategic document. The expectation is to conduct this management training in two levels – The Main leadership of NIAE and Broad leadership including the Regional Chairmen and other Chairmen of relevant Committees of NIAE. Attached is the proposed programme structures and training schedule.

The reserved fund in the Polaris Domiciliary Account was reserved mainly for this training including for the funding of the research proposal to be conducted by the NIAE and to be submitted to the Royal Academic of Engineers.

Strengthening the Women Agricultural and Bio-Resource Engineers Forum (WABEForum)

In pursuant of the strong roles that women play in agriculture from production to packaging and marketing and in line with the SDGs goals, the initiated WABEN Forum was strengthened and the executive council of the forum was duly supported in the running and discharge of their activities. The institution sponsored the development and creation of their website.

The committee have over 100 registered women in their database. They are now being registered with Corporate Affairs Corporation (CAC). There was a successful transition of the second leadership to the third succession and Engr. Dr. Nneka Nwagugu took over from Engr. Prof. Kehinde Taiwo who succeeded Engr. Idiat Amusu. Engr. Dr. Nwagugu will however be sworn in as a member of NIAE NEC today.

Strengthening of Our Journal and Other Publications

Publication of NIAE journal is sustained with publication of two issues released during Ilorin 2025. The journal now has a website and being integrated to the main NIAE website. Periodic release of NIAE News Letter is now regular.

Other publications that were released include Documentation of NIAE at 50 and Newly established NIAE Magazine in commemoration of NIAE at 50. It is opined that the publication of this magazine will be sustained along with monthly production of the NIAE News Letter.

Prompt Inauguration of the Board of Trustee (BOT) of NIAE

The Board of Trustee (BOT) of NIAE had been constituted. It is therefore important to integrate the Board properly into the running of the affairs of the Institution:

The Members are

Past President / Chairmen:

Prof. M. O. Faborode
Chairman

Prof. S. Z. Abubakar
Member

Prof. B. A. Adewumi
Member

Prof. S. M. Musa Secretary / Member

Other:

Prof. S. N. Asoegwu	Member
Prof. Femi Ajibola	Member
Engr. Bitrus Elasa	Member

Consolidation on the Students Activities and Growth of NIAE-Student Body (NIAESB)

Upon inauguration of the National Student body of NIAE on July 31, 2021, the body was reorganized with sound leadership provided by Comrade Stephen Adeyemo. Engr. Akintayo Akintola, Engr. Dr. Olanrewaju Taofiq and Engr. Dr. Nneka Nwagugu were mobilized to provide appropriate guidance and mentoring to the body.

The students' activities were prominently featured during Ilorin 2025 conference and separate student sessions, competitions and presentations were organized. The student body was able to organize election with new leaders emerged and the swearing in of the elected officers will be done during the swearing in ceremony of the National Chairman and other National Executive Committee members today, December 13, 2025.

Summary Statement

Collectively, these achievements demonstrate that the administration did not merely maintain continuity but strengthened institutional governance, expanded membership, enhanced professional relevance, improved visibility, secured strategic assets, and repositioned NIAE as a key stakeholder in national agricultural and engineering development during the period under review

As we hand over the reins of leadership to Engr. Prof. Joseph C. Adama and his council, I am confident that they will build upon these achievements with renewed vigor. I extend my warmest wishes for a successful tenure, marked by innovation and progress.

To the new administration, you have my unwavering support as you navigate the challenges and opportunities ahead. Together, I am certain we can continue to elevate the standards of agricultural engineering in Nigeria for the benefit of our nation.

Statement of Appreciation

I wish to express my profound and heartfelt appreciation for the overwhelming and diverse support received throughout the period under review.

First, I deeply acknowledge and appreciate the **elders of our great Institution**, our **Past Chairmen**, and **former and serving Executive Committee members**, whose wisdom, counsel and steadfast guidance provided a solid foundation for our collective efforts. Your legacy continues to inspire and guide our decisions.

I am sincerely grateful to our **special friends of the Institution** and our **committed Fellows and members**, whose loyalty, sacrifices and unwavering commitment ensured the successful execution of our programmes and activities across all levels of the Institution.

Our special and distinguished appreciation goes to **His Excellency, the Executive Governor of Borno State, Engr. Professor Babagana Umara Zulum**, a pillar of support to the Nigerian Institution of Agricultural Engineers. His promises were not only made with sincerity but were **faithfully fulfilled**, and his professional, moral and material support remains deeply invaluable to the growth and visibility of the Institution.

I also acknowledge with deep gratitude the **Permanent Secretary, Ministry of Agriculture and Food Security,** Engr. Dr. Marcus Olaniyi Ogunbiyi your support is unprecedented and highly appreciated. Also, the **Directors and Heads of various Units and Departments**, particularly the **Department of Rural Development**, **Water Resources**, and many others too numerous to mention individually. Your cooperation, encouragement and

institutional support greatly enhanced our impact and outreach.

I must express in an unequivocal term the enduring and robust working relationship that I enjoyed with the Executive Director, National Centre for Agricultural Mechanization, NCAM, Engr. Dr. Abdulgafar Rasheed Kamal, all his Directors and other staff members of the Centre. I sincere appreciate all your support and it all mean so much to me and thank you once again.

From the home front, I cannot but express my profound appreciation for the unwavering support of my **darling wife**, whose



The IPC delivering his welcome address

Spouses' Forum of our Institution, her commitment and leadership added a unique strength and moral support to our collective efforts.

To everyone who stood by the Institution in prayers, counsel, resources and goodwill, I say **thank you**. Your support remains the backbone of our achievements, and I remain sincerely grateful.

Thank you all for your attention, and let us look forward to a future filled with growth and success!

Engr. Professor Joshua Olanrewaju Olaoye, FNSE, FNIAE
Outgoing National Chairman



ACCEPTANCE SPEECH BY THE INCOMING NATIONAL CHAIRMAN

A SPEECH DELIVERED BY THE NATIONAL CHAIRMAN OF THE NIGERIAN INSTITUTION OF AGRICULTURAL ENGINEERS (A DIVISION OF THE NIGERIAN SOCIETY OF ENGINEERS) AT THE INAUGURATION OF THE MEMBERS OF THE NATIONAL EXECUTIVE COUNCIL HELD AT THE COMMITTEE ROOM, THE NIGERIAN SOCIETY OF ENGINEERS HEADQUARTERS, CENTRAL BUSINESS DISTRICT

ABUJA ON SATURDAY, DECEMBER 13, 2025

The President, Nigerian Society of Engineers,

The President, Council for the Regulation of Engineering in Nigeria,

The Guest of Honours and Permanent Secretary, Federal Ministry of Agriculture and Food Security,

The Guest Speaker and President, African University of Science and Technology, Abuja

The Immediate Past Chairman, Nigerian Institution of Agricultural Engineers,

Fellows, Elders and Members of the Nigerian Institution of Agricultural Engineers, Ladies and Gentlemen,

Good afternoon

On behalf of the newly elected NEC members of our dear institution, the Nigerian Institution of Agricultural Engineers, NIAE, I wish to give thanks to Almighty God for making it possible for us to be here today. Let me also thank all of you who left all your numerous engagements and gathered here today just to honour me and other NEC members. Notably here are the COREN President Engr. Prof. S. Z. Abubukar ably represented, Engr. Prof. A. P. Onwualu, Engr. Daniel Udo, Engr. Bitrus Elesa, Engr. Prof. A. F. Alonge, Engr. Sabiu Bello, Engr. Mauruf, Engr. Mrs. Fatima, etc.

Recall that this executive which was inaugurated today was elected at the National Centre for Agricultural Mechanization, Ilorin, Kwara state on December 14, 2025. We are to pilot the affairs of our institution for the next two years. Our special gratitude goes to our Immediate Past Chairman, Engr. Prof. J. O. Olaoye, for exemplary leadership which resulted in a seamless election that produced this NEC. Engr. Dr. Taiye Tehinse is specially recognized for his roles in putting things together and sponsoring this event.

He provided the logistics to ensure the success of this event.

I wish to promise that this regime will not let you down. This NEC will not only sustain the achievements recorded by the previous regimes but must improve on these achievements. Within the two years of our leadership, we will work hard towards:

1. Upgrading the National Centre for Agricultural Mechanization NCAM to a grade "A" agency. If this happens, NCAM will have direct access to the Minister and Permanent Secretary of the supervising ministry. Also, the nomenclature, "Executive Director, ED" will change to "Director General", DG". This will place the agency in a very good position to play the expected and needed roles in repositioning the Nigerian agricultural sector.

2. Identifying vacancies in relevant MDAs with a view to drawing the attention of the government to the condition.
3. Pursuing hazard allowance for agricultural engineers in the public service in collaboration with the Council for Regulation of Engineering in Nigeria.
4. Creation of departments of agricultural engineering in ministries of agriculture and in

universities and polytechnics where it is not existing.

5. Stopping interlopers in agricultural engineering projects and practice, etc.

I believe that with your supports and God being on our side, we will achieve these objectives.

To my fellow members of NEC, please note that the time is short. Two years will soon elapse and so we have to brace up for the challenges ahead of us. We should not give excuses. Most of us were members of the previous regimes. So, the experience is there. We have to live up to the expectations.

Finally, let me thank our fathers, among whom are, Engr. Prof. M. O. Faborode, Engr. Prof. S. M. Musa, His Excellency, Engr. Prof. Babagana Umara Zulum, Engr. Prof. S. N. Asoegwu, etc.

As I end this speech I pray for God's grace on our institution and may He lead us peacefully to our various destinations, Amen.

Engr. Prof. Joseph Chukwuma Adama, FNIAE, MNSE

National Chairman, NIAE.





Acceptance speech by the National Chairman Prof. J. C. Adama

Public Lectures by Prof Azikwe Peter Onwualu FNIAE, FNSE, FAEng. With a theme "Agricultural Engineering in the Era of Digital Transformation for Food Security in Nigeria: The Role of the Nigerian Institution of Agricultural Engineers."

ADDRESS BY PROFESSOR AZIKIWE PETER ONWUALU, FAS, PRESIDENT, AFRICAN UNIVERSITY OF SCIENCE AND TECHNOLOGY, ABUJA, AT THE INAUGURATION AND SWEARING IN OF THE NATIONAL CHAIRMAN OF NIGERIAN INSTITUTION OF AGRICULTURAL ENGINEERS(NIAE), PROFESSOR JOSEPH CHUKWUMA ADAMA

Protocol

President of the Nigerian Society of Engineers (NSE), Outgoing National Chairman of the Nigerian Institution of Agricultural Engineers, Distinguished Past Presidents and Council Members, Newly Elected National Chairman and Executive Members of NIAE, Esteemed Colleagues and Friends from the Agricultural Engineering Family, Representatives of Government Agencies, Academia, the Private Sector and Development Partners, Ladies and Gentlemen:

1. Introduction

It is a deep honour and a distinct pleasure to join you today as Guest Speaker at this important inauguration and swearing-in ceremony. I congratulate the newly elected National Chairman and executive members of the Nigerian Institution of Agricultural Engineers (NIAE). You have been entrusted with a responsibility that is professional, patriotic, and prophetic — a responsibility to lead our profession forward, to serve the agricultural communities of Nigeria, and to help guarantee a future of food security and prosperity for our people.

My theme this morning is: "Agricultural Engineering in the Era of Digital Transformation for Food Security in Nigeria: The Role of the Nigerian Institution of Agricultural Engineers." I will set out the challenge we face, outline how digital transformation is reshaping agricultural engineering, and propose concrete roles and actions that NIAE must champion so that technology becomes a pathway to resilient, equitable, and sustainable food systems in Nigeria.

2. The Challenge and Opportunity: Food Security in Nigeria — urgency and complexity

Agricultural sector in Nigeria is characterized by a paradox that throws up both challenges and opportunities. We meet at a moment of both pressing need and remarkable opportunity. Nigeria — richly endowed with land, biodiversity, and human capital — still grapples with persistent food insecurity, significant post-harvest losses, low productivity in key commodities, and supply chain frictions that raise costs and reduce access. Climate variability, an expanding population, rapid urbanization, global market volatility and insecurity further complicate the picture.

Food security is not just about producing more food — it is about producing better food, reducing losses, and ensuring that food reaches every Nigerian household affordably and nutritiously. It also means that as we provide enough affordable food, we also have enough that will serve as raw material for agro based industries and for export in such a way that even if these are perturbations such as drought, flood and other national disasters, we have enough food for 2-5 years. Agricultural engineering sits at the heart of this challenge. Our discipline designs, optimizes, and applies the machines, infrastructure, processes, and

systems that turn seeds and inputs into harvests, and harvests into nutrition on the table. Now, as digital technologies mature and become more accessible, we have an exceptional chance to transform how that work is done, and that is where the opportunity lies.

3. Digital transformation: an enabler, not a buzzword

Digital transformation refers to the integration of digital technologies into organizational processes, products, and services to create new value. In agriculture, it includes sensors and Internet of Things (IoT), remote sensing and geospatial analytics, data-science and artificial intelligence (AI), drones and robotics, mobile platforms and digital finance, cloud computing, and precision-control systems for equipment and storage. But technologies alone do not transform outcomes. Transformation happens when people, institutions, and systems adopt, adapt, and scale technologies with purpose.

For agricultural engineers, digital tools change the "what" and the "how" of our work. They give us the ability to measure crop and soil conditions in real time, predict pest and disease outbreaks, optimize irrigation and input use at field scale, design adaptive mechanization for diverse smallholder contexts, and manage cold-chains and logistics with data-driven efficiency. They give us the rare ability to optimize animal husbandry, fishery and management of the entire value chain of agriculture towards improved productivity. They allow us to move from intuition-based to evidence-based engineering, from reactive to predictive maintenance of equipment, and from generic solutions to tailored systems responsive to local realities.

4. Practical technology pathways for Nigeria

Let me highlight some concrete ways digital technologies are already — or could soon be — applied across the agricultural value chain in Nigeria, and the engineering challenges and opportunities they present:

a. Precision and Climate-smart Crop Management: Soil sensors, weather stations, and satellite imagery combined with machine learning models can guide precise fertilizer and water application, increasing yields while lowering costs and environmental footprint. Agricultural engineers can design affordable sensor networks and scalable decision-support dashboards appropriate for Nigerian agro-ecologies.
b. Digital Mechanization and Robotics: Smart tractors, sensor-guided planters, and small-scale robotic tools can bridge labour gaps and increase timeliness of operations. The engineering challenge: adapt mechanization to fragmented landholdings and low-capital farmers — design modular, low-cost, serviceable machines and business models (e.g., service providers, cooperatives, rental hubs).
c. Post-harvest and Storage Systems: Smart storage monitoring (temperature, humidity) and automated ventilation, combined with predictive analytics, can dramatically reduce post-harvest losses of cereals, tubers, fruits, and vegetables. Engineers must integrate low-energy cooling, solar-powered cold-chains, and sensor-based inventory systems to suit rural energy realities.
d. Supply Chain, Traceability and Market Access: Blockchain and mobile-enabled traceability systems can improve food safety, give farmers access to premium markets, and reduce transaction costs. The

role for engineers: ensure systems are secure, interoperable, and usable by actors with limited digital literacy.

e. Water and Irrigation Management: IoT-enabled pumps and controllers with remote telemetry can optimize irrigation and enable pay-as-you-use water services.
f. Design imperatives: robust hardware for harsh environments, low power consumption, and integration with local governance of water resources.
g. Agricultural Advisory and Finance: Mobile apps, SMS services, and AI chatbots can deliver agronomic advice and link farmers to digital credit and insurance. Engineers must ensure these digital services are integrated with physical infrastructures (access to mechanization, storage hubs) to convert information into action.
h. Renewable Energy Integration: Solar-powered processing, cold storage, and electrified equipment are enablers of decentralized food systems. Agricultural engineers must design systems that are cost-effective, maintainable, and interoperable with existing grids and community energy solutions.

5. The role of NIAE: three strategic pillars

To turn these possibilities into realities, the Nigerian Institution of Agricultural Engineers must lead along three strategic pillars: Capacity & Professional Development; Standards, Research & Innovation; and Advocacy & Partnership.

a. Capacity and Professional Development

NIAE must ensure that agricultural engineers in Nigeria acquire the digital skills required for modern practice. This includes:

- Curriculum modernization: Partner with universities and polytechnics to embed data science, IoT, remote sensing, and systems engineering into undergraduate and postgraduate agricultural engineering programs.
- Continuous professional development: Provide short courses, certification programs, and hands-on bootcamps for practicing engineers on digital tools, cybersecurity for agricultural systems, and technology transfer best practices.
- Technician and operator training: Recognize that machines and digital systems require well-trained technicians; develop accredited programs for field technicians, equipment operators, and maintenance staff.

Standards, Research and Innovation

NIAE should be the authoritative voice on engineering standards and research priorities:

- Standards and interoperability: Lead the development of technical standards for agricultural machinery, sensor networks, and data exchange formats to ensure that equipment and platforms can work together and scale safely.
- Local innovation ecosystems: Foster collaborative research and incubation hubs where engineers, farmers, startups, and researchers co-design

appropriate technologies — affordable drip irrigation controlled by simple GSM interfaces, low-cost solar dryers, modular processing units for cassava and tubers, etc.
- Evidence generation: Commission and disseminate applied research on what works in Nigerian contexts — cost-benefit analyses, lifecycle assessments, and social impact evaluations so policymakers and investors can make informed decisions.

c. Advocacy, Policy & Partnerships

NIAE must be a convener that shapes policy and mobilizes partnerships:

- Policy advice: Provide clear, evidence-based guidance to federal and state governments on incentives for digital agricultural infrastructure, standards for mechanization, and safe data governance policies for farmers' data.
- Public-private partnerships: Facilitate alliances between universities, startups, agribusinesses, and multilateral partners for piloting and scaling proven technologies, emphasizing inclusive models that serve smallholders and women farmers.
- Funding mobilization: Advocate for targeted finance mechanisms — blended finance, result-based contracts, and equipment-as-a-service models that reduce entry barriers for smallholder farmers.

6. Equity, inclusion, and ethics: designing for the many, not the few

Digital transformation must not deepen existing inequalities. Without deliberate action, we risk creating a "digital divide" where tech benefits large commercial farms and urban actors while leaving smallholders behind. NIAE should champion inclusive design principles:

- Gender-responsive engineering: design machines and interfaces with women farmers in mind; ensure training and service delivery reach women who make up a large share of agricultural labour.
- Affordability and service models: prioritize pay-per-use, cooperative ownership, and rental services that enable resource-poor farmers to access mechanization and digital tools.
- Data ethics and privacy: promote clear norms and technical safeguards so that farmers' data are protected, and benefits derived from data analytics flow back to producers.

7. Youth engagement and entrepreneurship

Nigeria is young. The promise of digital agriculture will only be realized if we mobilize young engineers and entrepreneurs. NIAE should:

- Support innovation challenges and hackathons

focused on agricultural problems.

- Mentor agrictech startups and create pathways for young engineers to commercialize innovations — from drone services to sensor manufacturing.
- Create membership streams and recognitions for young professionals to keep the institution vibrant and forward-looking.

8. Implementation road-map: from vision to action

Allow me to offer a pragmatic, short roadmap that the new leadership can adopt in the initial 12 months:

1. Launch a National Digital Agricultural Engineering Initiative under NIAE — a focused program to coordinate training, standards, and pilots across regions.
2. Convene a National Summit on Agricultural Engineering & Digitalization within six months to bring stakeholders together and define priority pilots.
3. Develop modular training packages (online and hands-on) and certify the first cohort of 500 practicing engineers and 1,000 technicians in digital agricultural skills in 12 months.
4. Pilot six regional hubs demonstrating integrated systems (crop & animal production): precision irrigation + mechanization + post-harvest cold storage + digital market linkage; evaluate, document, and scale within 24 months.
5. Draft and present a technical whitepaper on "Standards for Digital Agricultural Systems in Nigeria" to relevant government bodies and development partners.

9. Leadership, stewardship and institutional strengthening

These ambitions will require strong, credible leadership. To the newly inaugurated chairman and executive: your mandate is to build institutional capacity within NIAE — improve member services, strengthen the secretariat, expand funding channels, and cultivate a culture of collaboration. Be visible, be consultative, and be bold in partnerships. Strengthen zonal and state chapters so that innovation and capacity are decentralized and responsive to local agro-ecological realities.

10. Closing charge: engineers as builders of resilience

Agricultural engineers have always been builders — of machines, of systems, of infrastructure. In the era of digital transformation, we are also builders of data systems, of decision platforms, and of interfaces between human knowledge and machine intelligence. Our task is to ensure that the digital revolution in agriculture translates into more food on the table, more stable incomes for farmers, fewer losses after harvest, more available raw materials for agro-based industries and a sustainable environment for future generations.

NIAE stands at a pivotal crossroads. You can lead the profession to be not only a technical authority but also a trusted institutional partner to government, to farmers, and to industry. The opportunity is clear: leverage digital tools to increase

productivity, reduce waste, and make Nigerian food systems equitable and climate-resilient.

11. A final appeal and blessing

As you take office, remember that leadership in our field is service — service to farmers who rise before dawn and to families who depend on the daily miracle of agriculture. Pursue excellence in engineering, humility in partnership, and courage in innovation. Build standards that protect citizens, forge policies that open opportunities, and nurture talents that will carry our profession forward.

May your tenure be marked by practical achievements and measurable impacts: improved yields, reduced post-harvest losses, more farmers served by modern equipment, thriving agrictech startups, and above all, stronger food security for our nation.

Congratulations once again to the newly inaugurated leadership of the Nigerian Institution of Agricultural Engineers. I pledge my support and that of every sincere stakeholder to the realization of your vision for a digitally empowered, food-secure Nigeria.

Thank you for your attention and God bless the work of your hands, the communities you serve, and the great nation of Nigeria.

Prof. Azikiwe Peter Onwualu, FNIAE, FNSE, FAEng, FAS

President, African University of Science and Technology, Abuja

December 12, 2025.



Delivering Public Lecture by Engr. Prof Peter A. Onwualu FNIAE, FNSE FAEng



Public lectures session by NIAE members in attendance

INAUGURATION OF THE NATIONAL EXECUTIVE COUNCIL (NEC)

The inauguration of the National Executive Council and public lecture series of Nigerian Institution of Agricultural Engineers (NIAE) took place on December 13, 2025. The ceremony started at about 10:00 am with a brief welcome address by the National Chairman Engr. Prof Joshua O. Olaoye. The event represents a significant landmark in the institution's history, celebrating a smooth transition and a democratization of leadership and good governance. Recall that, the election that produced the executive took place on December 14 at the National Centre for Agricultural Mechanization Ilorin Kwara state.



Prof J. O. Olaoye comments before the commencement of the inauguration

Inauguration Day is the day when the National Chairman of our great institution and other National EXCO's were sworn-in and take responsibilities. The event occurs every two years after the institution election which was conducted during the International, National Conference and Agricultural Machinery Exhibition held in Ilorin November 2025.

The Inauguration and public lectures took place at the National Engineering Headquarters, Maitama Abuja. Key events of ceremony observed at the NIAE inauguration includes:

Welcome Address and formal speeches by the out-going National Chairman Engr. Prof Joshua O. Olaoye

Keynote and plenary lecture by Engr. Prof Azikiwe Peter Onwualu President African University of Science and Technology Abuja on the topic "Agricultural Engineering in the Era of Digital Transformation for Food Security in Nigeria: The Role of the Nigerian Institution of Agricultural Engineers."



Keynote speech by Prof. Azikiwe Peter Onwualu, FNIAE, FNSE, FAEng, FAS

Official Inauguration of the National Chairman Elect Prof Joseph Chukwuma Adama by the former National Chairman. Thereafter, the National Chairman swear-in other NEC members. These include the National Vice

Chairman and National Secretary Engr. Prof Mohammed S. Abubakar and Engr. Prof Christopher Akinbile respectively joined virtually while Engr. Dr. Prince Cyprian Ton Ndamzi as National Assistant Secretary, Engr. Dr. Christiana Adamade as National Treasurer, Engr. Dr. Bala Gambo Jahun as National Technical Secretary and Engr. Dr. Nneka Nwagugu as WABEN National Chairman took the oath of office physically.



Taking Oath of Office by the Incoming National Chairman Prof J. O. Adama MNSE, FNIAE, R. COREN



Newly Elected NEC members taking Oath of Office

NIAE Student Body inauguration also took place on the same day with the out-going President Comrade Stephen Adeyemo swear-in and handed the mantle of leadership to Comrade Sadiq Abdulmalik Mailafiya and immediately the in-coming President swear-in the National EXCO of the body.



Comrade Stephen Adeyemo Outgoing President Student Body swearing-in Comrade Sadiq Abdulmalik Mailafiya as the new President



Comrade Sadiq Abdulmalik Mailafiya Swearing-in newly EXCOs



Out-going National President posed for a photograph with the newly National President

Presentation of Award to the IPC by the National Chairman was also part of the activities during the inauguration ceremony.



National Chairman decorating the IPC



Presentation of Plague to the IPC for good governance

Dignitaries at the inauguration include; The COREN President, Engr. Prof. S. Z Abubakar represented by Engr. Dayyabu Tijjani, Former Dean of Faculty of Engineering, University of Uyo and former National Chairman of NIAE, Engr. Prof. A. F. Alonge, Director of Mechanization, Federal Ministry of Agriculture and Food Security, Engr. Maruf Ajenifuja, Engr. Daniel U. Udo former Director, Department of Rural Development, Abuja, Engr. Dr. Taiye Tehinse Samaila Deputy Director, Department of Rural Development, Abuja and Engr. Elesa Bitrus President of Tractor Owners and Operators Association of Nigeria (TOOAN) Abuja. Others at the event were Engr. Fatima Baba Ahmed, Deputy Director, Irrigation and Drainage Department, Federal Ministry of Water Resources and Sanitation, Engr. Chief Rita Eze of RYCON, Abuja. Engr. Sabiu Bello former NEC member, Engr. Dr. Isaac Tanam of Bingham University Abuja and Engr. Zakariyahu Salihu NIAE Abuja Chapter.



Engr. Tijjani Dayyabu representing the COREN President delivering his message



Engr. Dr. Taiye Samaila giving a word of advice to the newly NEC Members



Prof Folarin A. Alonge gracing the occasion



Group Photograph of Participants after the inauguration

OBITUARY



The dead has been announced of Prof Abdulganiy Olayinka Raji, who departed this world on Friday 19 December, 2025.

Late Prof Raji, a First Class graduate of the Department of Agricultural Engineering, University of Ibadan and recipient of the Commonwealth Scholarship, was until his passing, an astute academic and a dedicated member of the University of Ibadan Community in different capacities, as well as at the National level in Nigeria.

At different times, he served within the University of Ibadan Community as Head of Department, Director of Management Information Systems/ICT, and the Central Appointments and Promotions Panel, among many others.

At the National level, he was among the delegates from Oyo State to the 2014 National Conference in Abuja. Moreover, on account of his expertise, dedication to duty and trustworthiness, he was again called upon for National Service as a Resident Electoral Commissioner under the Independent National Electoral Commission from 2017 to 2023, a position in which he served meritoriously.

At the professional level, he was a Fellow of the Nigerian Institution of Agricultural Engineers, and member of the Nigerian Society of Engineers, among many others.

He was survived by his lovely wife and children.

He was buried on Saturday, 20th December, 2025 according to Islamic rites.

May his gentle soul rest in perfect peace, Amen.

WEDDING CEREMONY

Engr. Uduakobong Akpan took Engr. Ima-Obong Akpanas his wife. The marriage was performed under the following events:

- Football Match (NSE Machines vs Old Stars) – 24th December at A.M.E Zion Primary School Field, Ikot Mbon Ikono

- Bridal Shower – 25th December at Ibom Five Star Hotel & Golf Resort

- Bachelor's Eve – 25th December at Pals Club House

- Traditional Marriage – 26th December at Amunice Event Centre

- Court Marriage – 27th December

- Thanksgiving and Farewell – 28th December at Church of Christ, Mbiabong Ikot Antem



Engr. Uduakobong Akpan and Engr. Ima-Obong Akpanas get wedded