

# **COMMUNIQUE OF THE 15TH INTERNATIONAL CONFERENCE AND 35<sup>TH</sup> ANNUAL GENERAL MEETING OF THE NIGERIAN INSTITUTION OF AGRICULTURAL ENGINEERS (NIAE) HELD AT THE 2,500 CAPACITY AUDITORIUM, FEDERAL UNIVERSITY OF TECHNOLOGY, AKURE, ONDO STATE FROM 22<sup>ND</sup>-26<sup>TH</sup> SEPTEMBER, 2014.**

## **PREAMBLE**

The 15th International Conference and 35<sup>th</sup> Annual General Meeting (AGM) of the Nigerian Institution of Agricultural Engineers (NIAE) tagged Akure 2014 was hosted at the 2,500 Capacity auditorium of the Federal University of Technology, Akure from 22<sup>nd</sup> - 26<sup>th</sup> September, 2014. The theme of the conference was “**Agricultural Engineering Infrastructures for Wealth Creation**”. It was attended by Agricultural Engineers and other related professionals from various higher institutions of learning within and outside Nigeria; Federal and State Ministries of Agriculture, Departments, Agencies and private organizations. A total of 286 participants attended the conference and student workshop; consisting 183 participants and 103 students. The opening ceremony was attended by over 1000 participants and invited guests. A total number of 164 technical papers on the various sub-themes were submitted, reviewed of which 121 were accepted and published in the conference proceedings.

## **INTRODUCTION**

The opening ceremony was chaired by the President of the Nigerian Society of Engineers (NSE), Engr. Ademola Olorunfemi; *fnse, fniae*, COREN Reg., while Engr. Ike Azogu, *fnse, fniae*, a renowned Agricultural Engineer and Executive Director, National Centre for Agricultural Mechanization (NCAM) Ilorin, Kwara State was the chairman of the plenary session. Keynote address was delivered by the Chairman, Okomu Oil Palm PLC in Edo State, Mr. Gbenga Oyebode ably

represented by the Managing Director of the company, Dr. Graham Hefers. Remarks were made by the Vice Chancellor, Federal University of Technology, Akure (FUTA), Prof. Adebisi G. Daramola who was represented by the Deputy Vice-Chancellor (Academic), Prof. Adedayo E. Fasakin and the National Chairman, NIAE, Prof. Babatunde A. Adewumi during the opening session. Also present was the Governor of State of Osun, Ogbeni Rauf Aregbesola, ably represented by the Special Adviser on Agriculture and Food Security, Mr. Felix Agunbiade and the founder of Afe Babalola University, Ado-Ekiti (ABUAD), Aare Afe Babalola who was also represented by Prof. Abiodun Ojo. Goodwill messages were also presented from Ondo State Ministry of Agriculture, tertiary institutions, allied organizations, Deans of Engineering and some professional bodies.

Three lead papers were presented at the plenary session which addressed issues such as: harnessing renewable energy for improved agricultural production, critical infrastructure for rapid agricultural business development and appropriate strategies for getting the youth involved in Agriculture. The keynote address focused on bridging the gap between policy framework and implementation strategies for Commercial Agriculture Development in Nigeria. At the technical sessions, papers were presented and discussed under the following fields of Agricultural Engineering: Power and Machinery; Farm Structures and Environment; Emerging Technologies; Soil and Water Engineering; and Post-Harvest and Food Engineering.

The student workshop centered on procurement for engineering projects and preparation of tender document.

At the end of the conference, the critical issues were observed and recommendations made to enhance successful implementation and sustainability of Agricultural Engineering Infrastructures for wealth creation.

## **OBSERVATIONS**

The following observations were made during the conference:

1. Appropriate Agricultural mechanization and infrastructural development particularly irrigation infrastructure in Nigeria is a key to unlocking the green economy for the wellbeing of Nigerians;
2. The current curriculum for Engineering programmes in Nigeria did not provide any training on the procurement process for engineering projects and preparation of tender documents in line with international standards
3. The new Federal Government initiative on Land Clearing for agriculture in several parts of the nation as a laudable program that will contribute to increase in food crop production in the country
4. The substantial investment of the current administration in Strategic Grain Storage Facilities and the proposed Crop Processing Infrastructure in several parts of the nation;
5. The sustained import substitution policy of the Federal Government and policy initiative to promote the use of local production and processing of rice and cassava flour;
6. That several agro and household based waste products could serves as cost effective materials in farm structures and also play significant roles in bioremediation of crude-oil polluted agricultural soils;
7. Appropriate control of livestock housing environment significantly impact on the productivity and cost of production;
8. The need to develop pilot biofuel plants in Nigeria to enhance indigenous technology in Nigeria and the use of local products in solving the energy crisis;

9. The need to develop appropriate planters and harvesters for indigenous tuber crops so as to mechanize the production process;
10. Finally, the NIAE welcome with interest the significant investment of private investors in the agricultural sector as a result the federal government attractive policy framework.

## **RECOMMENDATIONS**

The following recommendations emanated from the conference:

1. The Institution recommends the improvement of existing irrigation infrastructure in Nigeria and complete ongoing irrigation projects in the nation.
2. The Institution suggest the improvement of the current curriculum for Agricultural Engineering in our higher institution to include modules on procurement process for engineering projects. This would assist in graduating students who can be entrepreneurial in outlook and thereby create jobs.
3. The institution suggest substantial increase in investment by Federal, State and Local Governments (2.5% of Value Added Tax) in land clearing and development as a critical infrastructure for large scale agriculture in Nigeria to further support the mechanization component of the Agricultural Transformation Agenda (ATA) of the government. We recommend full scale involvement of Agricultural Engineers in the planning and execution of land clearing projects. We also recommend effective land development process including subsoiling to be included in such land clearing projects.
4. There is need to develop appropriate mechanism and framework for the effective and profitable utilization of the Strategic Grain Reserves in the nation. The institution shall be willing to assist the Federal Government in developing the crop processing infrastructure based on our expertise and indigenous knowledge.
5. There is need to provide some forms of subsidy to investors willing to set up modern Cassava and Rice Processing facilities in Nigeria. Moreover, it will be apt to build capacity on local production of the Industry Grade Cassava Flour and promotion of local research on improved rice processing. It should be

mandatory for such investors to have a research and development unit attached to higher institutions based in Nigeria.

6. We recommend commerce oriented research into the utilization of abundant agricultural waste resources in Nigeria and also the use of agro-based product in remediation of oil polluted agricultural soils.
7. We suggest increased collaborative research by all stakeholders on optimum environment for efficient production of livestock in Nigeria particularly the indigenous species.
8. The institution in collaboration with the appropriate agencies of the Federal Ministry of Science and Technology should be tasked with developing pilot biofuel plants that will utilize indigenous non-food crop products for the production of biofuels (biodiesel). Such project should be accorded national priorities.
9. The National Center for Agricultural Mechanization in conjunction with the committee of the Heads of Department of Agricultural Engineering should be funded to harmonize and improve existing designs on tuber crop planters and harvester and produce a commercial grade design within the next 24 months.
10. The Federal Government should institutionalize and give appropriate legal backing (act of parliament) to all the policies aimed at entrenching local production of food and agro-based raw materials in Nigeria; as we observed this is the stimulant needed for investment in the sector.



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