

COMMUNIQUE OF THE 10TH INTERNATIONAL CONFERENCE AND 31ST ANNUAL GENERAL MEETING OF THE NIGERIAN INSTITUTION OF AGRICULTURAL ENGINEERS (NIAE) HELD AT OLIVE GATE HOTEL, ENUGU FROM OCTOBER 20TH TO 23RD, 2010

The Nigerian Institution of Agricultural Engineers held her 10th International Conference and 31st Annual General Meeting at the Olive Gate Hotel in Enugu from 20th to 23rd October 2010. The theme of the conference was *Mechanization for Sustainable Agriculture and Liberalized Economy*. A key note address (by Engr. I. K. Musa), two lead papers (by Engr. Prof. S. Z. Abubakar and Engr. Prof. B. A. Adewumi) and over 70 technical papers were presented during the gathering of Agricultural Engineers from all over the country. The opening ceremony was chaired by Engr. Prof. E. U. Odigboh and graced the Honorable Minister of Agriculture, Prof. Ahmed Sheik Abdullah (represented by the Engr. Ike Azogu, Executive Director, NCAM), the Vice Chancellor of Enugu State University of Science and Technology, Prof. C. O. Onyeji (represented by Prof. Aloy Uzoagulu).

The Communiqué emanated from the Conference is as follows:

1. Agricultural Mechanization Policy

There seems to be no definite agricultural mechanization policy in Nigeria. It is advised as a matter of urgency, that government should gazette functional agricultural mechanization policy for the country. The policy should be all embracing and should address the entirety of engineering in agriculture and not just tractorization. The Government must involve NIAE, National Centre for Agricultural Mechanization (NCAM) and all relevant partners and stake holders in the formulation of agricultural mechanization policy for the nation. The application of tero-technology maintenance management policy is recommended as a lead way to our maintenance culture.

2. Labor Gap

It was sadly observed that a lot of vacancies exist in many government parastatals and agencies for agricultural engineers not filled. There are many cases where only very senior agricultural engineers remain in the employment of Federal and State Ministries of Agriculture and no plans to replace them with younger ones, readily available in the labor market. It is strongly recommended that all relevant agencies should urgently engage qualified agricultural engineers in both public and private sectors of the economy to fill the labor gap.

3. Development of Rural Areas and Rural Infrastructure

It was observed that the rural areas with up to 70% of Nigerians and engaging up to 80% resident population in agricultural production do not attract sufficient attention of the Government in terms of development. Government at all levels should make it a priority to give concentrated attention to develop the rural areas. Adequate engineering infrastructures should be provided to support rural industrialization. Viable rural centres should be designated as agro industrial centres.

4. Agricultural Engineering Codes and Standards

It was observed that NIAE, NCAM and Nigerian Society of Engineers (NSE) have cooperated with the Standard Organization of Nigeria (SON) to produce Agricultural Engineering Codes and Standards. The Government of Nigeria should continue to support the production of more Agricultural Engineering Codes and Standards. The Federal Government should especially support NCAM financially to fulfill its objectives to produce Agricultural Engineering Codes and Standards.

5. Agricultural Engineering Extension Services

NIAE appreciates the services of agricultural extension workers in Nigeria but observed that this category of workers do not have sufficient technical background to handle extension services on mechanization. It is strongly recommended that agricultural engineering extension services should be established in government departments, ministries and State Agricultural Development Project (ADPs) along with other extension service delivery actors (NGOs, POs,) in the sector and agricultural engineers, who have the technical expertise, should be recruited for the job specifications.

6. Land Ownership and Development

It was observed that problems and challenges arising from difficulties associated with tillage operations have a direct bearing on land clearing and development. Therefore, government should establish an effective mechanism and outfit for the promotion of equitable and transparent approach to land development that would ensure guaranty to users so as to invest in the sustainable development and conservation of fertile land taking into consideration experiences gained from the past (e.g. NALDA, DFFRI, etc).

7. Procurement and Optimal Use of Machinery and Agricultural Inputs

Selection and acquisition of machinery should be viewed as a technical issue. It is strongly recommended that NIAE, NCAM and qualified Agricultural Engineers should be involve and consult for machinery selection, procurement, operation and maintenance.

Although inorganic fertilizers and other agricultural inputs are useful for agricultural production, expert guidance be taken in their application to ensure that the environment and ecosystems are protected.

8. Involvement of Agricultural Engineers in Mechanization

It was agreed that the agricultural engineer is the first and most appropriate personnel in issues related to agricultural mechanization. It is therefore suggested that agricultural engineers must be fully involved in all segments of agricultural mechanization including machinery development, farm settlement projects, dam and irrigation programs, livestock, fishery, forestry mechanization, strategic storage reserves, rural electrification, agricultural waste management, renewable energy, biomass engineering, agro environmental issues, etc.

9. Effective Linkage/Partnership and Networks

Lack of effective linkage/partnership was observed among the stake holders in agricultural engineering practice in Nigeria. It is recommended that both public and private sectors (industrialists, artisans, processors, marketers, etc) should liaise with research institutes and universities for commercialization of existing prototype equipment developed indigenously. Research Institutions, Polytechnic and Universities need to also liaise with the public and private sectors to capture genuine practical problems or demands by specific user groups from which researches can be formulated.

10. Emerging Technologies

There are great developmental opportunities in emerging technologies such as precision agriculture and applied biotechnology. Nigeria, as a nation, should imbibe their application through research funding.

Engr. Prof. S. Z. Abubakar, FNIAE, MNSE
National Chairman

Engr. Dr. M. K. O. Othman, MNSE, NIAE
National Secretary