

**RESOLUTIONS OF THE 12TH MEETING OF THE NATIONAL COUNCIL ON
SCIENCE AND TECHNOLOGY (NCST), HELD FROM 18TH - 22ND MARCH,
2013 AT PREMIER HOTEL, MOKOLA, IBADAN, OYO STATE**

The 12th meeting of the National Council on Science and Technology (NCST) was held from Monday, 18th - Friday, 22nd of March, 2013 at the Premier Hotel, Mokola, Ibadan, Oyo State with the theme "Science, Technology and Innovation (ST&I) as Catalyst for the Actualization of Transformation Agenda".

2. The meeting, declared opened by the Executive Governor of Oyo State, Senator Abiola Ajimobi ably represented by the Secretary to the State Government of Oyo State, Alhaji Waheed Akin Olajide was chaired by the Honourable Minister of Science and Technology, Professor Ita Okon Bassey Ewa, FMSN. The meeting had in attendance the Chairman, Senate Committee on Science and Technology, Sen. Prof. Robert Ajayi Boroffice, OON, and the Head of the Civil Service, Oyo State, Alhaji Tajudeen Aremu. Also in attendance were the Vice Chancellors of the University of Ibadan, Prof. Isaac Adewole and Ladoké Akintola University of Technology (LAUTECH), Ogbomosho, Prof. Adeniyi Gbadegesin, the Commissioners of States' Ministries of Science and Technology and related Ministries, Permanent Secretary of Federal Ministry of Science and Technology (FMST) and Permanent Secretaries of States' Ministries of Science and Technology and related Ministries. Directors-General/Chief Executives of FMST and other cognate Ministries' Agencies and Parastatals, Directors of the FMST and other Ministries, Departments and Agencies (MDAs),

3. Other dignitaries present at the Council included Representatives of National Universities Commission (NUC), National Association of Small Medium Enterprises (NASME), the Chief Medical Directors of the teaching hospitals, Deputy Chief of Staff, Oyo State, Secretary of Science Innovation and Climate Change, British High Commission, Captains of Industries, Gentle Men of the Press and Distinguished Participants.

4. The Council meeting was preceded on the first and second day (18th and 19th March, 2013) by the technical session of officials from the various States comprising Permanent Secretaries and Directors in charge of Science and Technology matters and Directors-General and Directors of cognate MDAs. The technical session was chaired by the Permanent Secretary, Federal Ministry of Science and Technology, Mrs. Rabi S. Jimeta, mni. In her welcome remarks, the Permanent Secretary implored the participants to take the meeting seriously as they deliberate on the presented memos and recommend the way forward on how Science, Technology & Innovation (ST&I) will foster development of the country.

5. At the opening ceremony, different dignitaries remarked that:

- This meeting was the first of its kind in the history of Oyo State and must provide a platform for exchange of ideas and expertise for the enhancement of the application and development of S&T in all spheres of knowledge. The Forum for S&T Commissioners was proposed for consideration.
- Institutionalization of the new National ST&I Policy as driver for industrialization and socio-economic development of Nigeria with its

implementation framework anchoring on the National System of Innovation (NSI).

- States should continue to partner with FMST in advancing the course of S&T as developmental agenda remains a mirage without the right positioning of S&T.
- S&T has not been given due recognition thereby resulting in the low allocation of less than 0.1% funding to date.
- Scientific oriented decisions are essential to set the pace of socio economic development in Nigeria especially in establishing of Research Centres.
- The implementation of the new ST&I Policy, especially the National Research and Innovation Fund (NRIF) should be given priority. Incubation Fund or grants through special Banks to encourage SMEs was proposed
- To encourage effective implementation, the FMST is urged to forge ahead its partnership with the Academia and the Organised Private Sector (OPS).
- The University of Ibadan (UI) was reported to have instituted a Research Fund for four key areas viz-a-viz, energy, food security, health and sustainable development.
- Stronger relationship and synergy between Medicine and Technology.
- Nigeria is assured of adequate cooperation and partnerships in S&T by the British High Commission.

6. In his keynote address, the chairman of the Council and the Honourable Minister of Science and Technology, Professor Ita Okon Bassey Ewa, FMSN

announced to the Council that the revised National Science, Technology and Innovation Policy (ST&I) was approved by the Federal Executive Council in 2012 and has since been presented to the public as well as to other development partners. He also added that the Policy was acclaimed as one of the best in Africa. He reiterated that the performance in the seven sectors identified as the main growth drivers of the transformation agenda have been constrained among other things by the low investments in scientific research and development. He stressed the recent acknowledgment of the importance of ST&I to the achievement of the international development agenda through Millennium Development Goals (MDGs) for developing economies as emphasized by the United Nations Economic and Social Council (ECOSOC) and the implementation of RIO+20 objectives. He further informed the Council of the Ministry's plan towards the establishment of Sheda Science and Technology Complex (SHESTCO) Silicon Valley (S&T Park) for promoting the commercialization of ICT and Solar Technology. Noting the importance of linkages among key actors thereby adopted the Triple Helix Model to make ST&I deliver and impact on national development.

7. In his address, Senator Abiola Ajimobi, expressed that Oyo State could leverage on the knowledge capacity in FMST and its Agencies to develop the State capacity in Science and Technology led-development. He thereafter declared the meeting open.

8. The report of the Technical Session by the Permanent Secretary, Mrs. Rabi S. Jimeta, mni was as follows:

- A total of 470 delegates were in attendance;

- Ninety Four (94) memos were received, seventy two (72) were considered while twenty two (22) were stepped down;
- The matters arising from the extra ordinary meeting of National Council of Science and Technology were also considered.

9. Highlights of the major decisions and recommendations of the Council are presented below:

9.1 Council Noted

1. The activities undertaken so far by the Ministry on the revised National Science, Technology and Innovation (ST&I) Policy
2. The laudable initiative of the development of the National System of Innovation (NSI) as a tool for socio-economic development
3. The incidence of climate change and its attendant effects on Nigeria's environment and the need for FMST to conduct a National Climate Change Adaptation Technology Needs Assessment for Nigeria in collaboration with all relevant stakeholders.
4. The progress made by FMST towards the development and equipping of a National Science and Technology Museum (NSTM) located within the Sheda Science and Technology Complex.
5. The need for FMST to collaborate with the key stakeholders in order to actualize the completion of the S&T Park because of its immense benefits for overall national development.
6. The importance and the need to support the development and use of renewable energy technology in the country for socio economic development.
7. The quest for Nigeria to acquire nuclear energy technology for peaceful purposes in the country.

8. The International Junior Science Olympiad (IJSO) as an annual competition in the natural sciences (Biology, Chemistry, Physics and Mathematics) for students of not more than 15 years.
9. The upgrade of the Federal Ministry of Science and Technology's websites and its development with a view to making it accessible to members of the public for effective utilization.
10. The recommendation of the need for advocacy by NITR to all agencies and the society at large to create awareness on the effects of the activities of the Institute.
11. The recommendation on the need for collaboration and provision of funds to the NILEST to enable them discharge their mandates effectively for the greater benefits of the national economy.
12. Update on some of the activities of the NNMDA since the last Council meeting and the request for more encouragement, support and partnership in some of her activities.
13. The additional mandates of NILEST regarding their accreditation for HND in Biochemistry, Microbiology and Polymer Technology. Following the new status, the students' enrollment has increased by over 300% in 2013 including upgrade in infrastructural facilities.
14. NITR's initiative on advocacy programmes embarked on towards the eradication of African Trypanosomiasis and Onchocerciasis diseases.
15. The efforts by NBRRI towards addressing the current skills gap in the Building/Roads and Construction sectors of the economy
16. The efforts by NBRRI towards the establishment of a Pozzolana Cement Pilot plant in the Country with a view to popularizing its activities through the establishment of States field stations including FCT

17. The presentation for funding of the National Water Solution Project under the SURE-P intervention by NASENI
18. The efforts of FMST at institutionalizing the Ward-Based Cluster Project in the country and encouraged all States, Local governments and agencies of FMST to partner in the implementation
19. The collaboration effort and programmes of RMRDC so far
20. Appointment of RMRDC by the World Association of Industrial and Technological Research Organizations (WAITRO) as the Regional Focal Point (RFP) for Africa and the need for all Parastatals under the FMST to join WAITRO
21. The support of World Bank through STEP-B towards RMRDC's projects and the need to encourage the dispersal of the project results to the investing public.
22. The efforts of RMRDC in local sourcing of Raw Materials for the Pharmaceutical sector
23. The efforts of PRODA on the Pencil project and proposed the need to domesticate the technology.
24. The request of PRODA for the provision of adequate funds to encourage local R&D in production of electrical porcelain insulators, bricks, pottery production and all other initiatives
25. The efforts of SHESTCO on the development of a drug on epilepsy and the need for the Agency to interface with the National Cereals Research Institute, Badeggi on its Rice Transformation Project as well as encourage access for usage of its equipment and facility by other research institutions.
26. The award of Masters degree in Technology Management in collaboration with Federal University of Technology (FUT) Minna by NACETEM and the

ranking index of Research Institutes (RIs) projects as well as the ST&I indicator projects.

27. The commercialisation of appreciable energy R and D results of ECN is of utmost importance in order to meet the energy needs of the nation.

28. Efforts of NASRDA in the provision of training courses and support to other West African countries in building the capacities of their citizens in space related courses.

29. The progress made by NABDA on the;

- a. application of biotechnology on indigenous industrial capacity for biofuels production in the country.
- b. desirable use of Biotechnology in exploiting the DNA fingerprinting tool for wider applications and revolutionalising the developmental programmes in diverse areas;
- c. production of all Male Tilapia Fish;
- d. Biosafety Bill for regulatory issues in the country and further directed the Agency to identify the status of the Bill and report back to the Council Chairman;
- e. Development of organic fertilizers and bio-pesticides for the country and further directed that synergy should be established with other Agencies executing similar mandates
- f. Proposal to transfer Stem Cell Technology for the establishment of a Bone Marrow Transplantation Programme in Abuja for the treatment of sickle cell anaemia and other related diseases; and further encourage the Agency to collaborate with other relevant stakeholders;

30. Benefits accruable from the establishment of the National Centre for Microbial Type Cultures Collection (NCMTC) ; and further encouraged the Agency to collaborate with other stakeholders in the medical sciences;
31. Achievements of Akwa-Ibom State Ministry of Science & Technology in the area of her capital project implementation and the importance of establishing S&T directorate.
32. NOTAP's efforts in tracking technology transfer agreements.
33. NOTAP's national programme on the creation of 1,000,000 gainful employments/jobs every year using the indigenously evolved technologies and innovations and the Africa's Premier Science, Technology and Innovation Corridor, Abuja (APSTICA).
34. Importance of NOTAP's Agenda 1777.
35. The achievements of the Nasarawa State Ministry of Science and Technology and further encouraged her to partner with the FMST's parastatals.
36. The achievements of the Oyo State Ministry of Industry, Applied Science and Technology.
37. The achievements of the Yobe State Ministry of Science and Technology particularly in the area of neem research and further directed the State to relate with relevant Agencies.
38. The recent efforts by NASRDA to harness the capabilities of NigeriaSat-2 high resolution satellite imagery for the whole country;
39. That NASRDA had earlier completed the 1:100,000 National Resource Inventory Map of 1:250,000 using satellite imagery data from NigeriaSat 1 launched in 2003;

40. That NASRDA is leveraging on the improved resolution to also improve the earlier resource inventory map that has saved the country over Two Billion Naira;
41. That the imageries from NigeriaSat -2 are readily available at NASRDA and currently being used for the development of Nigeria's Geospatial Data Infrastructure programme, provision of data and information for infrastructure projects, disaster management, environment resources planning, monitoring and management;
42. That information from the Resource Inventory of the whole country when completed will be used by foreign investors to ascertain available resources for various investment purposes;
43. The achievements of States Ministries of Science and Technology and encouraged them to liaise with National agencies of government to execute their ST & I programmes;
44. The passion of the National Association of Small and Medium Enterprises (NASME) to drive the promotion of research results for industrial development; **and**

9.2 Approved that:

1. The FMST should initiate actions on the establishment of the National Research and Innovation Council (NRIC) to be chaired by the President.
2. That actions be initiated on the creation of the National Research and Innovation Fund (NRIF) by FMST
3. The establishment of a Forum for Commissioners of S&T in the 36 States and the Secretary FCT Board for S&T with secretariat at FMST

4. The popularization of the outcomes of the Rio+20 Conference pertaining to the use of technologies for sustainable development through stakeholders' workshops.
5. That FMST should undertake the project on Bio-resources Mapping, Development and Utilization in collaboration with stakeholders.
6. The establishment of a Gender Desk in each of the 36 States Ministries of S&T and FCT Board of S&T for mainstreaming women in ST&I for sustainable National Economic growth and further directed its implementation before the next Council meeting.
7. The establishment of Nigerian Silicon Valley while recommending that it should be named as SHESTCO Silicon Valley.
8. The support and recommendation for improvement in the funding level of the Presidential Standing Committee on Inventions and Innovations (PSCII)
9. The collaboration of NILEST, NARICT, NOTAP, etc with States, private sector and stakeholders' in the leather industry to commence implementation strategies aimed at repositioning the sector.
10. The production of a comprehensive and credible data/information on R&D efforts conducted by Nigerian Scientists on Tar Sands for dissemination by FMST.
11. The collaboration of FMST with the states and other stakeholders on the production of a Compendium of 100 Years of Science and Technology in Nigeria and further directed its implementation by December, 2013.
12. The collaboration of FMST and States Ministries of Science and Technology/FCT Board of S&T with the Federal and States Ministries of Education to organize JETS programmes at all levels.

13. The participation of States Ministries of Science and Technology in the 2013 edition of the National Science and Technology (NASTECH) Week and further directed FMST to send out invitations on time.
14. The implementation of the automation of activities of the FMST and the States S&T Ministries to strengthen administrative system.
15. Provision of functional science laboratories to secondary schools by NISLT and to employ laboratory technologists to manage them as required by law.
16. NITR should popularize its activities by establishing Field Stations in States including FCT
17. The prioritization of the budget for the theoretical framework of NBRRI Skills Development Scheme (NSDS) estimated to be N100 million and participation of States Ministries of S&T and Works and Housing nationwide on the NSDS.
18. That NBRRI in collaboration with the Federal Ministry of Industry, Trade and Investment should set up the second Pozzolana Cement Pilot Plant in geo-political zones of the country using volcanic ash as raw material and promote the establishment of commercial Pozzolana Cement Enterprises in Nigeria as done in other countries. In addition, NBRRI should sensitize the State Ministries of S&T nation-wide on this innovation.
19. The participation of other States who have not responded to FIIRO regarding the proposal on Youth & Women Empowerment and relevant stakeholders should also participate at the proposed Investment Forum on SME financing towards the commercialization of R&D results.
20. That FIIRO should be adequately supported during the budget process to allocate more funds for the successful commercialization of all projects as itemized in the memo.

21. The Establishment of a Cassava Processing Research Centre and Industrial Enzyme Model Plant at FIIRO
22. The proposal of a separate line budget for research recurrent expenditure which would be in line with the universities to enhance research and development activities for NARICT and further directed its application to be extended to all Research Institutes under the Ministry.
23. That NACETEM acts as appropriate on the ranking index of Research Institutes (RIs) as well as the STI indicator projects.
24. That ECN should proceed with the review of the National Energy Policy and the legislation of National Energy Master Plan.
25. That NABDA should include the DNA bar-coding technique into the DNA fingerprinting tool
26. The establishment of the Technology Incubation Centres in the following states: Nasarawa, Benue, Ebonyi, Rivers, Gombe, Katsina, Jigawa, Yobe and Kogi and further directed NBTI to inform FMST on its modalities.
27. That NOTAP issues circular to all MDAs directing companies operating in various sectors of the economy under their supervision to register all their technology transfer agreements with the Agency.
28. The collaboration of MDAs and other relevant stakeholders with NASRDA to build the capacity of their personnel for effective use of space technology application with a proviso that the calibration is completed and the satellite commissioned appropriately.
29. States should cease from outsourcing technologies that are available in the country.
30. Functional science laboratories be provided for secondary schools.

31. Schools should employ laboratory technologists to manage the science laboratories as required by law.
32. Technology entrepreneurs and industrial based technicians should be engaged to take up inventions from the research institutes.
33. Yobe State should establish an industrial processing cluster on Neem fertilizer which will consequently lead to job and wealth creation in the State.
34. A strong advocacy be made to the Federal Ministry of Agriculture on the need to include organic fertilizer in the overall fertilizer mix of the nation.
35. Establishment of a Cassava Processing Research Centre; and Industrial Enzyme Model Plant at the Institute.
36. The cassava bread with 20% cassava/wheat composite should be promoted.
37. NASENI needs to collaborate with other sister Agencies in related projects including the Federal Ministry of Water Resources.
38. The Cluster Concept propagated by the RMRDC and local sourcing of raw materials should be adopted by all stakeholders.
39. FMST should conduct a National climate Change Adaptation Technologies Needs Assessment in collaboration with all relevant stakeholders;
40. There is need to actualize and popularize the Silicon Valley Initiative and regenerated rice, wheat and cassava project of SHESTCO by the FMST for national development.
41. In view of the many identified feasible hydro-power sites in the country, PRODA is encouraged to collaborate with other stakeholder institutions in the development of small hydro power turbines in the power sector.

42. A deliberate plan to commercialise the PRODA pencil project is imperative and a Committee needs to be set up to actualize this step with immediate effect.

43. NNMDA should put in place a mechanism for clinical trial and collaborate with NABDA since the mechanism of the herbal drugs is biological

44. Partnership for the Women in Science Initiative in Nigeria and support for their upcoming conference through the OSWD should be from all stakeholders.

45. The Forum for Commissioners of S&T at the state level should be established, and have its secretariat at the Federal Ministry of Science and Technology (FMST) Abuja.

10. **Council** commended the Government and the people of Oyo State for the unparalleled hospitality extended to delegates and the human capital deployed to ensure the success of the 12th meeting of the National Council on Science and Technology.

11. **Council** agreed in principle that the hosting of the 13th meeting be decided after the Honourable Commissioners must have consulted adequately with their respective Governors.

DATED THIS 22ND DAY OF MARCH, 2013 AT THE PREMIER HOTEL, IBADAN, OYO STATE