



NBRRI

NEWSLETTER

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1st and 2nd Quarter Edition



**VP OSINBAJO TOURS NBRRI STAND AT
2021 SCIENCE AND TECHNOLOGY EXPO**

Handwritten signature

Director General/CEO

Prof. Samson Duna

Editor-In-Chief

Daniel O. Makava

Associate Editor

Peter Mashem

Staff Writers

Oneshi Umoche

Josephine Adeyemi

Aminat Adekunle

Makava Richard

Uham Danshak

Izere Jonathan O

Blessed Ugbede

Ganyilo Goodness

Umar Ameena Aliu

Photographer

Olotu Mohammed

NBBRI

*(Vision, Mission & Core Values)
Building capacity and setting the
pace in indigenous construction
technology development.*

VISION

To evolve and use a comprehensive and integrated approach in capacity building and investment promotion so as to foster the application of environment friendly and energy efficient innovation, construction materials, manufacturing technologies and cost effective building and road construction practices, which will enhance job creation, wealth generation and poverty reduction as well as nurture the emergence of vibrant, knowledge based and highly competitive indigenous construction companies capable of meeting global standards.

MISSION

Integrate R & B, Capacity building and robust extension services in which technology innovation and knowledge based practices in the fields of building road and engineering materials will be used to provide adequate and affordable housing and road infrastructure as well as increased economic empowerment.

CORE VALUES

- Professionalism
- Resourcefulness
- Commitment and Integrity
- Innovativeness

Editorial

I welcome you all to the first and second quarters of the 2021 NBBRI Newsletter. We have stories that will confirm that NBBRI has done a lot within the first half of this year.

In this edition, the Nigerian Building and Road Research Institute had the honor of having His Excellency, the Vice President of the Federal Republic of Nigeria, Prof. Yemi Osinbajo and some Honourable Ministers touring NBBRI's stand at the 2021 Science, Technology and Innovation Expo with the theme "Science, Technology and Innovation (STI) for Economic Recovery and Sustainability Amidst COVID-19 Challenges".

Again the Institute held its 10th Annual International Conference/1st Virtual Seminar with the theme: Circular Economy in the Built Environment for Enhanced Performance of the Nigerian Construction Industry. The stories and speeches during the event are captured in this edition.

Also in this edition, the Permanent Secretary (FMSTI) Mr. Sunday Edet Apkan paid a courtesy visit to NBBRI's Administrative Headquarters, Abuja as he stated that research is very important in the country and should be considered one of the foremost priorities of the country.

The DG/CEO, Prof Samson Duna commissioned a one block of three classrooms built by NBBRI's Board Chairman in Tai Community in Gombe. He also paid a condolence visit to the family of His Royal Majesty Dr. Abdu Baba Maisherull who was the Mai Tangale before his demise. Interesting story to read.

Included in this edition is the handing over of NBBRI's sponsored projects at the Palace of the Olotu of Ota, Ogun State. NBBRI also conducted training for Artisans among the Internally Displaced Persons in Jos. Also, the Institute handed over three-bedroom bungalows constructed at Model Secondary School, Maitama and Government Science Girls Secondary School, Kuje to the management of FCT Secondary Education Board.

As part of NBBRI's effort in nation building, the Institute signed a very important MoU with Niger Delta (LIFE-ND) in the bid to tap from the wealth of knowledge of the Institute in area of training, construction and maintenance of Rural Access/Feeder Roads in the Niger Delta Region.

Other news items to read in this edition includes; Universal Basic Education Commission ready to collaborate with NBBRI. RITVALUE Consultants also sought collaboration with NBBRI mainly in areas of commercialization and promotion of NBBRI Technologies. The Peace and Private Development Centre also paid a courtesy visit to the Institute. The Nigerian Institute of Civil Engineers is also to partner with NBBRI in construction and research development.

The DG/CEO also bagged an award of Distinguished Ambassador for Children's Safety from the Driving School Association of Nigeria. The Center for Peace Transparency and Accountability also accorded a special recognition to NBBRI.

There are also pictures and stories from various events that took place within this quarter. The wait is over, enjoy your reading.

Daniel Makava
Editor-in-Chief

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NBBRI INTERNATIONAL HEADQUARTERS

No. 10 I.T. Igbanji/NBBRI Road, Off Obafemi Awolowo Way, Jabi-Abuja
P.M.B. 5065 Wuse GPO, Abuja-Nigeria
Website: www.nbrri.gov.ng

All Correspondence to the Director General/CEO

VP OSINBAJO TOURS NBRRI STAND AT 2021 SCIENCE AND TECHNOLOGY EXPO



The 2021 Science and Technology Expo with the Theme “*Science, Technology, and Innovation (STI) for Economic Recovery and Sustainability Amidst COVID-19 Challenges*” was declared opened on Monday 15th March 2021 by the President of the Federal Republic of Nigeria, His Excellency, President Muhammadu Buhari, GCFR, who was ably represented by His Excellency, Prof. Yemi Osinbajo, SAN, GCON, Vice President of the Federal Republic of Nigeria. President Buhari stated that the Expo is particularly relevant given the new challenges and fresh opportunities presented by the Covid-19 pandemic.

The President buttressed the fact that no nation in the world has ever developed without proper utilization of Science, Technology, and Innovation and that the country is fully committed to the belief that this must be the path for Nigeria as well. He explained that as a country, we have some of the brightest and best minds in the world especially in the innovation sector and he is convinced that this can and should be at the vanguard of our efforts, to not only foster economic recovery but to reposition Nigeria entirely as an innovators' haven.

The Special Guest of Honor also explained the relevance of the Expo in relation to the Executive Order No. 5 (“EO5”) which was issued by the President of the Federal Republic of Nigeria in

February 2018, by which all Ministries, Departments and Agencies (“MDAs”) of government were directed to engage indigenous professionals in the planning, design and execution of national security projects and maximize in-country capacity in all contracts and transactions with Science, Engineering and Technology components. Executive Order No. 5 was inspired by the recognition of the vital role of Science, Technology and Innovation in national economic development, especially in promoting domestic goods and services.

The President further urged all the Researchers, Inventors and Innovators who are participating in the Expo to be steadfast as the government has confidence that their results, products and services will help make Nigeria a truly great nation respected all over the world for its exploit in Science and Technology.

The high point of the opening ceremony was a ceremonial tour of the Vice President to visit the various stands/exhibition centres of various exhibitors and MDAs.

NBBRI was given a special recognition when Vice President Osinbajo was led by the Hon. Minister of Science and Technology, Dr. Ogonnaya Onu, the Minister of State, Science and Technology, Barr. Mohammed Hassan Abdullahi and the Chairperson, Senate Committee on Science and Technology, Dr. (Mrs.) Uche Lilian Ekwunife visited NBBRI's exhibition stand. Prof. Samson Duna, DG/CEO of NBBRI explained to them the newly fabricated machines displayed by NBBRI which includes, The Manual Rural Road Compactor, the Motorized Road Cutter and Compactor for Road Maintenance, and so on. The visit to NBBRI's exhibition stand did not just end at the stand as the Vice-President and his

team took a special interest in visiting the NBBRI's Movable House. There they were briefed on the importance and benefits of the house to the economy of the country. The DG/CEO further explained the process of the construction from the Interlocking Block Making Machine to the roofing tiles and the NBBRI Laminated Bamboo Panel for flooring and ceiling work.

On Wednesday 17th which happened to be the Day-3 of the Expo had a special presentation on NBBRI as 'NBBRI Day'. At the Expo Pavilion, NBBRI had the opportunity to deliver lectures on its R&Ds. These lectures were well presented as the DG/CEO, Prof. Samson Duna explained in practical terms to the audience what NBBRI as a Research Institute is all about and the roles it has played and still playing in the country as it relates to building and road sectors. He went further to explained the Mission, Vision and Mandates of NBBRI. He then explained in details some of the R&Ds and interventions NBBRI has done and still doing for the

growth of the country. These includes, the Construction of Skills Acquisition Centres in the Country, NBBRI's Pozzolana Pilot Plants in Ota, Ogun State and Bokkos, Plateau State, NBBRI's Artisan Training Centre, Capacity Building, Construction of Class Rooms and so on.

In the same way, the Heads of the various Research Departments were given the opportunity to deliver brief lectures on the new R&Ds each of the departments has worked and is working on.

The Head of the Engineering Materials Department, Engr. Dr. Friday Apeh explained some of the recent R&Ds they have fabricated and those they are working on using local contents from start to finish. Some of which are, Fancy Facing Tiles for Exterior Walling in Building (From Industrial Dust), Hammer Crusher Machine, Earth Compactor and Asphalt Cutter Machine and so on.

The Head of Building Research Department, Abuja Office, Engr. Dr. Jibrin Sule also explained the R&Ds the Building Department is working on

which are; Assessing the Potentials of Kaolin and Industrial Effluent as Alternative Materials for the Production of Fire Retardant, Assessing the Rates of Unplanned Settlements Expansion Within The Phase III of Abuja Using Environmental Geomatics, Evaluation of Urban Slum.

Living Conditions in Nigeria: Case Study of Kano Metropolis (Phase 2), Exploring the Potential of Scoria as Coarse Aggregate In Lightweight Concrete, Investigating the Potentials of Nigerian Scoria Deposits as a Pozzolanic Material, Development of a Holistic Approach to Integrate Fire Safety Performance with Market Design: Case Study of Kano Market, Nigeria, Optimizing the Mix Ratio of NBBRI CSEB Using Pozzolana, Assessing The Acoustic Performance Of NBBRI Compressed Stabilized Earth Bricks, Design of Climatic Adaptive Solar Shading System for Buildings in Nigeria Climatic Context, Utilization of Waste Glass and Recycled Clay Brick Waste in Developing Blended Cement Mortar, Experimental Investigation of The

Physical, Chemical and Mechanical Properties of Different Brand of Cements In Nigeria.

Engr. Godwin Yisa who represented the Head of Road Research Department talked on the Manual Rural Road Compactor, Application of Agrowaste Based Stabilisers in Soil Erosion Control and Remediation, Production of Rubberized Asphalt Mat (RAM) for Road Maintenance, Field Application and Performance Monitoring for Pothole Patching Using Bitumen Tar-Sand in Ondo State, Road Pavement Failure Investigation and so on. And finally, Engr. Paul Agwu spook as the representative of the Head of Science Laboratory Technology Department. He talked on the ongoing innovations of the department which includes, Evaluating the potential of Piezoelectric Energy Harvester (PEH) in Nigeria, Automation in Construction (the Motorized Wall Plastering Machine), Structural Health Monitoring device for bridges in Nigeria, Development of Plastic Melter Densifier and Extruder Machine in the Production of Plastic Blocks, Development of Online Application for

Estimating Building Cost in Nigeria and so on.

On the closing ceremony of the Expo which took place on Friday 19th of March 2021, the outstanding performance of NBBRI was further recognized as the Honourable Minister of Science and Technology, Dr. Ogbonnaya Onu who led other notable Ministers to visit the NBBRI's Movable House which was constructed under a short period of 6 hours. The Hon. Minister led his counterparts who are, Hon. Minister of State for Science and Technology, Barr. Mohammed Hassan Abdullahi, Minister of Information and Culture, Alhaji Lai Mohammed, Minister of Health, Dr. Osagie Ehanire and Minister of Women Affairs and Social Development, Dame Pauline Tallen. They were well received and briefed by the DG/CEO of NBBRI, Prof. Samson Duna.



APPLICATION OF AGROWASTE BASED STABILISERS IN SOIL EROSION CONTROL AND REMEDIATION IN NRI, ANAMBRA, SOUTH EASTERN NIGERIA



Aim and Objectives
The aim of this study is to provide a remedial measure that will bring a lasting solution to the problem of soil erosion in Nigeria as part of an on-going Erosion mitigation and control program using locally sourced materials.

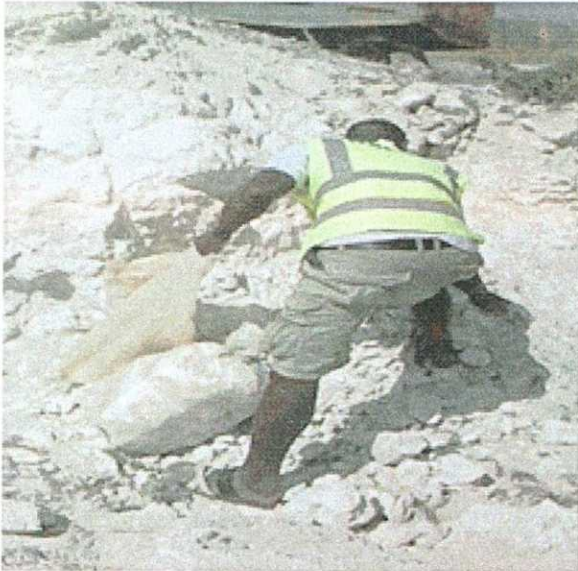
Materials and Methods
Locally sourced Agrowaste s, Wood Ash, Rice Husk Ash and Kaolin.



Erosion prone roads before stabilisation



Agrowaste materials (Wood ash & Rice husk ash)



KAOLIN SOURCING

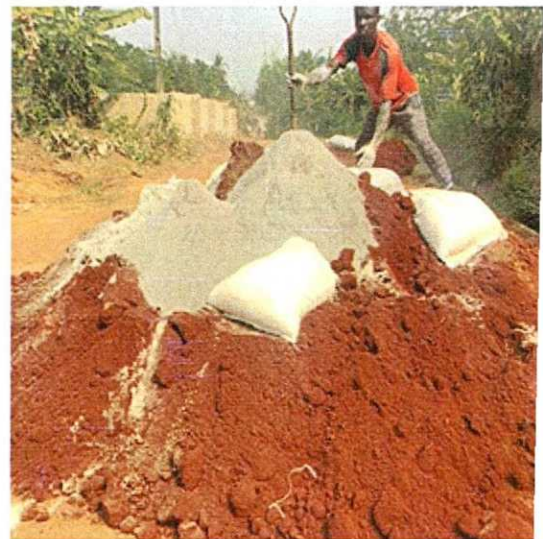


Heat

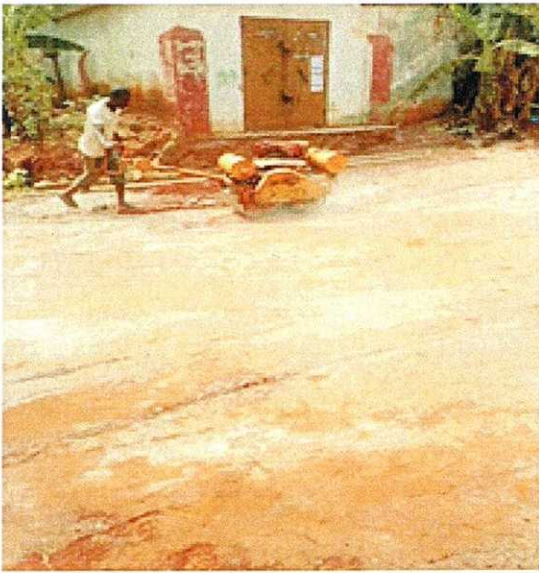


KAOLIN $[Al_2Si_2O_5(OH)_4]$

METAKAOLIN $[Al_2O_3 \cdot 2SiO_2]$



FIELD PREPARATION MODIFIERS



Stabilised erosion prone earth road with modifiers

NBBRI HOLDS 10TH ANNUAL INTERNATIONAL CONFERENCE

The Nigerian Building and Road Research Institute (NBBRI) the world at its 10th Annual International Conference Series which happened to be its 1st Virtual Seminar in April 2021.

Stakeholders present at the Conference included the Academia, Researchers, Federal and State Government Ministries and also Guest speakers and Experts from within and outside Nigeria. The virtual seminar brought together stakeholders from within and abroad to discuss issues of national interest in the construction industry thereby harnessing the different perceptions and views on ways to take advantage of the waste regulation in the country. The 10th International Conference strictly adhered to the COVID-19 protocols in other to reduce the spread of the highly contracted infection known to hinder activities mostly social gatherings in all countries in the universe.

The 2-day gathering with the theme “**Circular Economy in the Built Environment for Enhanced Performance of the Nigerian Construction Industry**” took place on 27th and 28th of April, 2021 at the Conference rooms of the Institute's Administrative Headquarter in Abuja (NBBRI) and was declared opened by Dr. Ogbonnaya Onu, the Hon. Minister of Science, Technology and Innovation who was accompanied by the Hon. Minister of State for Science, Technology and Innovation, Barr Mohammed Abdullahi and the Permanent Secretary of the Ministry, Mr. Edet Sunday Akpan.

During the proceedings of the Conference, several technical papers on contemporary issues related to the theme were presented at the conference which encompassed robust technical and professional discuss. The conference gave room for innovative inputs by guest speakers

from within and outside Nigeria.

While declaring the conference open, Hon. Minister of FMSTI, Dr. Ogbonnaya Onu address participants on the relevance of the Nigerian Building and Road Research Institute to its parent Ministry (FMSTI). Commending the Agency for its adaptation of their core mandate of capacity building and addressing the challenges facing the construction industry. Dr. Ogbonnaya Onu used this means to call for more Bitumen investment when he said that Nigeria has an estimated of about 42 billion barrels of Bitumen reserves, adding that a whopping 43 industrial chemicals including heavy crude petroleum can be obtained from Bitumen. He then Urged Stakeholders to develop technology using local contents.

In the same way, the Hon. Minister of State, Barr. Mohammed Abdullahi, also urged stakeholders in the construction industry to develop technologies that would address housing and infrastructural deficiencies using locally available resources – which as we know, is the most paramount objective of the Nigerian Building and Road Research Institute (NBBRI).

Barr. Mohammed also stated that a large part of the conference revolved around issues of development and innovations as NBBRI is on a forceful drive seeking to revamp raw materials and incorporate this produce into affordable building materials that proves effective in the scope of laying structural foundation.

He said the locally available resources should be able to meet the United Nations Sustainable Development Goal's target of providing affordable and decent housing for citizens. “This will not just enhance the performance of the

construction industry but will also boost the economy as one of the major ways of increasing government's revenue. “It will also improve the country's Domestic Product through research and development. “The aim should be at cost reduction, zero waste and income generation that would eventually translate to improved standard of living of our citizens. Barr. Abdullahi said the forum was apt and would expose stakeholders to the latest trends in the building sector that could reduce the dangers associated with erosion, building collapse and persistent flooding.

The Minister of State however, said the platform should be used to sensitise professionals and experts in the building industry on the opportunities offered by the presidential Executive Order 5 and to support its full implementation.

While delivering the lead paper at the conference, the Director-General/Chief

Executive Officer of NBBRI, Prof. Samson Duna laid emphasis on the stages of production of these raw materials. Pondering on the need to produce raw materials that are not only devised through waste but to provide locally available resources that are equally efficient in regards to building materials.

According to the DG/CEO, NBBRI, the forum is expected to discuss other sub-themes which include; Socio-Economic and Environmental impact of circular economy in Construction; Construction using Recycled/Reclaimed Materials; Policies, Insurance, and Legal Frameworks as drivers for Circular Economy in Construction; amongst others. The stakeholders deliberated on sustainable Development goals and challenges to re-engineer the Nigerian Construction Industry.

SPEECH DELIVERED BY THE HONORABLE MINISTER OF SCIENCE AND TECHNOLOGY, DR. OGBONNAYA ONU, AT THE OPENING CEREMONY OF THE 10TH NBBRI INTERNATIONAL CONFERENCE SERIES/1ST VIRTUAL SUMMIT HELD ON TUESDAY 27TH APRIL 2021 AT THE NBBRI ADMINISTRATIVE HQ, JABI, ABUJA.

Let me begin by expressing my delight to be part of this, NBBRI, first virtual International Conference with the theme **“Circular Economy in the Built Environment for Enhanced Performance of the Nigerian Construction Industry”**. The construction industry is an important and crucial sector of every single economy; a forerunner of national development and a standard for measuring national advancement. Public infrastructure and private physical structures for many productive activities thrive as a result of the availability of construction products. In recent years, conscious efforts have been made to reduce the negative environmental impact associated with urbanization through the

concept of “Circular Economy”. The application of this concept (circular economy) I believe is still at its infancy stage in the construction industry and this conference provides an opportunity to address the challenges facing the construction industry through reduction of the use of primary materials, protecting material resources and reducing carbon footprint. In order to transform the Nigerian Construction Industry while maintaining relevance and competitive edge in line with national and global best practices, I



believe that there is the need to inject adaptive processes, user-friendly techniques throughout the design, material specification, procurement, construction, maintenance and reconstruction processes to allow an effective transition. It is on this basis that this NBBRI first virtual International Conference tagged **“Circular Economy in the Built Environment for**

Enhanced Performance of the Nigerian Construction Industry”

is timely and apt to raise awareness, identify critical issues and challenges, enablers, and opportunities that will enhance performance, relevance, innovativeness, and drive the realization of circular economy in the construction industry.

NBRRI however, being a key agency under the FMST is saddled with the responsibility of propagating and regulating scientific, technological and innovative advancements of the nation's building and road construction activities which is evident in the recent contributions and breakthroughs in R&D activities and the highly educative and informative International Conferences that have been organized by the Institute in past decade to address key issues in the

building and road construction sectors.

Despite the COVID 19 pandemic, NBRRI in compliance with its now appreciated tradition, has put together its first virtual International Conference to address key issues in the building and road construction sector with a view to strategically repositioning the Industry by bringing together researchers, scientists, academicians, relevant stakeholders and experienced experts in the built environment from within and outside Nigeria to collectively discuss and brainstorm on critical and pressing issues.

This first virtual conference has the full support of the Federal Ministry of Science and Technology and I have no doubt that at the end of these deliberations, new strategies and plans to reposition the Nigerian construction industry in

line with the change agenda will be achieved.

NBRRI has constantly and successfully organized this International Conference on annual basis since 2011. The Federal Ministry of Science and Technology has been part of this success story.

Let me also assure you that the FMST is committed to ensuring that the outcome of this all-important conference is implemented.

Finally, participant, distinguished ladies and gentlemen, I wish you all very fruitful deliberations and I am pleased to declare this conference open.

Thank you and God bless.

Dr. Ogbonnaya Onu
Honorable Minister of
Science and Technology

GOODWILL MESSAGE DELIVERED BY THE HON. MINISTER FOR STATE, FMST. BARR. MOHAMMED ABDULLAHI AT THE OPENING CEREMONY OF THE 10TH NBBRI INTERNATIONAL CONFERENCE SERIES (1ST VIRTUAL SUMMIT) HELD ON TUESDAY 27TH APRIL 2021 AT THE NBBRI ADMINISTRATIVE HQ, JABI, ABUJA.

Let me first congratulate the DG/CEO of the Nigerian Building and Road Research Institute, Prof. Samson Duna, members of this Conference Planning Committee and the entire staff of NBBRI for organizing this year's International Conference with the theme ***“Circular Economy in the Built Environment for Enhanced Performance of the Nigerian Construction Industry”***. Taking a critical look at the theme, it is timely as it seeks concrete solutions towards eradicating wastages in the built, road and construction industry. This will not only enhance the performance of the sector but also boost the

economy of the country. There has indeed been positive impact of previous NBBRI International Conferences as topical issues are brought to the front burner with the primary objective of raising the awareness of stakeholders in the construction industry and the general public towards fashioning out action plans for our country's growth. Once again, I commend NBBRI for striving towards actualizing the Institute's mandates through its various Research



& Developments. Finally, I want to encourage all participants and stakeholders present and those connected via the various virtual media platforms to see this as a viable means for learning and contributing intellectually to the issues to be addressed and find solutions that will be beneficial. Thank you all

**Barr. Mohammed Abdullahi
Hon. Minister for State, FMST**

SPEECH PRESENTED BY THE CHAIRMAN, HOUSE COMMITTEE ON SCIENCE RESEARCH INSTITUTE, HON. PRINCE OLAIDE AKINREMI AT THE OPENING CEREMONY OF THE 10TH NBBRI INTERNATIONAL CONFERENCE SERIES/1ST VIRTUAL SUMMIT HELD ON TUESDAY 27TH APRIL 2021 AT THE NBBRI ADMINISTRATIVE HQ, JABI, ABUJA

It is an honor to bring this goodwill message to all participants of the 10th Nigerian Building and Road Research Institute (NBBRI) International Conference Series taking place physically in Abuja but seen all over the world via the virtual media. Let me first congratulate the Federal Ministry of Science and Technology and also NBBRI for its consistency in organizing this impactful forum in the Built and construction sector of the Nation's economy. The NBBRI International Conferences in the last years has no doubt serve as a catalyst for charting the way forward in this critical sector which is the bedrock of the country's infrastructural growth.



The choice of this year's conference theme; ***“Circular Economy in the Built Environment for Enhanced Performance of the Nigerian Construction Industry”*** is prescient, as it is meant to highlight the economic challenges of the construction industry from the vantage point of the construction professional and other stakeholders in

delivering sustainable socio-economic benefits for Nigerians.

As a Nation, we have significant infrastructural challenges; housing affordability and gross shortfalls; and per capita road volume deficits, for example, are clearly evident and the current administration is working to significantly

improve these indices which are related to the SDGs aimed at reducing poverty and hunger, improving health, education, sanitation, energy access etc.

As the Chairman, House Committee on Science Research Institute, I am particularly proud of the achievements of Nigerian Building and Road Research Institute (NBRRI) under the leadership of Prof. Samson Duna. The results of work done by the Nigerian Building and Road Research Institute are key towards improving the socio-economic development status of Nigeria and Nigerians as buildings and roads are basic requirements.

We are witnesses to the responses and goodwill generated at the just

concluded 2021 Science and Technology Expo, where the “dismantle-able” building, based on the NBRRI interlocking blocks, built within the expo ground, in record time generated unprecedented traffic and admiration by visitors to the expo. We at the National Assembly and as a committee supervising the activities of Science Research Institutes will continue to support Science, Technology and Innovation (STI) activities in Nigeria through the various agencies/parastatals under our supervision; like NBRRI.

I am hopeful that the cross fertilization of ideas, expected to occur at this conference, which is an annual, high value, NBRRI event, would deliver solutions and strategies that would

result in significant improvements in the livelihood of Nigerians first, and then other citizens of the world.

NBRRI, you can count on the undoubted support of the Federal House of Representatives at all time. I wish you all, happy deliberations!

**H O N . P R I N C E
OLAIDE AKINREMI**
Chairman, House
Committee on Science
Research Institute

SPEECH DELIVERED BY THE CHAIRPERSON, SENATE COMMITTEE ON SCIENCE AND TECHNOLOGY, SENATOR (MRS.) UCHE LILIAN EKWUNIFE AT THE OPENING CEREMONY OF THE 10TH NBBRI INTERNATIONAL CONFERENCE SERIES/1ST VIRTUAL SUMMIT HELD ON TUESDAY 27TH APRIL 2021 AT THE NBBRI ADMINISTRATIVE HQ, JABI, ABUJA.

Let me begin by expressing my delight to be part of this historic occasion at this year's NBBRI 2021 International conference with the theme *“Circular Economy in the Built Environment for Enhanced Performance of the Nigerian Construction Industry”*.

This topic is timely and relevant to our national focus and dispensation. Certainly, meeting the country's economy and enhancing the growth of the country's GDP, this will require collective efforts, synergies and cooperation from all Stakeholders in the built environment. Thus, attending



a forum such as this, where intellectuals and professionals gather to chart a way forward for our collective national gain, is always heartwarming to me. I understand that, in line with

the NBBRI mandate on capacity building for Professionals and Stakeholders in the built environment, the Institute has over the years organized various annual International

Workshops and Technical Conferences on topical issues with the primary objective of raising the awareness of stakeholders in the construction industry and the general public in order to chart future action plans for the Industry and Nigeria.

This is a step in the right direction as it is geared towards actualizing the overall objectives of the present administration agenda for transformation. The present government, under the able-leadership of President Muhammadu Buhari, GCFR, is committed to repositioning our national fortunes and no doubt, some of the instruments of change include Research and Development (R&D) cradles such as NBBRI.

I therefore wish to commend the Director General/CEO of NBBRI, Professor Danladi Duna, and the Management

team for the determination with which they have consistently displayed excellence in actualizing the Institute's mandates through novel technologies and R&D products that will reposition Nigeria globally. The impact of R&D to the infrastructural development of the nation cannot be overemphasized. The successes recorded by more developed countries of the world are attributable to their R&D investments and products. Further to this, infrastructural development is a function of the construction technologies and innovations traceable to a country's R&D. Hence, our locally generated R&D outputs should be embraced and also improved upon if we will compare favourably with other nations.

I once more commend the management of the Institute under the leadership of

Professor Samson Duna, for the efforts toward repositioning NBBRI and making it a global research center that every Nigerian is proud of under the present Management of the Institute.

Thank you all

**SENATOR (MRS.)
UCHE LILIAN
EKWUNIFE
Chairperson, Senate
Committee on Science
and Technology**

WELCOME ADDRESS BY NBBRI'S BOARD CHAIRMAN, HON. WILLIAM L.J. WADNI AT THE OPENING CEREMONY OF THE 10TH NBBRI INTERNATIONAL CONFERENCE SERIES/1ST VIRTUAL SUMMIT HELD ON TUESDAY 27TH APRIL 2021 AT THE NBBRI ADMINISTRATIVE HQ, JABI, ABUJA

It is with great honour to join the Director General/CEO of the Nigerian Building and Road Research Institute, in welcoming you all to this year's Nigerian Building and Road Research Institute, NBBRI, first Virtual International Conference with the theme **“Circular Economy in the Built Environment for Enhanced Performance of the Nigerian Construction Industry”**.

Indeed, the Nigerian construction industry has been identified as one of the fastest growing around the world and to maintain its impressive performance, it is imperative that the industry is repositioned so that it continues to

compete with its contemporaries globally as well as explore the boundless realities and possibilities of employing local materials and user-friendly techniques that can be better appreciated by our people.

I understand that the Federal Ministry of Science and Technology (FMST) in the 2011 Science, Technology and Innovation (STI) policy review, affirmed the strengthening of institutional mechanisms that would drive the nation's economic growth and development



by harnessing indigenous technologies and innovations through its 17 agencies/parastatals using beckons hinged upon their various mandates and visions.

In line with its mandate, NBBRI has developed many innovations from intensive research work over the years which made vital impacts on the building and road construction sectors and

these are evident to me since I assumed office as Board Chairman.

Despite the COVID 19 pandemic, NBBRI in compliance with its now appreciated tradition, has put together another its first virtual international conference to address key issues in the building and road construction sector with a view to strategically repositioning the Industry by bringing together researchers, scientists, academicians, relevant stakeholders and experienced experts in the built environment from within and outside Nigeria to collectively discuss and brainstorm on critical and pressing issues.

It is important to state that the Nigerian construction industry is vibrant and characterized by continuous change

mainly due to the fluctuating dynamics of the economy which influences the socio-economic, physical and psychological needs of the average Nigerian. The industry though fast growing is faced with a lot of challenges and yet to attain the desired level in spite of efforts and funds committed to it. This makes this conference a timely initiative to address the underlying challenges as is captured in the theme and sub-themes.

The Board as presently constituted under my Chairmanship will continue to provide exemplary leadership and direction to the Institute. To the management team led by the Director General/CEO, Prof. Samson Duna, I extend our deep appreciation for

their hard work and loyalty.

I once more welcome you and I wish you all a very fruitful deliberation.

Thank you and God bless.

HON. WILLIAM L.J. WADNI

Chairman, NBBRI
Governing Board

PS (FMST) PAYS WORKING VISIT TO NBBRI HEADQUARTERS, ABUJA



Edet Sunday on his part decided to take a tour round the agencies which will afford him a better

History was made on Wednesday 27th January, 2021 when Mr. Edet Sunday Akpan, became the first ever Permanent Secretary of the Federal Ministry of Science and Technology paid a working visit to the Nigerian Building and Road Research Institute (NBBRI) Headquarters in Abuja as part of his planned visit to Agencies under FMST. Unlike in the past, Agencies under the aegis of the Ministry often go to the Permanent Secretary for briefing and presentation of documents on his/her assumption of office. Mr.

working relationship with the Institutes and know how they are faring.

On arrival at NBBRI, the Director-General/CEO, Prof. Samson Duna and Management Staff received the Permanent Secretary and his team and immediately took on a tour of the facilities at the complex including the laboratories and display centre to see the different machines produced by NBBRI.

At the meeting with the Permanent Secretary and NBBRI staff, Prof. Duna expressed his joy and appreciation to the P.S for

finding time out of his busy schedule to visit the Institute. He briefed the Perm Sec on the mandate of NBBRI, various research findings NBBRI has done and still doing, the locations of NBBRI's Zonal Offices and their functions, the NBBRI Artisan Training Centre, Pozzolana Plants, Skills Centres and many more.

In response, the Permanent Secretary appreciated the DG and Staff of NBBRI for the warm welcome he got. He stated that the main reason for his visit is to know how far the Institute is carrying out its functions based on its mandate and to discuss on how the Ministry through his office can have a

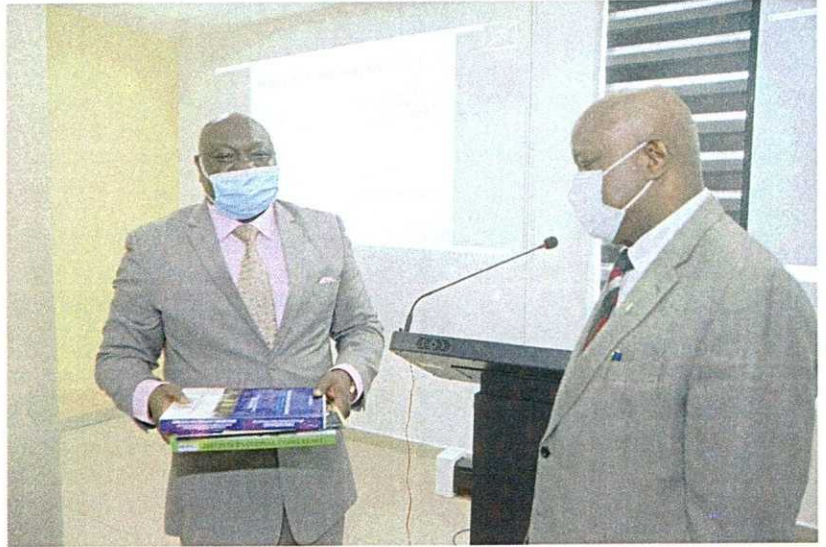
better working relationship with the Institute to improve research in the country.

Further, he encouraged the Institute to work with the Ministry as a team as he acknowledged the great work NBRRI has done in areas of R&Ds.

He then stated that research is very important in the country and should be taken as number one priority. He also encouraged the Institute

to have a well-established nominal role of staff. Finally, he encouraged the DG to make sure that NBRRI is a conducive and knowledge-based

environment which will boost the working output of Staff.



DELEGATES FROM THE CENTRE FOR TRANSPARENCY WATCH VISITS NBBRI



A four-man team from the Centre for Transparency Watch on Monday 18th January, 2021 paid a courtesy visit to the Nigerian Building and Road Research Institute (NBBRI).

The Executive Director of the Centre, Mr. Emmanuel Ayuk in his address commended NBBRI and its management for the positive and orderly ways the procurement process of the Institute is been handled over the years and also appreciated the DG/CEO for honouring their request for the courtesy visit. He stated that for the past five years since the Centre

started monitoring NBBRI's procurement processes, there has been no negative reports of any kind. He also stressed that for the past four years, Bureau for Public Procurement always invites the Centre in respect to negative reports involving other agencies, but never has NBBRI been mentioned in any negative light.

Speaking further, he stressed on some of the challenges the Centre is undergoing and thereby solicited for stronger collaborations between the Centre and NBBRI mostly in area of Project

Monitoring and Evaluation to ensure total compliance from the contractors.

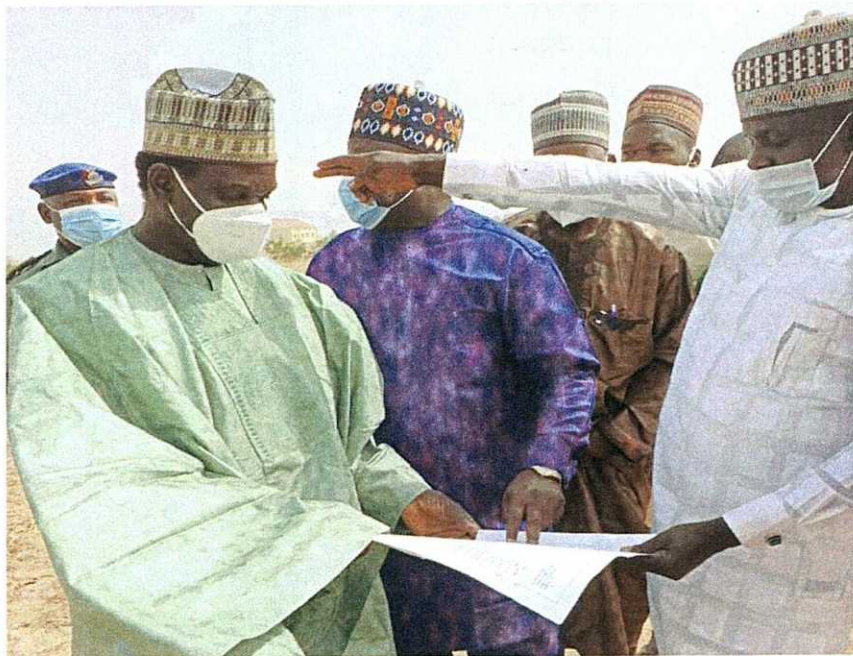
In response, Prof. Samson Duna applauded the Centre and its management for the positive impacts they have shown and are showing in area of accountability in the Country. He also appreciated the Centre for the constant follow up of NBBRI's procurement processes.

Finally, he promised to always carry the Centre along in all areas of procurement processes and also to involve some of their Staff in project monitoring and evaluation.

DG NBBRI IN GOMBE...COMMISSIONS PROJECTS

Friday the 22nd of January, 2021 was a day filled with activities for Prof. Samson Duna as he made his first visit to the North-East NBBRI's Zonal Office in Gombe State since his assumption into office as the DG/CEO of NBBRI. Prof Duna was in Gombe as part of the entourage of the NBBRI's Governing Board Chairman Hon. William Wadni.

Addressing the staff in the Gombe office, the Board Chairman said he knows NBBRI staff to be very hard working and encouraged the staff to keep the good works. The zonal coordinator of NBBRI's Office in Gombe Mr. Baba Yerima after introduction of all the zonal office staff, thanked the Board Chairman and DG for finding time out of their



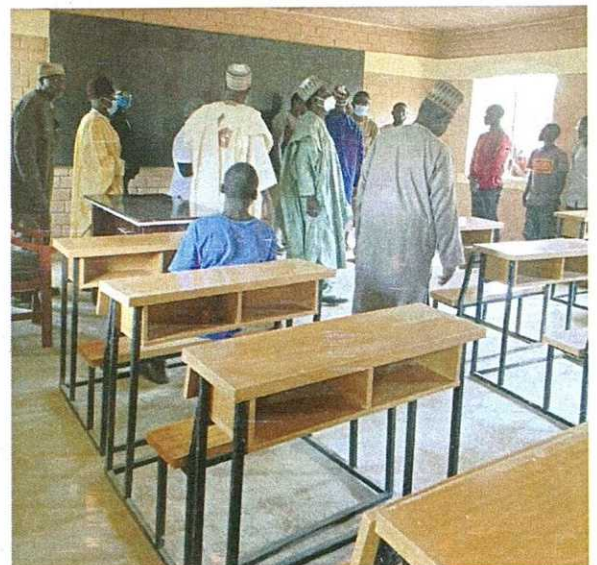
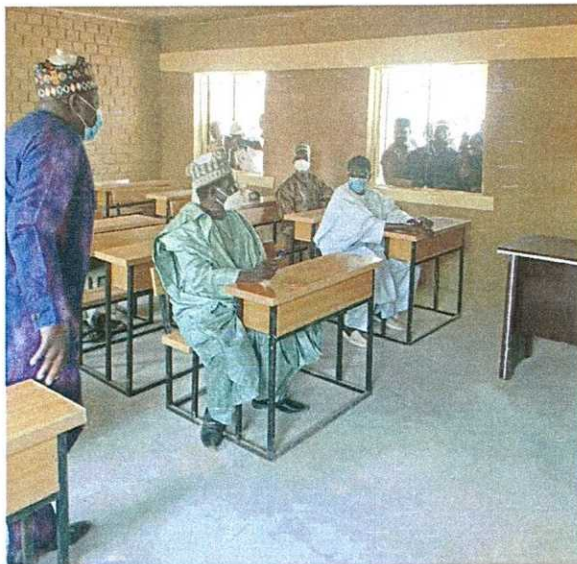
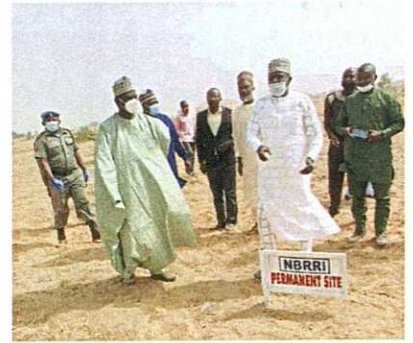
busy schedule to visit the zone. He stated that the zonal office will continue to contribute its quarter and make NBBRI great.

The DG/CEO, NBBRI's Board Chairman and the team took the great opportunity to visit the permanent site allocated for the construction of NBBRI's North-East Zonal Office.

The visit did not end at the office as the team proceeded to Billiri Local Government Area of

Gombe State to condole with the family of His Royal Majesty Dr. Abdu Buba Maisherull, JP, OON who before his death in the second week of January 2021 was the 15th Mai Tangle. The Honorable Minister of Science and Technology Dr. Ogbonnaya Onu who delegated the NBBRI DG to represent him sent his condolences to the family and also prayed for the children to follow their Father's footsteps.

Finally, the DG/CEO and his entourage moved to commission a one block of three classrooms built by NBRRI's Board Chairman in Tal Community, Billiri Local Government Area of Gombe State. The atmosphere was filled with joy and excitement as the staff, pupils and members of the community showed their joy and pleasure towards the great work of providing the block of classrooms for the educational growth of the community and the state in general.



NBBRI ADDS VALUE TO OLOTA OF OTA'S PALACE



It was showers of praises for the Nigerian Building and Road Research Institute (NBBRI) on Thursday 18th of February, 2021 when the Director-General/Chief Executive Officer of NBBRI, Prof. Samson Duna and some top Management Staff paid a courtesy visit to the Olofa of Ota Oba Adeyemi Abdulkabir Obalanlege. The visit was used to also a handing over ceremony of NBBRI sponsored projects at the palace to the Olofa.

The Kabiyesi, who gave the NBBRI delegation an "AWORI" welcome, was pleased and honoured to receive the DG/CEO to his palace as he expressed joy towards the great work NBBRI has been doing in the kingdom.

Speaking about the project, Head of NBBRI's Engineering Materials Research Department, Engr. Dr. Friday Apeh, said the Institute decided to interlock the entire compound of the Palace using NBBRI's technology and paving stones which today is a success owing to the huge support by the DG/CEO and his push on NBBRI's Corporate Social Responsibility towards her host community.

Giving his keynote address, the DG NBBRI Prof. Samson Duna stated that the Obalanlege has

one of the most beautiful and welcoming palaces in Nigeria and the Institute is there to partake of the blessings of the Kabiyesi and hand over the project done in the palace to him. He explained that this will not be the last of projects the Institute will carry out in the kingdom even as he solicited for more cooperation between the indigenes of Ota and Staff of NBBRI. Duna assured the Olofa that NBBRI's staff are law abiding, and opined that NBBRI's technology can be taught to the indigenes of Ota to enable them gain a source of self employment. He then promised to set up a committee that will work out modalities for other projects that will be beneficial to the Awori kingdom. He thanked the Kabiyesi for his support during the project and

also commended the Oba on his unending intervention to the Institute in terms of working relationships as well as adequate security.

Prof. Duna also thanked the Oba for honouring the Institute's invitation at the last RIGAN games hosted by the Institute. In the same vein, he requested the Oba to always invite the Institute to events and programmes that require the Institute's presence. He also notified the Oba of his confirmation as the DG/CEO, NBBRI since his last visit.

In response, Oba Adeyemi Abdulkabir Obalanlege expressed joy and satisfaction with what the DG/CEO has done for the people of Awori kingdom, stating that the Institute has put a smile on the faces of his

people by its Corporate Social Responsibility, thereby creating advance publicity for itself. He then offered a royal prayer that NBBRI will be a Centre of excellence and the Institute will grow in greater heights and advancement.

Like Oliver twist, the Oba stated that they will ask for more and hoped that the second phase of the project will commence soonest. To this, the DG/CEO gave him the assurance that within 2 to 3 months, work will start to complete the entire project.

Giving the vote of thanks, the Coordinator of NBBRI's National Laboratory Complex (NLC), Ota Dr. C. C Osadebe thanked the Oba for the opportunities given, his leadership role and for the cordial

relationship between NBBRI and the Awori people as this relationship gives room for developments.

After the brief meeting, the Kabiyesi alongside his High Chiefs led the DG/CEO and Directors of the Institute on a tour on the projects within the palace which the DG/CEO performed the handing over ceremony of the projects to the Kabiyesi.



NBRRI TRAINS ARTISANS AMONG THE INTERNALLY DISPLACED PERSONS (IDPs)



The partnership between the North Central Zonal Office of the Nigerian Building and Road Research Institute in Jos and the Rotary Club to train Artisans among the Internally Displaced Persons (IDPs) on brick making took an exceptional boost as the Training took off in Jos on Tuesday 16th of February, 2021 with selected IDPs from three Local Government Areas of Plateau State.

The Director-General/CEO of NBRRI, Prof. Samson Duna was represented by the Head of Consultancy and Extension Services Department, Mr. Daniel Makava, who flagged off

the training with the President of the Rotary Club, Jos Central District, Rotarian Edeh and other officials of the club.

The Zonal Coordinator of NBRRI North Central Zonal Office, Jos, Mr. Terver Tyosar delivered the welcome address as he urged the participants to take seriously the opportunity as the skills acquired during the training will make them self-reliance and provide them with new means of livelihood.

While speaking, the President of the Rotary Club expressed joy on the successful partnership between the club and NBRRI to train the IDPs and prayed that the partnership will be sustained for the benefit of the less privileged.

The Head, NBRRI Pozzolana and Skills Acquisition Centre, Bokkos, Arc. Dafang Maton delivered a lecture titled: "Introducing NBRRI in Brief" to the participants, highlighting the mandates of the Institute, achievements, roles of the zonal offices, and the need for capacity building in the construction industry to get skilled manpower.

The training has both theoretical as well as practical sessions and ran from 16th to 25th of February, 2021.



NIGER DELTA (LIFE-ND) SIGNS MoU WITH NBRI

The signing of the Memorandum of Agreement between NBRI and (IFAD) Life-ND took place on Wednesday 20th January, 2021 at NBRI's Headquarters in Abuja. This ceremony as emphasized by the team leader of Life-ND, the National Project Coordinator of Life-ND, Engr. Abiodun Sanni 'it's not just a gesture of pen on paper but a collaboration to provide and contribute to the economy of the Nation'.

Engr. Sanni further explained that Life-ND is working in corporation with the Federal Ministry of Agriculture, Niger Delta Development Commission and Nine States within the Niger Delta region to provide Agro Enterprising Entrepreneurship Projects aimed at enhancing income, food security, creating jobs for the youths, alleviate poverty and improve the economy of the Niger Delta region and the



country in general. These are done through the provision of basic infrastructure like Rural Access Feeder Roads that will make transportation of farm produce easier for rural farmers from their farms to the market.

He explained that the major purpose of the collaboration is to tap from the wealth of knowledge of NBRI in areas of training, construction and maintenance of Rural Access

Feeder Roads in these regions.

Responding to the request in the MoU, the

Director-General/CEO of NBRI, Prof. Samson Duna expressed readiness of NBRI to collaborate with Life-ND in ensuring a better standard living and Rural Access Roads and infrastructure in the region.

He further stated that NBRI's material testing laboratories will be made accessible for use at any time the team from Life-ND wants to test materials for standardization. And also promised to assist in areas of Artisan training, construction of farm houses with NBRI's Stabilized Earth Blocks for shelter and storage of farm produce if the needs arise.

Finally, the brief ceremony ended with the signing of the MoA and presentation of the document by the DG/CEO of NBRI to the National Project Coordinator of Life-ND.



NIGERIAN INSTITUTE OF CIVIL ENGINEERS TO PARTNER WITH NBBRI IN CONSTRUCTION AND RESEARCH DEVELOPMENT

The newly sworn in executives of the Nigerian Institute of Civil Engineers (NICE) paid a courtesy visit to the Nigerian Building and Road Research Institute (NBBRI) on Friday 12th March, 2021 at the Institute's Headquarters in Abuja.

In his address, the national chairman of NICE, Engr. Dr. Tanko Jang expressed his joy of appreciation to the Director-General/CEO of NBBRI, Prof. Sason Duna for his immeasurable care and show of love to NICE anytime he is called upon. He used this means to enumerate the 8 points agenda of NICE which are:

1. Consolidation/Sustenance of the gains of previous administrations
 2. Promotion of unity and oneness of NICE
 3. Membership drive
 4. Harnessing of NICE Assets
 5. Professional Development
 6. Publication of Civil Engineering codes and standards
 7. Encouragement of NICE and NICESA Chapters to be more vibrant
 8. International Relationship
- These he stated can be

achieved through effective collaborations with other stakeholders like NBBRI.

In response, the DG/CEO of NBBRI, Prof. Samson Duna encouraged the institute to see NBBRI

as their home and never hesitate to come up with research for collaboration with NBBRI for the betterment of the country. He also stated some key areas and life changing sponsorship NBBRI has done of recent which are:

1. Collaboration with reputable stakeholders like FERMA, Federal Road Safety etc in carrying out an assessment cause of road failure in Abuja Lokoja Express way
2. Funding and supply of standard Civil Engineering Equipment by NBBRI to 6 selected

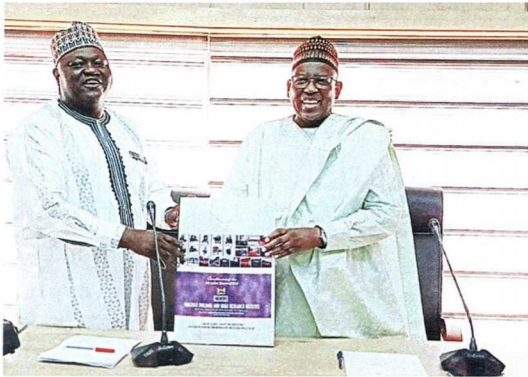
Universities in all the geopolitical zones



es in the country with University of Uyo, Federal University of Technology Owerri, University of Lagos, University of Jos, Abubaka Tafawa Balewa University Bauchi and Amadu Bello University Zaria as the beneficiaries. The DG/CEO finally promised to give his full support to NICE in areas of research so as to work in collaboration for improved economy of the country through R&Ds.



UNIVERSAL BASIC EDUCATION COMMISSION HOSTS NBBRI



In his response, the Executive Secretary of UBEC, Dr. Hamid Bobboyi expressed joy for the great visit by NBBRI to the Commission and the idea for collaboration. He explained the various positive steps the commission had taken in the past to savage the state of the country's educational system to its present state. He appreciated NBBRI for this giant stride and promised a good and result oriented collaboration with the Institute.

A team from the Nigerian Building and Road Research Institute, paid a courtesy visit to the Universal Basic Education Commission Headquarters in Abuja on the 15th of April, 2021.

ongoing ones. He then concluded by soliciting for collaboration with UBEC so as to enable the Institute demonstrate her research work which will also be a means of adding value to the country's educational sector.

Briefing the Executive Secretary of UBEC the purpose of the visit, the DG/CEO of NBBRI, Prof. Samson Duna spoke on the Mandate, Vision and Value of NBBRI. He also explained the various research works/findings NBBRI conducted and the



NBBRI HANDS OVER THREE-BEDROOM BUNGALOW TO FCT SECONDARY EDUCATION BOARD

On the 21st of April, 2021, the Representatives from the FCT Secondary Education Board, Principal, Staff and Students of the FCT Model Secondary School, Maitama, Abuja showered praises and encomium on the Director-General/Chief Executive officer of NBBRI alongside the entire Institute for the grand-breaking and epoch-making event recorded in the school.

While handing over the keys of the building to the principal of the school, the DG/CEO of NBBRI, Prof. Samson Duna encouraged the school management to imbibe the maintenance culture as he stated that this act

by NBBRI is its own way of assisting the country on boosting the educational system in the country.

Still on the delivery of Corporate Social Responsibility and boosting of the educational sector in the country, the Principal, Staff, Corps Members and Students of Government Girls Science Secondary School (GGSSS), Kuje, Abuja on Thursday 27th May, 2021 were filled

with joy as the Director, Department of Science and Technology, Federal Capital Territory (FCT) Mr. Kolawole on behalf of the Hon. Minister of FCT presented the keys and performed the official commissioning of a three-bedroom bungalow to the Management of GGSSS to be used as accommodation for Staff/Corps Members of the school.

The building which was built with 90% NBBRI



technology is part of NBBRI's Corporate Social Responsibilities to the growth of educational sector in Nigeria. Mr. Dika Sunday, a Management staff of NBBRI who gave a brief on the building explained that the initiative began during the era of Prof. D. S. Matawal, the immediate past DG of NBBRI; and the facilitator is Mr. Tunde Adeyanju, a retired Director from NBBRI. He explained that this is

the 4th building NBBRI is constructing for FCT Secondary Schools. He also stated that the process of constructing the building from clearing and excavating of the land to the final construction work was used as a training ground for students as students from Federal Technical College Area 3, Abuja were on ground for training and joined in the construction. He then encouraged the school management on maintenance culture.

Delivering her address, the principal of the school, Mrs. Sabina Aguedu expressed her heart felt joy as she thanked the DG/CEO of NBBRI for the kind gesture of the building. She then stated that the building came at the right time and will go a long way in solving accommodation challenge to a great extend in the school.

In his remark, Mr. Kolawole thanked the Institute for the donation of the building and the goodwill to see to the betterment of education in the country. He also explained the long-term relationship between NBBRI and the FCT Secondary Education Board. Furthermore, he demanded for a stronger



tie and collaboration between NBBRI and the FCT Administration/Secondary Education Board so that more Buildings using NBBRI Technology will be built across FCT Secondary Schools. He also solicited for technical training for teachers who are technologically inclined.

Delivering his address, the Director-General/Chief Executive Officer of NBBRI, Prof. Samson Duna called on the FCT Administration and FCT Secondary Education Board to

have collaboration with NBBRI to meet to the needs of accommodation, school halls and classrooms for schools around the FCT.

While explaining the value of the building, the DG/CEO stated that the three major research areas of NBBRI to the development of building as it relates to the use of local content in construction are affordability, durability and availability which has been met through the use of NBBRI's technology. He also stated that NBBRI is still and about

concluding research on the use of local materials for roofing sheet, the use of bamboo for ceiling and walling works. He finally promised collaboration in areas of training of technical staff in FCT Secondary Schools.



RITVALUE CONSULTANTS SEEKS COLLABORATION WITH NBBRI

The Management of NBBRI, led by the DG/CEO, Prof. Samson Duna on Tuesday 1st of June, 2021 played host to R I T V A L U E CONSULTANTS (RVC) at the Institute's Headquarters, Abuja.

Before stating the purpose of the visit, The Chief Executive Officer of RVC Dr. Taofiq Raimi said that his firm is into promoting Construction, Real Estate and Infrastructure Business Research and Practice in Nigeria. According to him, RITVALUE CONSULTANTS is not only concerned about Practice but also the Research component of the industry. This he said pioneered the interest of visiting NBBRI, a leader



Research Institute in the country.

Raimi explained that the achievements of NBBRI as an Agency in Nigeria as it relates to R&Ds in areas of local contents and fabrications of machines for production of building materials is ringing positive bells in the ears of practitioners in the built industry and Real Estates especially. He went further to elaborate the four-point agenda of their visit

which are;

- a. Presentation of the Proceedings from the just concluded Real Estate Housing International Conference they organized.
- b. Presentation of the Communiqué from the just concluded Real Estate Housing International Conference.
- c. Presentation of a ward of recognition to

NBBRI for the great job the Institute has done so far in area of R & D s b y promoting local content.

- d. To appeal for collaboration between NBBRI and RITVALUE CONSULTANTS mainly in areas of commercialization and promotion

of NBBRI's Technologies.

In his remark, the DG/CEO of NBBRI, Prof. Samson Duna expressed gratitude for the visit as he stated that it is timely and commendable. He went further to elaborate some areas of R&Ds NBBRI has carried out successfully and research

works that are ongoing. Further, on behalf of NBBRI, he appreciated RITVALUE CONSULTANTS for the awards presented to NBBRI and for recognizing the contributions of the Institute to the built industry.



PROF. DUNA BAGS 'DISTINGUISHED AMBASSADOR FOR CHILDREN SAFETY' AWARD



The Director-General/Chief Executive Officer of the Nigerian Building and Road Research Institute (NBRI), Prof. Samson Duna on Thursday 3rd of June, 2021 received a prestigious award of 'Distinguished Ambassador for Children Safety' from the Driving School Association of Nigeria (DSAN).

While presenting the award, the National President of the Association, Mr. JideOwatunmise stated that NBRI is being recognized for the enormous research work the Institute has conducted in areas of road construction and maintenance as well as

publications produced by NBRI in the country. He stated that NBRI is widely recognized in all seminars and awareness programmes organized by DSAN, the Nigerian Road Safety Corp and other professional bodies. He stated that the Road Safety Guidelines published by NBRI has assisted the association and most road users in road safety rules.

The president explained that the immediate focus of the association is to educate school children on road safety measures and security. To carry out these functions effectively, the association produced a learning guide and charts for school children on road

safety; and the association is organizing a 'free-train-the-trainers' programmes for school teachers. Finally, Mr. Jide solicited for collaboration with NBRI for a better working relationship which will be geared towards enhancing a safer road and accident-free Nigeria.

Appreciating the award, Prof. Samson Duna stated that all the achievements recorded by the Institute cannot be overemphasized which are a collective effort of NBRI Staff as he dedicates the award to them.

Prof. Duna also used this means to encourage the Driving School Association of Nigeria not to relent in their struggle to make Nigerian roads accident free. He pledged the total support of NBRI to work and collaborate with the association for the growth of the country.



in reducing importation and cost.

NBBRI DG/CEO, Prof. Samson Duna in his response, appreciated REDAN for recognizing the valued input of NBBRI in a project of this magnitude. He went further to explain some valuable research findings and ongoing research works of the Institute which includes;

- v Comparative study on building from one to three-bedroom flats using different materials and NBBRI's

technologies with the focus of cost reduction.

- v Study on the use of Sandcrete Blocks for building construction.

- v The use of Compressed Stabilized Earth Blocks for building construction

- v Ongoing study on the use of Insulated Roofing Materials for roofing work that can help in regulation of temperature.

- v The use of bamboo for ceiling and walling works.

He further

encouraged the Association to see the need of constructing some of these affordable houses close to the city centres for the benefit of low-income earners such as Civil Servants for easy access to their working places which are situated in the city centres.

Duna promised the full support of NBBRI to collaborate in this great initiative for the betterment of the country.



REDAN PARTNERS NBBRI TO TACKLE HOUSING DEFICIT IN NIGERIA

Bringing together researchers and practitioners in the built environment to brainstorm and collaborate on ways toward tackling the housing deficit in Nigeria is the main agenda that brought the Real Estate Developers Association of Nigeria (REDAN) to the Headquarters of the Nigerian Building and Road Research Institute (NBBRI) in Abuja.

The Executives of the Real Estate Developers Association of Nigeria under the leadership of Dr. Alliu Wamako initiated a project to build one-hundred-unit housing estate in each of the seven hundred and seventy-four (774) local government areas in Nigeria under the Product and Estate Development Endorsement Programme

Scheme of REDAN tagged 'Rural - Urban Housing Initiative'.

In order to achieve this laudable initiative, the REDAN Vice President, Alhaji Usaini Abubakar and the Executive Secretary, Mr. Yunusa Shuaibu were at NBBRI to seek for partnership

Speaking on the choice of NBBRI for the collaboration, Mr. Yunusa stated that the Institute is their number one choice because of its research value and the plan to construct the mass houses using at least 90% local content.

Alhaji Usaini further outlined the following which needs to be met and can only be achieved with the full support of NBBRI as part of the project:

Ø The need for good products mainly local contents that has passed through research.

Ø To aim at getting good, reliable and standard products which can stand the test of time and are cost effective

Ø Effective compliance in the construction procedures.

Ø Proper land acquisition and title

Ø Standardization of building procedures and the use of standard materials.

Ø Assurance of engagement of qualified technicians, engineers and artisans for the construction.

Ø Use of NBBRI's expertise, machines/technologies for the construction which will go a long way

PUBLIC AND PRIVATE DEVELOPMENT CENTRE VISITS NBBRI



A team from PPDC paid a special visit to the Nigerian Building and Road Research Institute (NBBRI) on Tuesday 25th May, 2021 at the Institute's Headquarter in Abuja.

Speaking on behalf of the team, the Programme Officer Margaret Lawrence explained the mandate and function of the organization and the purpose for the visit. She stated that Public and Private Development Centre (PPDC) is a citizen sector Non-Governmental Organization (NGO). They are driven by the desire to have a more transparent and accountable government

as well as citizens empowered to actively participate in governance processes. Their programmes and activities are formulated in a manner intended to drive institutional and behavioral change. PPDC pioneered procurement and contract monitoring activities in Nigeria using the FOI Act as a tool to source relevant procurement data from Public Institutions and continues to do so. She further stated that they are in NBBRI to inquire about the challenges the Institute is facing in area of information dissemination as it relates to the FOI Acts

that deals with procurement and budgeting.

Responding to the visit, the Director-General/Chief Executive Officer of NBBRI, Prof. Samson Duna appreciated the team and the organization for the timely visit. He stated that this is the first of its kind since the establishment of PPDC to visit NBBRI to know the challenges the Institute is facing in relation to information dissemination as it relates to procurement and budgeting. He then explained the steps the Institute has taken so far to meet to the demands from various organizations in this regard.

CENTRE FOR PEACE TRANSPARENCY AND ACCOUNTABILITY ACCORDS NBBRI SPECIAL RECOGNITION



the theme “Harnessing the Gains of NBBRI as a Key Factor in

“The Nigerian Building and Road Research Institute (NBBRI) is one Research Institute in Nigeria that has achieved greatly in the construction sector of our country through its numerous research findings”.

The CEO/Executive Director of the Centre for Peace Transparency and Accountability, Comrade. Ogheneyero Patrick stated this at the Civil Society Roundtable Discussion with The Nigerian Building and Road Research Institute (NBBRI) on the Review and Assessment of its Achievement and Milestone Attained, with

Achieving the Next Level Agenda of Government”

Presenting a comprehensive and analytical overview of NBBRI's Research work so far, the Director-General/Chief Executive Officer of NBBRI, Prof. Samson Duna explained in details the numerous concluded and ongoing R&Ds conducted by the Institute. He explained from the NBBRI Compressed Earth Blocks through the importance of the Pozzolana Plants in Ota, Ogun State and Bokkos, Plateau State, the Rubberized Asphalt Mat (RAM), NBBRI fabricated machines, and others.

At the end of the DG/CEO's presentation, the gathering which had in attendance, distinguished personalities and members of various Civil Society groups applauded the great works on research done by NBBRI and unanimously decide that the DG/CEO should be honoured with the Certificate of Performance.

Present at the occasion were Executive Director/CEOs of various Civil Society groups, representative of the DG/CEO of Energy Commission, experts from the build industry, the National President of the National Youth Council of Nigeria, Comrade Solomon Adodo, Management Staff of NBBRI, the press and a host of guests.

NBBRI LOSES A PROMISING STAFF



The entire NBBRI and mostly the PIT family of NBBRI was thrown into mourning when the sudden news of the demise of one of its promising staff Mahmoud Usman was announced.

Usman was born in Gwammaja area of Dala Local Government of Kano State on the 25th August, 1985. He began his educational career when he was enrolled into

the Islamiyya school at a tender age where he completed and memorized the holy Quran. He was later enrolled into Prof. Ibrahim Yaro Yahayya Special Primary School

from 1990-1996, and Government Day Secondary School Kwakwaji from 1996-2002 and moved to College of Arts, Science and Remedial Studies Kano in 2006. He had a Bachelor's Degree in Mass Communication from Bayero University Kano and he is a member of the Nigerian Institute of Public Relations.

He worked with Equal

Access International, Kano (Arewa 24) as junior producer from 2014-2015 and later joined the Nigerian Building and Road Research Institute in 2015 and was posted to North West Zonal Office, Kano as Information Officer.

He died on 2nd March, 2021. He was very religious, friend to all, he dedicated his lifetime to service. Mahmoud was the engine or the heart of Kano Zonal Office. His death has indeed created a vacuum that is very hard to fill. He would forever be remembered by all.

He is married with one wife, four children. May Allah have mercy on his soul. Amin

THE DEPARTURE OF A GEM



We lost a gem, a colleague, a friend and a loving sister Mrs. Adio Fatimo Ayoka. Before her death, she was a staff of the Nigerian Building and Road Research Institute of the Administration and Finance Department, NBBRI NLC, Ota,

Ogun State. She was born on 23rd of January and left this world to eternal glory April 16th, 2021.

She had her primary education at Nusara-u-Deen Primary School, Nigerian, Model Secondary School both at Idi - Oro Mushin and later proceeded to Lagos State Polytechnic,

where she obtained her OND and HND respectively. She was not satisfied with her level of education and she proceeded to Bells University of Science and Technology for further degree and came out with First Class Honours.

She worked at NBBRI as an Office Clerk for almost 23 years and also served as an Assistant Financial Secretary to NBBRI Multi-purpose Cooperative Society.

She was an open-minded person, easy going and always ready to serve to the best of her ability. She is survived by Parents, siblings and a beautiful daughter.

Fatima, we love you dearly, but God loves you more.

May your soul continue to rest in Peace.

SOCIAL DIARY BIRTH



BABY ELIJAH OSINACHI,
*Born On 31st May, 2021 To The Family Of
Mr. Chris Chukwurah Of Pit Dept. Ota*



BABY PRINCE ODUGOCHO Victor
*Born On 7th March 2021 To The Family Of
Mr. Olotu Mohammed Of Pit Dpt, Abuja*



BABY JEREMIAH OCHE OKOPI,
*Born On 10th December, 2020
To The Family Of Mrs. Mary Lawal Of Ces, Jos.*



BABY MARYAM, BORN ON 8TH May, 2021 To
*The Family Of Mr. Yerimaabubakar Baba
Of Brd/zonal Coordinator. Gombe*



BABY AMINA IBRAHIM,
*Born On 28 May 2021 To The Family Of
Mr. Ibrahim Garba Of Ces Dpt, Kano Office*



BABY ALIYU UMAR GWARAM,
*Born On 29th April, 2021 To The Family
Of Mr. Umar Aliyu Of Slt Dept. Gombe*

TEAM NBBRI PREPARING FOR RESEARCH INSTITUTE GAMES ASSOCIATION OF NIGERIA 'REGAN' 2021 GAMES FESTIVAL

The Research Institute Games Association of Nigeria (RIGAN) comprises of a family of Thirty -Five Research and Development (R&D) Institutes under the aegis of the Federal Ministry of Agriculture, Science, Technology and Innovation, Health, Education, Transport, youths and Sports and Environment. One of the cardinal objectives of RIGAN include the bringing together of various R&D Institutes through Bi-annual sporting activities.

NBBRI is a committed member of RIGAN and has been participating in her activities. The Institute successfully hosted the Year 2019 Games Festival at her National Laboratory Complex Ota, Ogun state. The Institute took fifth position in the overall medals table.

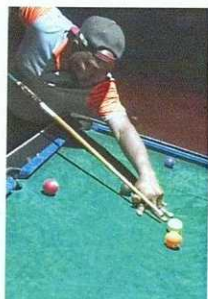
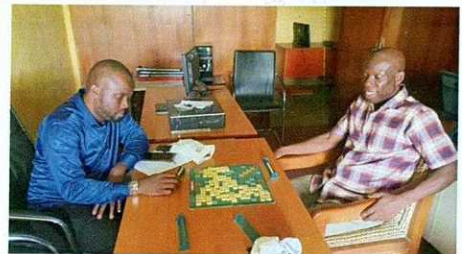
The 2021 Games Festival will be hosted by Raw Materials Research and Development Council (RMRDC) at Moshood Abiola National Stadium, Abuja.

In preparation for the Games Festival, NBBRI sports men and women have been training hard to ensure excellent outing to top the medals table. The Management has thrown all her weight to support Team for excellent performance during the forthcoming Games Festival.

There are lots of games to be competed for during the festival which includes: Football (Digital and Veteran) , Volleyball (Men and Women) , Lawn Tennis - Men and Women (Digital and Veteran) , Table Tennis - Men and Women (Digital and Veteran), Scrabble (Men and Women), Snooker (Men and Women), Squash - Men and Women (Digital and Veteran), Ayo (Men and Women), Badminton - Men and Women (Digital and Veteran), Draught (Men and Women), Chess Classical (Men and Women), Chess Blitz (Men and Women), Dart 501 (Men and Women), Dart TDB (Men and Women), Athletics Veteran - Men and Women (100m, 200m, 400m, 800m, Short Put, long Jump), Athletics Digital - Men and Women (100m, 200m, 400m, 800m 4 x 100m, 4 x 400m ,4 x 100 Mixed Relay, Long Jump, Triple Jump, High Jump).

The Games Festival which was earlier scheduled for 26th November - December. 2021 has been postponed to 11th - 20th March, 2022.

'NBBRI GO FOR GOLD'





NBRRI INTERNATIONAL HEADQUARTERS

*No. 10 I. T. Igbani/NBBRI Road, Off Obafemi Awolowo Way, Jabi-Abuja
P.M.B. 5065 Wuse GPO, Abuja-Nigeria
Website: www.nbri.gov.ng*