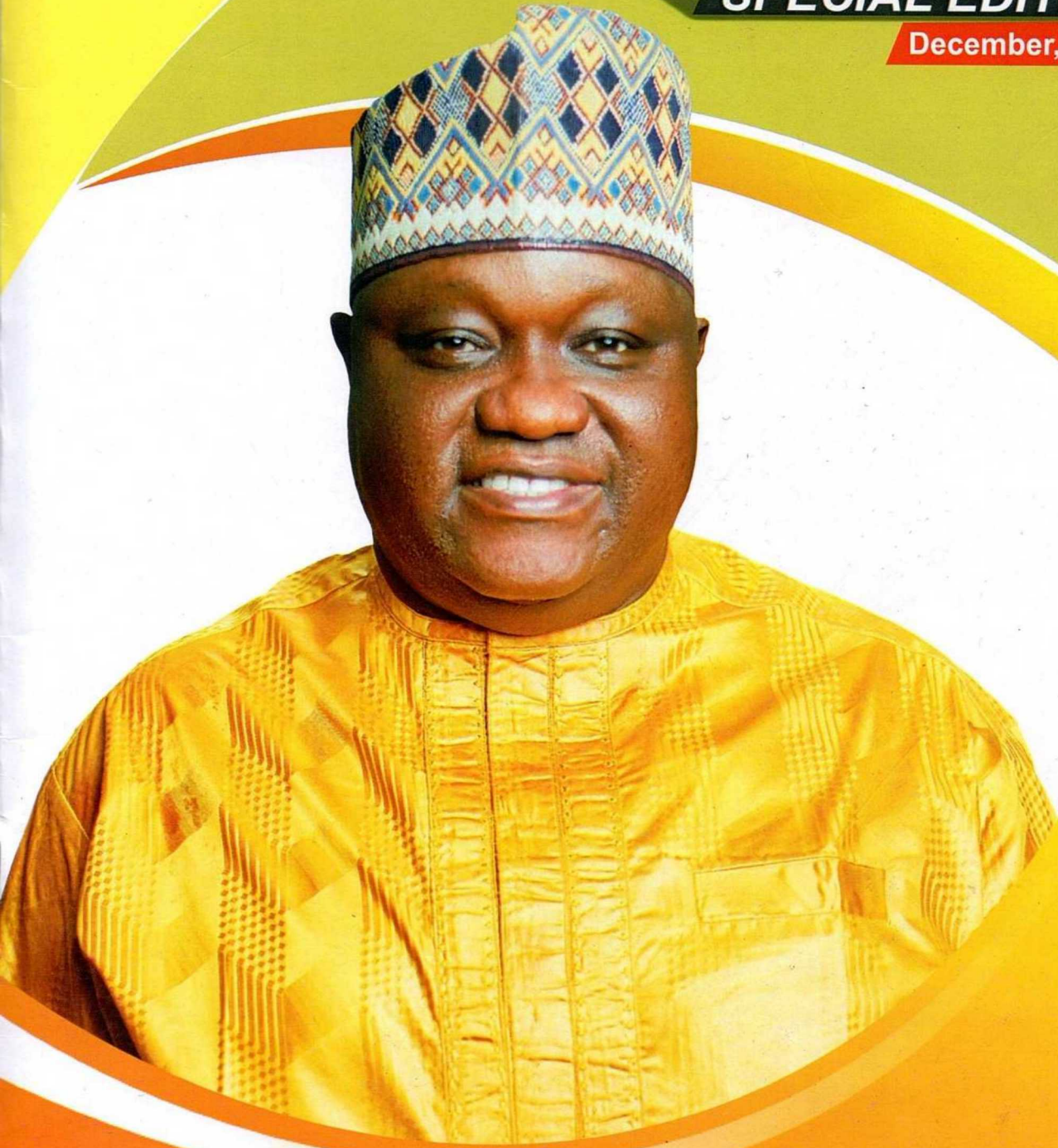




# NBRRI

**NEWSLETTER**  
**SPECIAL EDITION**

December, 2024



**GOOD ENOUGH** *For* **2<sup>ND</sup> TENURE**

## NBRRI NEWSLETTER

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## NBRRI

*(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 & D, 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

*On behalf of the management and staff of NBRRI, I welcome you to the Special edition of the NBRRI Newsletter 2024. As you will all agree with me that 2024 has indeed been a very adventurous and productive year.*

*The year 2024 has unfolded with a remarkable milestone for the Nigerian Building and Road Research Institute (NBRRI), as we proudly announce the reappointment of Prof Samson Duna as the Director-General of the institute. This exciting development comes at a time when the institute has seen an unprecedented strides in research, development and innovation under his astute leadership.*

*In this special edition, the Governor of Gombe, His Excellency Muhammadu Inuwa Yahaya conveyed his heartfelt congratulations to the DG, recognizing the immense contributions that Prof Samson Duna has made to the growth of infrastructure across Nigeria.*

*Also included in this edition is an exclusive interview of Prof Samson Duna with NBRRI Newsletter where Prof Duna expressed his unwavering commitment to elevating the institute to new heights in the years ahead.*

*We also take a closer look at the four cardinal points that have defined his tenure presented through pictorial journey of his achievements which also include international conferences/workshops, investigations of building/bridge collapse and road infrastructural failures, training and empowerment of artisans across all geopolitical zones, capacity building of staff across all zones and faceup lifts of all NBRRI offices across Nigeria.*

*As we reflect on these milestones, we are filled with anticipation for what the next four years will bring as the DG's reappointment is a signal not just for continuity but also a commitment to excellence. We also look forward to sharing more updates on NBRRI's ongoing projects and the transformative impact of its work under the continued leadership of Prof Samson Duna.*

*Here's to building a stronger, safer, and more sustainable future for Nigeria- one road, one building and one bridge at a time.*

*Cheers!*

**Makava Daniel**  
**Editor-In-Chief**

**Published by Nigerian Building and Road Research Institute (NBRRI)**

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**All Correspondence to the Director General/CEO**

NBRRI DG 2nd Tenure 'Special Edition'

# PRESIDENT TINUBU REAPPOINTS PROF. SAMSON DUNA AS DG NBRRI



Nigeria's President, Bola Tinubu, has approved the reappointment of Professor Samson Duna as the Director-General of the Nigerian Building and Road Research Institute (NBRRI) for a second tenure of four years.

His reappointment was conveyed in a letter signed by the Secretary to the Government of the Federation (SGF), Senator George Akume.

In a statement signed by the Deputy Director of Information for the agency, Peter Mashem, it was noted that Professor Duna has been serving as the Director-General of the Nigerian

Building and Road Research Institute since his appointment in 2020.

Professor Duna is an erudite Professor of Civil Engineering from Billiri Local Government Area of Gombe State.

As a COREN-registered engineer, Professor Samson Duna is also a fellow of the following professional bodies: the Nigerian Institution of Civil Engineers (FNICE); the Nigerian Association for Engineering Geology and the Environment (FNAEGE); Fellow of the Nigerian Society of Engineers (FNSE) among others

## PROFILE

# PROFESSOR SAMSON DUNA,

*MNIEN, RE(coren), FNICE, FNAEGE, FANSE, FNIHTE, FNATE, FNLI, FIOGR, FNSE*

**DIRECTOR-GENERAL/CHIEF EXECUTIVE OFFICER  
NIGERIAN BUILDING AND ROAD RESEARCH INSTITUTE (NBRRI)  
(FEDERAL MINISTRY OF INNOVATION, SCIENCE AND TECHNOLOGY)**

Born on 13<sup>th</sup> March, 1968, Samson Duna is a Professor of Civil Engineering and the current Director-General/Chief Executive Officer of Nigerian Building and Road Research Institute (NBRRI), a parastatal under the aegis of the Federal Ministry of Innovation, Science and Technology.

He attended the following Institutions and obtained the following qualifications: Abubakar Tafawa Balewa University, Bauchi, Doctor of Philosophy(PhD) Civil Engineering (Structures); Ahmadu Bello University, Zaria, Masters of Science (M.Sc.) Civil Engineering; Abubakar Tafawa Balewa University, Bauchi, Bachelor of Engineering (B.Eng. Hons), Civil Engineering; Government Science Secondary School, Toro, Bauchi State, General Certificate of Education; and Ekan Primary School, Hwolshe Giring Jos, Plateau State, Primary School Leaving Certificate.

His working career started at Abubakar Tafawa Balewa University, Bauchi, as Graduate Assistant in the Civil Engineering Department where he rose to the rank of Professor, specializing in Structures.

As a COREN Registered Engineer, Engr. Prof. Samson Duna is also a member of several professional bodies including; Member, Nigerian Institute

of Engineering Management (MNIEM); Fellow, Nigerian Institution of Civil Engineers (FNICE); Fellow Nigerian Association for Engineering Geology and the Environment (FNAEGE), Fellow, Nigerian Society of Engineers (FNSE), and Fellow Academy of Natural Science and Engineering, Duna is also Council Member of Standard Organization of Nigeria (SON) and a member of Industrial/Sectorial Board for the Regional Transport Research and Education Centre Kumasi (TRECK), Ghana.

Engr. Professor Samson Duna has to his credits over fifty (50) research publications in learned local and international journals as well as technical reports, workshops and conferences. He has attended and delivered various papers at technical workshops and conferences both within and outside the country. He has supervised over 140 undergraduate and post-graduate students comprising of Post-Graduate Diplomas, Masters of Engineering and Doctor of Philosophy and taught in the University for over twenty-six (26) years.

Professor Duna designed, supervised and was involved in the construction of various types of infrastructure spread all over the country.

Duna joined the Nigerian Building and Road Research Institute as Director of Research and was appointed the Acting Director-General/CEO of the Institute in 2019; a position he held till 3rd December 2020 before his confirmation as the substantive Director-General/Chief Executive Officer of Nigerian Building and Road Research Institute, NBRI. Due to his

dynamic leadership, President Bola Ahmed Tinubu last week reappointed Professor Duna as the DG/CEO of NBRI for another 4-year tenure.

Prof Duna is married to Doctor Mrs. Agatha Duna and they are blessed with Children. He is currently the National President of the Boys Brigade Nigeria and hails from Tal, Billiri Local Government Area of Gombe State.



## GOMBE GOV HAILS REAPPOINTMENT OF PROF DUNA AS NBRRI DG



Gombe State Governor,  
**Muhammadu Inuwa Yahaya**

Gombe State Governor, Muhammadu Inuwa Yahaya, has expressed delight and pride in the reappointment of Prof. Samson Duna as the Director General of the Nigerian Building and Road Research Institute (NBRRI) for another four-year term.

The reappointment was approved by President Bola Ahmed Tinubu.

Prof. Samson Duna, who hails from Billiri Local Government Area, has been serving as the Director General of NBRRI since his initial appointment in 2020.

Inuwa Yahaya described him as an illustrious son of Gombe State and a shining example of commitment to excellence and professionalism.

He noted that his vast experience and network have been instrumental in driving forward Nigeria's infrastructural research and development.

According to him, “We are immensely proud of Prof. Duna's achievements. His reappointment by Mr. President is a validation of his exceptional leadership and commitment to excellence in the engineering profession.”

The governor added, “We are confident that he will continue to make Gombe State and Nigeria proud.”

The Governor assured Prof. Samson Duna of the solidarity, support, and goodwill of the government and people of Gombe State as he continues in his role, as contained in a statement by Ismaila Uba Misilli, Director-General (Press Affairs), Government House, Gombe.

## INTERVIEW:

### TOGETHER, WE WILL WORK TOWARDS ELEVATING NBRRRI TO NEW HIEGHT.... Prof Duna

*Engr. Professor Samson Duna, has been reappointed for another four-year tenure as the Director General and Chief Executive Officer of the Nigerian Building and Road Research Institute (NBRRRI) by His Excellency, President Bola Ahmed Tinubu. The NBRRRI NEWSLETTER engaged the erudite Professor of Civil (Structure) Engineering in a brief but insightful discussion on some of his plans for the next 4 years.*

**NBRRRI NEWSLETTER:** Congratulations, sir, on your reappointment for a second tenure as the Director General and Chief Executive Officer of the Nigerian Building and Road Research Institute by His Excellency, President Bola Ahmed Tinubu. We are delighted to have the opportunity to congratulate you on your achievements thus far, and to discuss your plans for the future. Prof, how do you feel about this reappointment for a second tenure?

**PROF. DUNA:** Thank you very much. First of all, I want to express my sincere appreciation to you and your media crew for taking the time to speak with me today. This is a momentous day that I believe results from divine providence. I want to take this opportunity to extend my gratitude to President Tinubu, the President and Commander in Chief of the Armed Forces, for entrusting me once again with the responsibility of leading the Nigerian Building and Road Research Institute. It is an immense honor to serve my country in this capacity. In response to your question, I am very pleased with my reappointment. It is a

recognition of the progress we have made and the impact we have had during my first tenure. It also signals that our work is aligned with the Institute's mandate. Being asked to continue in this role means that the President is satisfied with my performance and gives me the opportunity to build on our achievements and make further improvements. As a human being, it brings me great joy to know that my efforts are appreciated, and I am eager to continue serving my country and contributing to its growth and development.

**NBRRRI NEWSLETTER:** How do you plan to build on the achievements of your first tenure and what initiatives will you introduce?

**PROF. DUNA:** Speaking about building and other related initiatives, I believe that success is relative, and it depends on one's perspective. When I assumed this position, I had a mandate to fulfill and goals to achieve, and I am proud to say that we have accomplished a lot during my first tenure. But there is always room for improvement and new ideas.

In my second tenure, I plan to introduce new innovative initiatives to further advance the Institute's mission and benefit our country. I am confident that with the support of my team, we will continue to make significant strides in the building and road research industry. Upon assuming office in my first tenure, I had four key objectives to guide me:

1. To elevate NBRRI to become the premier research agency in the nation, with a focus on fulfilling our mandate through thorough investigations.
2. To enhance our research capabilities and ensure the sustainability of our facilities, including road infrastructure, buildings, and office equipment for the benefit of our staff.
3. To enrich the skills and expertise of our team through continuous training and development, both on the job and through obtaining additional qualifications.
4. To prioritize the well-being of our staff, ensuring they are content, leading to their optimal performance in the workplace.

While I will not personally evaluate my progress, I am confident that from an outsider's perspective, it is evident that significant strides have been made in all four areas. Training opportunities have increased, resulting in a noteworthy number of PhD and MSc graduates, and a greater emphasis on on-the-job training.

Our departments consistently hold training sessions almost every week, highlighting our commitment to continuous improvement. Our efforts in training have been successful and our investigation and laboratory equipment are top-of-the-line. We have procured special equipment from reputable countries such as Italy and Germany. Recently, a program was implemented to provide universities with equipment through intervention. Based on the four key areas of assessment, it is apparent that we have excelled.

Moving forward, our focus is to further enhance these areas. We aspire to go beyond providing basic necessities and instead, aim for our staff to have ownership of their own homes. A committee has been established to explore the possibility of utilizing NBRRI technologies to assist staff in building their own homes before retirement. We believe as experts in the field that, our staff should not have to struggle with housing issues. The process may take time, but our goal is for every staff to have a home of their choice by the time they reach 35 years of service.

We have plans to address the issue of transportation for our colleagues. Here in the headquarters, we are trying because there is no route that there is no vehicle that aids staff with the means of transportation to and from the office. However, It is a different story in some zonal offices as face this challenge. So, our goal is to ensure that all NBRRI

zonal offices in the States have access to buses for their transportation needs, just like we do at the headquarters. In addition, we are also focused on enhancing our training opportunities. We have recently released a manual guideline that outlines our commitment to providing staff with a complete training package, from your school fees to your tuition fees, to your fieldwork to your journals, practical, and project fees. Everything that has to do with your studies, the Institute will pay 100%. Our aim is to give you all the necessary resources for a successful training experience. Furthermore, we want to make sure that our facilities are top-notch for your comfort in the office. Our goal is for NBRRI to feel like a second home, where you are eager to return to work instead of rushing to leave at closing time. We are dedicated to providing the best possible working environment so that we can get the best from our staff. These are the initiatives we are implementing to ensure your well-being and productivity.

**NBRRI NEWSLETTER: In our discussion on the four cardinal points, the focus was on elevating NBRRI to become the top research agency in not just Nigeria, but also in the world. What specific strategies do you plan to implement to achieve this goal? And how will it enhance the existing collaboration between stakeholders and academia?**

**PROF. DUNA:** At the onset, we got into blind research, where individuals come up with research and bring out journal publications. We want to say no to that approach. We want to use what we call the bottom-top approach. Where a market for something will be identified first, then we carry out research in line with that market demand. For instance, we might decide to have a good Memorandum of Understanding with an industry. An industry that uses certain raw materials as their main work, when we identify your problem as an end user then we carry out research in line with your product. So, we need not start looking for the market of the end product because we have started from the fact that this is the end product, this is your need, this is the area of need, this is what you want, then we can carry out the research based on your need.

We might visit a construction company and when we discover what the problem is, which is material and cost spent on it, we can say we work towards getting an alternative for that material. If that alternative can be made, we carry out that research in line with that market. By recognizing their challenges as end-users, we then conduct research tailored to addressing their needs. Therefore, there is no need for us to search for a market for the final product because we begin with the understanding of what the end product should be, what the consumer requires,

and where the need lies. Subsequently, we can conduct research that aligns with their specific demands.

For example, let's imagine that we decide to visit a construction company and inquire about their current challenges. During our conversation, the owner may mention a specific issue with a particular type of material. They might even reveal the cost they have incurred using this material. In response, we would ask if it would be beneficial to explore alternative options. If a viable alternative can be found, we will conduct thorough research on it for the company's specific needs. This approach ensures that our research is not aimless, but rather targeted towards satisfying a specific end user. Ultimately, this eliminates the need to market the alternative since we already know where it will be utilized. As a result, our research will be purposeful and focused, leading to successful outcomes.

Let's shift our focus to what we want to prioritize now - actionable research that leads to innovation. We need to move away from conducting research that will ultimately end up forgotten on a shelf. Instead, our main goal is to conduct research that can be implemented and transformed into tangible innovations. We should be targeting issues within our communities and using research as a tool to address them. Our approach going forward will be centered around how we can effectively implement our research findings.

As a research agency, one of our challenges is the issue of converting our research into commercial success. We conduct thorough research to solve problems, but monetizing it and making it available for use by others proves to be difficult. Our approach is to blindly conduct research without a clear plan for addressing a specific problem. However, if we establish a partnership or sign a Memorandum of Understanding with an industry, we can identify their specific challenges and work together to create a solution. For example, we recently developed a cement product called Pozzolana, which has been in existence for some time. Despite our efforts to promote it and use the term frequently, it has not been commercialized yet. This is because our initial research was not targeted towards a specific location. We have now shifted our focus to addressing specific issues rather than blindly conducting research.

Our mandate has to do with construction, materials, methods, and equipment while we have about 10 mandates, we specialize in. With these 10 areas in mind, we take the necessary steps to determine your specific needs. For example, if you already have a design plan in place, then our goal is to provide you with the best design for your three-story or two-story building. We have a team ready and available to assist you in this process. We will then discuss any necessary materials, such as blocks, that are needed for the construction of your house. If our blocks do not meet your requirements,

we will conduct research specifically for your needs, such as creating blocks that are suitable for riverine areas. Our ultimate goal is to provide you with a tailored solution that effectively meets your needs. Another area is the issue of bringing something new on the table, it is very necessary. We have just acquired an equipment called super pave mix machine, it is a design of raw material that has to do with designing a road, not based on a mere design. Now for instance there is a procedure called Marshall Mix Design, Marshall mix design is a general concept of road design using asphalt, but irrespective of the location of where the road is, they just carry out the mix based on penetration of 60/70. But today, we want to bring out a design that has to consider the weather, the peculiarity of where the location of the road is. If the road is in a location where there is hot temperature, the mix proportion should take care of the weather condition of where the road is located. If it is a road that has to do with high traffic loading, when I mean HP loading, where heavy trucks, we need to consider the types of trucks or load that will be following that road. But what we do now, is that, we don't consider the type of trucks, if we do a road, any truck will pass on top, because the road is designed in such a way that it does not take into peculiar reference on the of road, the condition of the road, the weather and all other things. Fortunately, NBRRI has introduced the Super Pave Mix Design, which is currently only available in

Nigeria through this agency. We recently commissioned this equipment about two weeks ago, with the honor of the minister of Innovation, Science and Technology who attended the ceremony.

NBRRI is poised to present a multitude of innovations in the realm of design. I am confident that members of academic institutions will flock to this location in FCT. High-profile companies like Julius Berger will also join us to gain insight into our research capabilities.

**NBRRI NEWSLETTER:** Prof, you talked about the Super Pave which is going to be a breakthrough for NBRRI. Are you going to work with sister agencies or ministries that have similar vision?

**PROF. DUNA:** Yes, in terms of research collaboration it is a very effective tool. When you collaborate you get the best, it goes to show that you are not hiding anything. At times people try to hide knowledge in terms of research because they are afraid people will come and steal your technology. But when you open up and invite collaborators to come, it shows that what you are doing meets up to standard; people will know that what you are doing is right. Relevant stakeholders are supposed to be available when you are doing anything because they are the people that will put what you are going to do into practice. We had to bring this into consideration,

we have to bring the Federal Emergency Road Maintenance Agency, we have to bring people selling bitumen, we have to bring people mixing Asphalt, and all the construction companies have to be on the same page. When you come up with a new system of doing things, they should be able to castigate, instigate, investigate, and come up with logical conclusions.

Basically, we are not afraid, we are going to bring out our stakeholders that are relevant in those fields so that we can work together, and they will have an avenue to test whether what we have done is right or wrong.

**NBRRI NEWSLETTER:** The media have been asking how they can come in to create awareness on what NBRRI is doing, they want to do more. We just want you to give us that assurance that in your second tenure, we will engage the media more even as you propagate the achievements of what we are doing in NBRRI.

**PROF. DUNA:** NBRRI has always been a friend to the media, there is no programme that we do that the media are not there. So sometimes I quarrel when the publicity is not well felt. I want to assure you that second tenure we are going to work with the media. I have directed the director PIT to come up with two or three budget line additional to cater for the media in the second tenure. So we are ready to move with the media so that the good things

NBRRI is doing should be publicized for people to know and for people to patronize us. The media will always be a friend of the institute.

**NBRRI NEWSLETTER:** Prof. let's take a look again at the wellbeing of NBRRI staff in general. indeed, you have been very outstanding in your first tenure in terms of welfare generally, kudos to you Sir. In this second tenure, NBRRI staff will be eager to know what you have in store for them.

**PROF. DUNA:** House! Yes, you see palliatives have been going on in different forms, palliatives in terms of visits to site, in terms of Monitoring and Evaluation, in terms of constituency projects from time to time, in the form of funds for assistance, in forms of vehicles to take staff to their respective house, etc. Just like we have right now, there is no route in Abuja that you don't have a bus, all these are areas of welfare. But one thing that we are not doing, we cannot be bragging that we investigate in terms of building materials and our staff don't have buildings they can call their own. And let me tell you that at the recent Institute's Management Committee meeting, we have set up a committee, a team to look at how best to implement this idea of NBRRI Staff owning their houses. It is chaired by the Director, Consultancy and Extension Services, Chief Daniel Makava and he has started working on it. The idea is first of all geared towards acquiring land.

Everybody will fill out a form, identifying his choice of location. Some people would like to retire and go to the village, some people like to retire and stay in their state capital, and some people like to retire and stay where they are, their last posting. Everybody is expected to fill out a form, then from that form, you will identify the state of your choice, from that state of your choice we work towards acquiring a land and this land will be acquired once the land has been acquired the next thing is to work towards construction but everybody will key in based on the type of building you have. There are about four categories of building; we have a room and a parlor self-contained, two rooms and a parlor self-contained, three rooms and a parlor self-contained, what I mean self-contained, then a duplex. We are talking about five bedrooms. So based on this, the idea behind all these is for the staff to key into NBRRI technologies. They use our compression machine, the laterite is there, the technology if you don't know how to do it, we send a staff to handle it for you whenever you are ready. All materials and other things will be given to you free of charge. For our machines, you will not pay anything; the machine will be given to you as a staff. There are a lot of subsidies, we will work towards that. So, if you can get that for the next 35yrs, even if it is every year, you commit something small for the next 35yrs. The idea is that before you end your service, you should own a house.

And the choice of house is for you to decide for yourself and there are four categories where you get you get to pick the one that suits you. The land payment will be a gradual process depending on where you are. But the idea behind the welfare thing is that we don't want you to leave the system and go back as a tenant. You leave the system; you go back as a landlord and that is the idea. I want to assure you confidently that, within a year or two the first set will start benefitting from it.

**NBRRI NEWSLETTER:** Finally, Prof, what is your message to NBRRI staff, and the Federal Government of Nigeria who has bestowed this trust on you?

**PROF. DUNA:** The first message I have for NBRRI staff is that I want to appreciate them, they have been supportive to me, they have been giving me their maximum cooperation and we have been working as a team. And all these successes recorded in my first tenure was because of the support I received from NBRRI staffs, and I want to extend and appeal to all of them again just as they have supported me in the first tenure, I want to appeal to all to support me, so that we continue to put in our best to move the institute forward. There are quite a lot of research we are doing; the country needs us and we can do more. So, with us working together as a team, the sky is our limit and we are going to do more to ensure that we meet our mandate as a research agency.

As a Director General reappointed by the government, I am deeply grateful for their trust in me. I want to assure His Excellency, President Bola Ahmed Tinubu of my utmost dedication and cooperation. I am committed to surpassing my previous achievements in my first tenure and strive for even

greater success. My top priority will be ensuring the fulfillment of the Institute's mandate, contributing to the success and growth of our nation. I am honored to serve my country in this role, and once again, I thank President Tinubu for the opportunity.



# X-RAYING THE FOUR CARDINAL POINTS OF ENGR. PROF. SAMSON DUNA IN PICTORIAL PRESENTATION IN THE PAST FOUR YEARS OF OFFICE

1. To elevate NBRRI to become the premier research agency in the nation, with a focus on fulfilling our mandate through thorough investigations. This is one of the core mandates of the institute as it deals on research of both raw and local contents for the construction of buildings and roads infrastructure in the country. Prof. Duna, standing on this mandate has for the past four years successfully piloted the affairs of the institute in thorough investigations in various aspects of research findings in areas of building collapse, road failures, bridge collapse and so on. The institute has successfully come out with various results in form of journal publications, technical reports and

international conference proceedings for the educational purposes of the construction industry players, enriching government policies and the general public in aspects of curbing building collapses, road failures and bridge collapses in the country. Also, NBRRI's technologies has been put to great use for developmental purposes in construction of school buildings, accommodations and so on by the institute in form of experimenting the research findings and for corporate social responsibility.

# INTERNATIONAL CONFERENCES AND WORKSHOPS



Nigerian Building and Road Research Institute Hosted the World to its 1<sup>st</sup> Virtual/10<sup>th</sup> Annual International Conference



Housing Deficit in Nigeria Linked to Poverty, High Cost of Building Materials and Rural-Urban Migration: An Outcome on an Intensive Three-Day International Seminar Organized by NBRI in Conjunction with Association of Housing Corporations of Nigeria (AHCN).



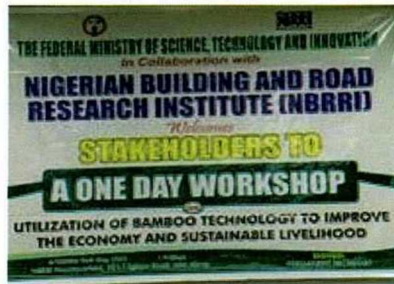
National Workshop on Fire Safety with the Theme: "Fire Safety Management in Nigerian Markets: Challenges and Pragmatic Solutions".



One-Day Special Summit on Building Collapse in 2022



Five-Day International Workshop on Global Trends in Design and Construction for Durable Road Pavements in 2024



Bamboo; The Future of Construction for Reinforced Concrete (International Workshop) in 2023



Nigerian Building and Road Research Institute (NBRI) Organized Bridge Summit to look at the current state of bridges across Nigeria in 2023

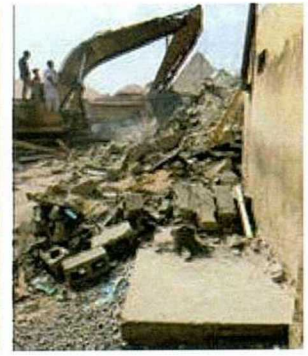
# BUILDING/BRIDGE COLLAPSE AND ROAD INVESTIGATIONS



DG NBRI receives Technical Report from the Committee Set up to Investigate the 21 Storey Ikoyi Building Collapse that Occurred in 2021.



NBRI's Team on Site Investigating the Collapse of a Storey Building on Sunday 18th September, 2022 at Bukuru, Jos South LGA, Jos, Plateau State



Prof. Duna speaking to newsmen at the site of the collapse Three-Storey Building Still Under Construction at the Popular GSM Market along Beirut Road of Kano in Kano State. Also in picture, NBRI Team Investigating the Technical Cause of the Building Collapse in Kano



Eight-Man Committee set up by NBRRI to Investigate the Collapse Building at Iman Street, Uyo, Akwa-Ibom State.



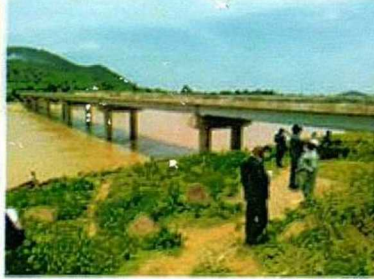
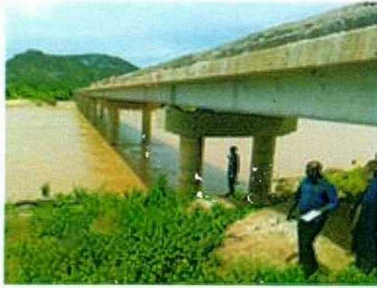
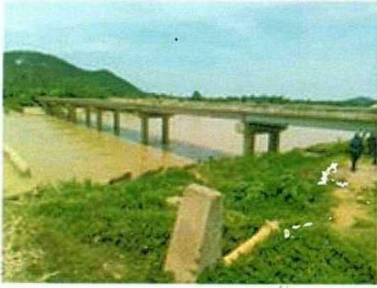
Prof. Samson Duna at the site of Saint Academy School Building Collapse, Busa Buji, Jos North.



NBRRI DG addressing a World Press Briefing on the Frequent Occurrence of Building Collapse in Nigeria.



NBRRI Team on Road Failure Investigation



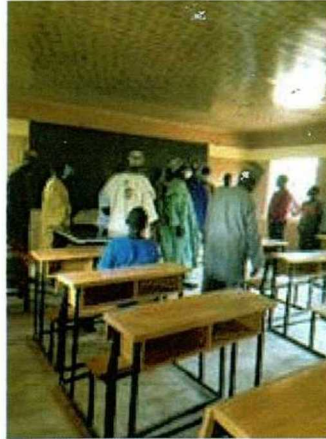
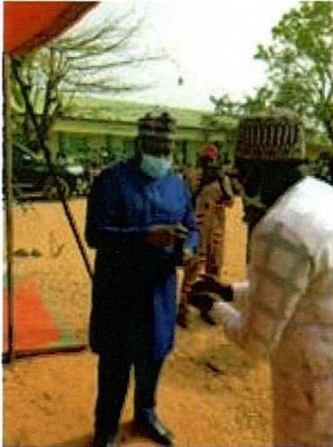
*Community Service*  
**CONTRIBUTIONS TO THE SOCIETY**



For some years, NBRRRI has been donating World-Class Engineering Laboratory Equipment to Six Federal Universities from the Six Geopolitical Zones annually. This initiative has been on for about 3 years now and Prof. Duna, in ensuring better and qualified graduating engineering students for the country, pledged to continue with this gesture.



Foundation Laying for the Construction of Four Nos Classroom Blocks



Director-General/Chief Executive Officer of the Nigerian Building and Road Research Institute Commissioned Classrooms in Gombe State



The Director-General/Chief Executive Officer of NBRRI on a Courtesy Visit and Handing Over of NBRRI'S Corporate Social Responsibility (CSR) Project to the Olota of Ota.



Handing Over of a Three-Bedroom Bungalow at the FCT Model Secondary School, Maitama, Abuja to the FCT Secondary Education Board by NBRRI



Handing Over of a Three-Bedroom Bungalow at Government Girls Science Secondary School (GGSSS), Kuje, Abuja to the FCT Secondary Education Board by NBRI



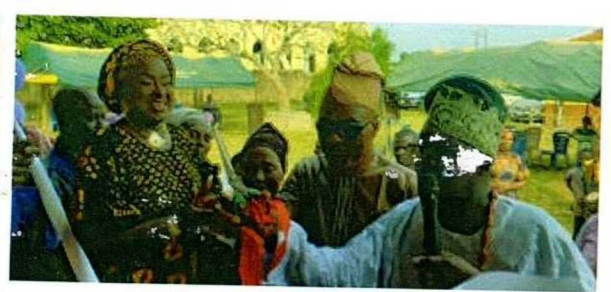
NBRI Donates Facility to the people of Bokkos LGA of Plateau State to serve as International Potato Market



NBRI Donates Block of Classrooms to the good people of Udi, Enugu State



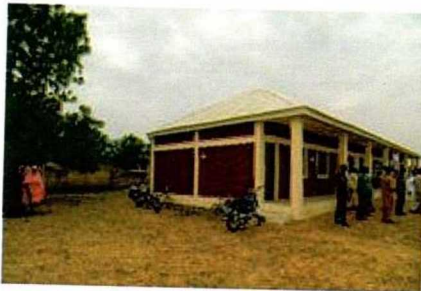
NBRI also commissioned a Block of Three (3) Classrooms at Wajah Girls Primary School in Hong Local Government Area of Adamawa State.



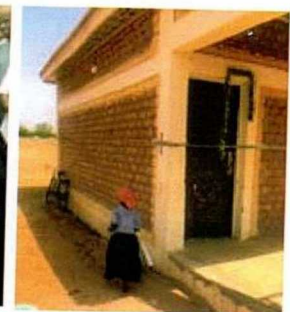
Commissioning of a Block of Three Classrooms using NBRI Technology at Awe Town, Oyo State



Donation of a Block of Three Classrooms to the People of Karu LGA, Nasarawa State by NBRI



NBRI Enhances Education with Donation of Block of Classrooms to Sakwa Community in Zaki LGA, Bauchi State



Nigerian Building and Road Research Institute (NBRI) Commissions Projects Across Two Northern States (Yobe and Borno)



## ARTISAN TRAINING

Nigerian Building and Road Research Institute (NBRRI) in Collaboration with Artisans Skills Empowerment Initiative (ASEI) Organized Two-Week long Training for Youths in Abuja



Artisans Empowered with Skills in Plateau State by the Nigerian Building and Road Research Institute (NBRRI)



Nigerian Building and Road Research Institute Trained Artisans from the North-East on Artisan Skills Curriculum Learning Guide.



Sensitization/Training on NBRRI Artisanal Skill Curricula/Learning Guides, South-South Zone



Nigerian Building and Road Research Institute Trains Artisans among the Internally Displaced Persons (IDPS)



NBRRRI'S North-West Zonal Office Trained Artisans on NBRRRI Artisanal Curricular



Four-Days Empowerment Training Program for Artisans Organized by OTA PARAPO Chambers of Commerce, Industry, Mines and Agriculture in Conjunction with NBRRRI at NBRRRI NLC, OTA



NBRRRI Hosts a 7-Day Professional Training on Operations and Maintenance for Engineers from the Niger Delta Region

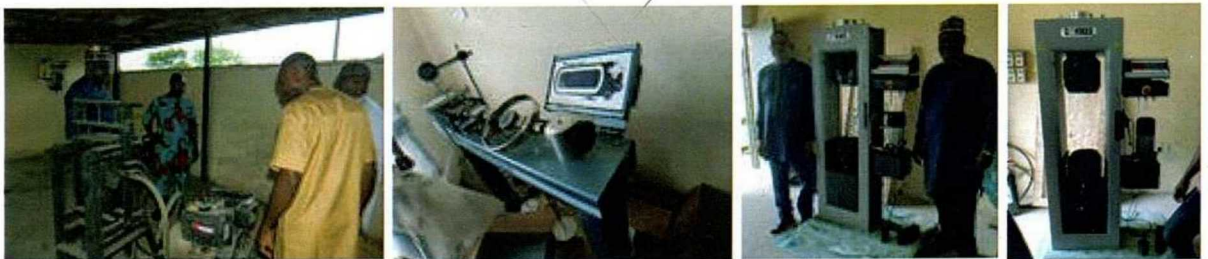
2. To enhance our research capabilities and ensure the sustainability of our facilities, including road infrastructure, buildings, and office equipment for the benefit of our staff.

Prof. Duna prioritizing face uplift of NBRRI's facilities by innovating the offices from the headquarters to the zonal offices is a top notch amongst his cardinal points. Within these four years of his dedicated service to the enhancement of the institute, the offices can be categorized as one of the best with an international standard amongst other federal governments offices nationwide. Having the best among the best has projected the institute into limelight. Putting research on the world map, Prof. Duna not just only uplifted the physical structures of the offices, he placed the acquiring of world class equipments to be his number one priority. Today, the institute is proud to have world standard research equipments which most of them can only be found in NBRRI in the entire Africa continent.

### EQUIPTING NBRRI'S LABORATORIES



Equipping NBRRI Laboratories with basic testing R&D machines for standard research work



Installation of basic testing R&D machines for standard research work at the Zonal Offices, (South-South Zonal Office, Uyo)



Some World Class Laboratory Machines Acquired by NBRRI

## FACELIFT OF NBRRI OFFICES NATIONWIDE

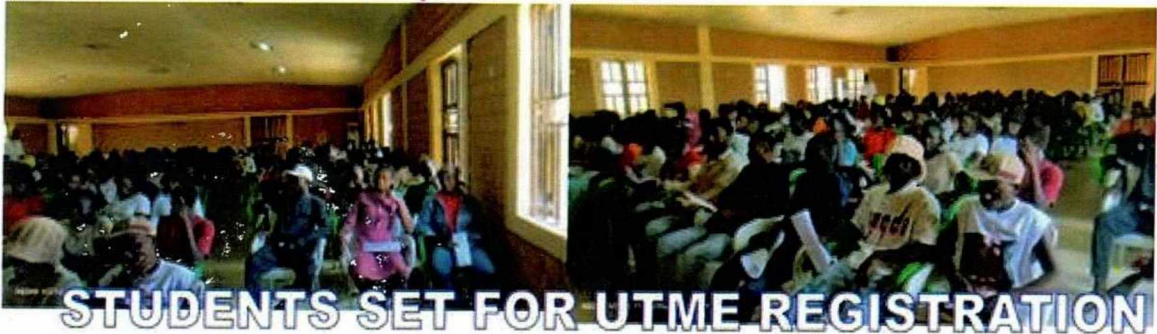


NBRRI Display Center, Abuja



NBRRI ICT Center, Abuja

**NBRRI SKILL ACQUISITION, JAMB/CBT CENTRE, BOKKOS, PLATEAU STATE.**

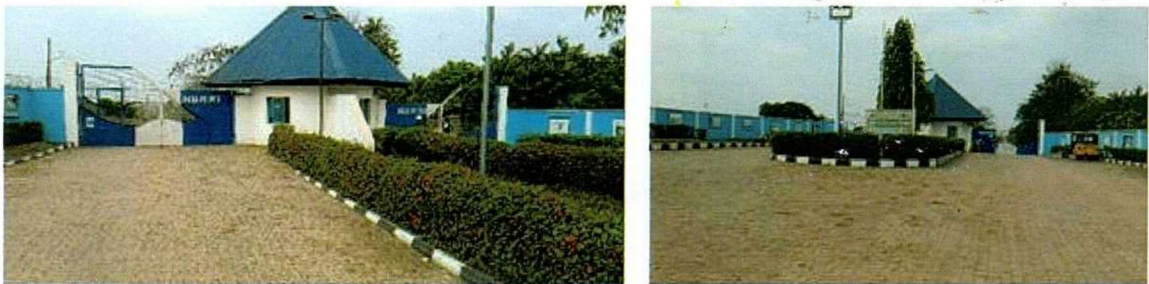


**NBRRI Conference Halls. Red and Green Chambers, Abuja**

Some of the captivating structural upgrade Prof. Duna embarked on which are standing and will remain significant to the nation and NBRRI are the rehabilitation of the NBRRI National Laboratory/Production Center, Ota, Ogun State. distinguishing himself as the first DG to play host to RIGAN Games Festival in 2019, Prof. Duna till date placed a great priority in sports as he embarked on the construction of a Mini Sports Complex in Ota. The on-going construction of NBRRI Guests House in Ota, renovation and construction of the Engineering Materials Workshop Bay, NBRRI Technology Village, Building of the NBRRI Storey Building with Bamboo as the reinforcement steal, the NBRRI ICT building and many more are part of Prof. Duna's great dream for the institute's upliftment. The NBRRI Zonal Offices were not left out in the Prof. Duna's agenda. He renovated all the offices of the institute nationwide and provided official vehicles for zonal project monitoring and official assignments.



NBRRI ICT/CBT Center, OTA, Ogun State



Painting of NBRRI gate/fence in OTA using NBRRI Cement Paint



On-going construction of NBRRI Mini Sports Complex in OTA



On-going construction of NBRI Guest House in OTA



NBRI Multi-Purpose Hostel/Lodge and Sports Complex in Bokkos, Plateau State



Renovation of the North-East NBRI Zonal Office, Gombe State



Renovation of the North-Central NBRI Zonal Office, Jos, Plateau State



Renovation of the South-East NBRI Zonal Office, Nnewi, Anambra State



Renovation of the North-West NBRI Zonal Office, Kano



Renovation of the South-South NBRI Zonal Office, Uyo, Akwa-Ibom State



Renovation of the South-West NBRI Zonal Office, Lagos, Lagos State



On-going Construction of NBRRI Technology Village, Ota



NBRRI Workshop Bay, Ota

3. To enrich the skills and expertise of our team through continuous training and development, both on the job and through obtaining additional qualifications

No research agency/organization that can attain a greater height if training, retraining and acquiring of additional academic qualifications by its staff is not one of the top priorities of the organization. Seeing staff excel in their professional field brings joy and happiness to Prof. Duna. If there is any staff request that the DG in his past four year has given top priority and express approval to, six in every ten of such requests must be that of training (internal/external), acquiring of additional academic qualifications by both the research and non-research staff of NBRRI. Today, NBRRI through the training programmes initiated by Prof. Duna, 80 percent of staff have benefited on going for one annual training or the other. It has become a culture for each department to also organize department trainings for her staff on a regular basis. The number of staff with Masters and PhD holders in NBRRI has increased tremendously due to the magnanimity of Prof. Duna by encouraging acquiring of additional qualifications.



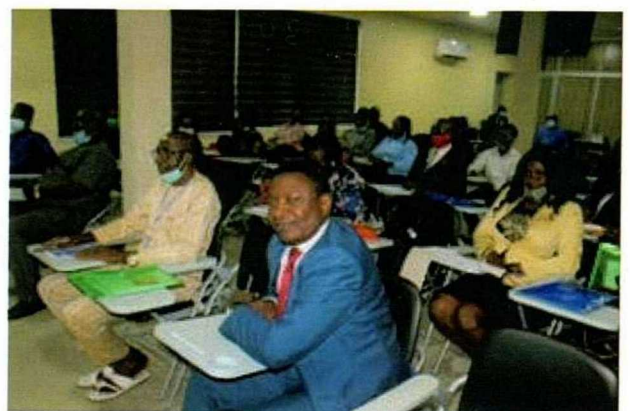
Road Research Department Organizes Workshop on Investigation of Road Pavement Failures



Registry Unit on an E-Registry Training



Research Staff on a 2-Day Seminar on The Use of Geographic Information System (GIS)

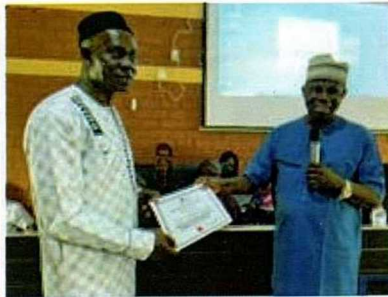


Finance and Account Department Holds a 2-Day Workshop



Materials Characterization and Geotechnical Tests Result Analysis and Interpretation Training

## CONSTANT CAPACITY BUILDING FOR ITS STAFF



NBRI National Laboratory Complex (NLC), Ota Staff on a One-Day Intensive Training



Staff of NBRI'S Public Relations Unit Undergo Two Days Intensive Public Relations Training to Boost



NBRI Staff on Two-Days Intensive Training on Capacity Building, Work Attitude and Retirement Plan after Service.

4. To prioritize the well-being of our staff, ensuring they are content, leading to their optimal performance in the workplace

Prioritizing Staff Well-being for Optimal Workplace Performance has been goal-to-goal in Prof. Duna's topmost agenda for staff. In today's fast-paced work environment, the well-being of staff is a crucial factor in achieving organizational success. Just as Prof. Duna use to say in any given opportunity, "when staff members are content and well-supported, they are more engaged, productive, and motivated, leading to optimal workplace performance. Employers who prioritize staff well-being create a positive work culture that fosters loyalty, creativity, and efficiency. I am committed to the well-being of every single staff in NBRRI."

One of the primary ways to enhance staff well-being is by promoting a healthy work-life balance. Overworked staff often experience burnout, which negatively affects their productivity and job satisfaction. Providing flexible work schedules, encouraging regular breaks, and supporting mental health initiatives help create a balanced and sustainable work environment. These, Prof. Duna has successfully achieved to some great level in the past four years with the introduction of regular health seminar, provision of sports centres like the NBRRI fitness arena in Abuja, equipping the NBRRI sick bay, support of staff welfare, provision of staff buses to ease transportation in all route withing Abuja, and so on.

Additionally, a supportive and inclusive workplace culture contributes significantly to staff satisfaction. Recognizing staff' contributions, fostering open communication, and addressing workplace concerns promptly help build trust and morale. When employees feel valued and respected, they are more likely to take ownership of their roles and contribute meaningfully to the organization. Prof. Duna is often called the "father of all, man of the people, ambassador of students" these names are tagged to him due to his 'open door' policy he is operating.

Prioritizing employee well-being is not just a moral responsibility but a strategic advantage. A happy and content workforce leads to increased efficiency, lower turnover rates, and a more positive work environment. Organizations that focus on their staff' well-being ultimately thrive in today's competitive business landscape.



NBRI Organized Medical Sensitization on Cardiac Arrest for Her Staff



NBRI Organizes Health Awareness Seminar for Staff of the Institute on the Topic, Mental Health and Self-Discipline within the Work Place



NBRI Installs and Commissions a Fitness Centre for its Staff



NBRI Sick Bay for Staff in Abuja Office



Fire extinguisher installed in all the floors at NBRRI head office, Abuja



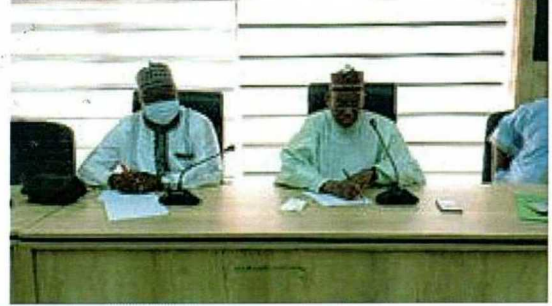
Installation of Solar for Constant Light Supply



NBRRI Staff Busses to Ease Staff Transportation

5. OTHER ENGAGEMENTS, NOTABLE INNOVATIONS, COLLABORATIONS UNDERTAKEN BY PROF. DUNA

**COURTESY VISITS FOR COLLABORATIONS/SIGNING OF MOU**



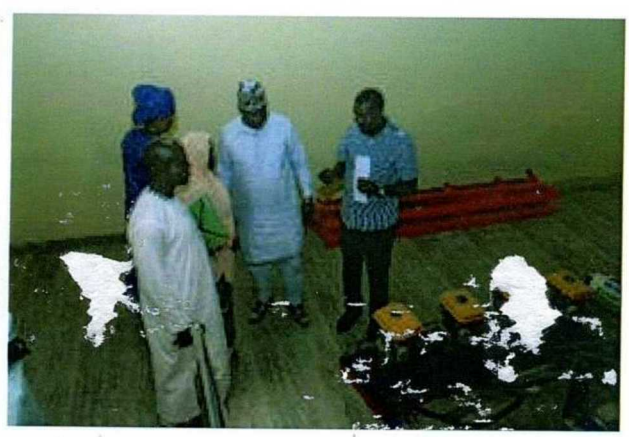
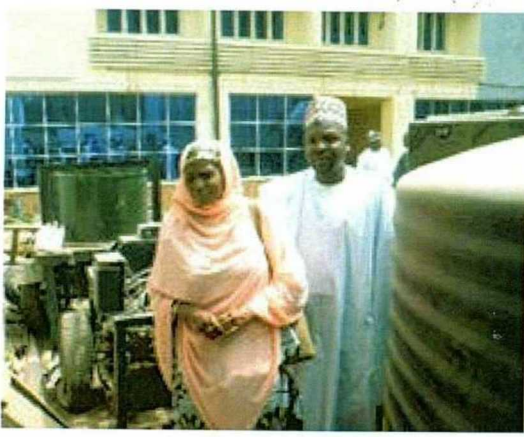
Courtesy Visit by the DG/CEO of NBRRI to the Executive Secretary of the Universal Basic Education Commission (UBEC) (Collaboration in Building Education Sector)



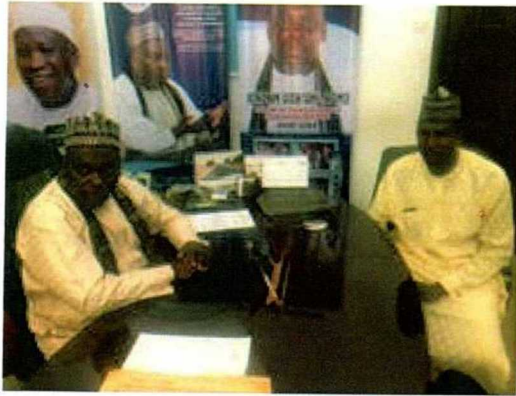
Tackling Housing Deficit in Nigeria: NBRRI and Real Estate Developers' Association of Nigeria (REDAN) set for Collaborations



Nigerian Association of Engineering Craftsman Visits NBRRI for Collaborations



Gombe State to Partner with NBRI on Affordable Housing as the Honourable Commissioner Ministry of Science, Technology and Innovation, Gombe State, Dr. Aishatu Usman Maigari Visits NBRI Head Office, Abuja



Kano State Considers NBRI for Consultancy Services as Commissioner for Works, Hon. Engr. Mu'azu Magaji Visits NBRI Kano Office for Collaboration



NBRI signing a Memorandum of Agreement with Livelihood Improvement Family Enterprise - Niger Delta (Life - Nd) on collaboration in Capacity Building



African University of Science and Technology (AUST) Seeks Partnership with NBRRI to Promote Science and Technology in the Country



Bingham University seeking Collaboration with NBRRI on Improving R&D and Student's Empowerment Academically



NBRRI in Collaboration with Galaxy Backbone Limited in Creation of Smart Homes System in Nigeria



NBRI/RITVALUE Seeks to Tie a Strong R&D Collaboration with Julius Berger Nig. Ltd.



NBRI/RITVALUE Seeks Collaborations with Chinese Civil Engineering Construction Company (CCECC) Nig. Ltd.



NBRI and the Regional Sustainable Energy Centre of Excellence for Sub-Saharan Africa signing an MoU on Mass Construction of Houses using Local Materials from NBRI's Technology.



NBRI/RITVALUE initiating move to tie a strong R&D collaboration with Reynolds Construction Company (RCC) Nig. Ltd.



NBRI/RITVALUE initiating move to tie a strong R&D collaboration with SETRACO Nig. Ltd



NBRRI partnering with Federal Road Safety Corps to curb Traffic Offences in Nigeria



PAVION Group of Company, Brazil Ready for Collaboration with NBRRI



Superpave Mix Committee Working on Phase 2 of the National Super Pave Project



NBRRI Inaugurates Anti-Corruption & Transparency Unit committee

# ROUNDTABLE DISCUSSIONS



Centre For Peace, Transparency and Accountability Roundtable Discussion and Assessment of NBRRRI's Projects situated in the Northern Nigeria Region



NBRRRI Presents 2023 Innovation Score Card to Nigerian Civil Society Groups, Media Organizations and Construction Stakeholders

## SOME NOTABLE INNOVATIONS



Construction of a Prototype Storey Building with Bamboo as Reinforcements



Prof. Samson Duna Honoured with the Prestigious Certificate of Performance by the Centre for Peace, Transparency and Accountability

# NBRRI DISPLAY CENTER



## INSTALLATION OF SOLAR FOR CONSTANT



## NBRRI STAFF BUSES TO EASE STAFF



# NIGERIAN BUILDING AND ROAD RESEARCH INSTITUTE

(FEDERAL MINISTRY OF INNOVATION, SCIENCE AND TECHNOLOGY)

MEETING YOUR LOCAL CONTENT NEED IN CONSTRUCTION



### NBRI INTERNATIONAL HEADQUARTERS

No. 10 I. T. Igbani/NBRI Road, Off Obafemi Awolowo Way, Jabi-Abuja  
P.M.B. 5065 Wuse GPO, Abuja-Nigeria  
Website: [www.nbri.gov.ng](http://www.nbri.gov.ng)



ELECTRIC INTERLOCKING MACHINE



INTERLOCKING BLOCKMAKING MACHINE/DIESEL



PAVING STONE MACHINE



NBRI COMPACT INTERLOCKING BLOCK MAKING MACHINE



FCR TILE MAKING MACHINE (MULTI-CHAMBER)



ENGINEERING SUBGRADE SOILS ATLAS OF NIGERIA



ASPHALT MAT



HAND ROLLER COMPACTOR

#### SOME CONSTRUCTION MATERIALS/SOIL TESTING LABORATORY EQUIPMENTS



NBRI MOVEABLE HOUSE (DUPEX)



NBRI SKILL ACQUISITION CENTRE



IMPROVED NBRI TECHNOLOGY (MOVEABLE BUILDING)



NBRI POZZOLANA PLANT



ROAD FAILURE ASSESSMENT

**SOUTH-SOUTH**  
PLOT 14, UBI INYANG STREET  
AKWA HOUSING ESTATE  
OFF ABAK ROAD, UYO  
AKWA IBOM STATE

**NORTH-CENTRAL**  
NO 2, WASE ROAD  
GRA, JOS  
PLATEAU STATE

**SOUTH-WEST**  
15, AWOLowo ROAD, IKOYI  
P.M.B 12566, IKOYI  
LAGOS STATE

**SOUTH-EAST**  
PLOT 750, NNEWI OKIGWE EXPRESS  
NNI P.M.B 5070, NNEWI  
ANAMBRA STATE

**NORTH-WEST**  
PLOT 124, BLOCK 5, KATSINA ROAD  
P.M.B 556, KANO  
KANO STATE

**NORTH-EAST**  
SHARD ROAD, NEW GRA  
OPPOSITE CONHOA, GOMBE  
GOMBE STATE