VRA NEWS

Newsletter Volume 25: July - August - September - 2021

PUBLIC ENTERPRISES MINISTER APPLAUDS VRA'S FINANCIAL TURNAROUND



Mr. Cudjoe (middle) in a group photograph with Management of VRA and his entourage

he Minister for Public Enterprises, Joseph Cudjoe, has commended Management and Staff of the Volta River Authority (VRA) profoundly, for recording profit for the first time in five years after registering an operational loss of over \$1 billion in 2016.

 \rightarrow Contd. on pg.2

VRA GETS NEW BOARD OF DIRECTORS

nine-member Governing
Board has been constituted for
the Volta River Authority
(VRA) by President Nana Addo
Dankwa Akufo-Addo in consultation
with the Council of State.

The newly constituted board is chaired by Mr. Kofi Tutu Agyare, an investment banker, who would be supported by other members on the board including: Mr. Emmanuel Twum Antwi-Darkwa, Hon. Kwame

 \rightarrow Contd. on pg.2

Security Tips on Working from Home



Keep your computing devices secured



Secure your network.

Avoid using public

Wi-Fi network

IN THIS ISSUE >>

- VRA makes profit from FRP implementation
- VRA shuts down GT12 at KTPS p 9 for major inspection
- VRA beefs up internal security p15 with new recruits
- VHSL acquires new diagnostic p 23 equipment



→ Contd. from pg.1

The financial turnaround was made possible through the successful implementation of the three-year Financial Recovery Plan (FRP), to cut down operational costs and inefficiencies to move VRA from a lossmaking institution to a profitable one.

Although the audited financial statement for the year 2020 is yet to be released, it is projected that the Authority would post marginal profit for the fiscal year when the report is completed.

This information was made known to the Minister when he paid a working visit to the Management of VRA recently to learn at first-hand, challenges and policy direction of the Authority in the short, medium to long term.

The meeting highlighted VRA's mandate, power operations, strategy, subsidiaries, sector challenges and the way forward for operational sustainability.

Commenting on VRA's financial turnaround, the minister stated that "this is a very wonderful success story and I must say a big congratulations to you for this achievement. It is obvious your losses were becoming very deep but under your leadership there is a very successful turnaround story to tell."

He asked Management to continue with its vision of progress to sustain the gains made and assured VRA of his ministry's commitments to address some sector bottlenecks that affect the Authority's operations and, also pledged to work with other relevant ministries, including the Ministries of Finance and Energy, to resolve some of the challenges confronting the Authority.

He expressed satisfaction about VRA's renewable energy agenda and stated that "I am very happy VRA is building technical competencies by way of new project developments especially, your 75MW Wind Power project, because wind technologies are also coming out to be very efficient, however, there is the need to build more efficiencies."



Mr. Joseph Cudjoe

Chief Executive of VRA, Mr. Emmanuel Antwi-Darkwa, explaining how the VRA financial turnaround was done, said "We looked at our own operations and asked ourselves how come we were in difficulties. Once we identified the difficulties, we needed to improve on our finances, operations and business processes, and the need to maintain our market share. When we saw the ingredients for success, we decided that we would embark on a programme to do all that, and that is what we were able to achieve."

"We were able to identify what we should do at the operational level how we should run our power plants either on gas or liquid fuel, how we should motivate our staff to become more productive," Mr. Antwi-Darkwa noted.

According to him, the VRA's turnaround is also anchored on digitalisation of its business, stating that "today as we speak, when I walk into my office the place is paperless. The paperwork is now done digitally.'

He said "there is the need to sustain the gains that is why we have put together a sustainability plan."

 \rightarrow Contd. from pg.1

VRA GETS NEW BOARD OF DIRECTORS



The VRA Board of Directors

Anyimadu-Antwi, Rev. Dr. Joyce Rosalind Aryee, Most Rev. Cyril K. Ben Smith Ph.D., Mr. Musa Badimsugru Adam, Mr. Solomon Adjetey Sowah, Madam Janet Anane and Mr. Richard Obeng Ankrah.

Speaking at the inauguration ceremony for members of the new VRA board, the Energy Minister, Dr. Matthew Opoku Prempeh, urged them to work assiduously to make the cost of electricity affordable to all consumers. He said that the current cost of power which is on a high does not help promote government's industrilisation agenda.

 \rightarrow Contd. from pg.2

He stated that, "we have to work with the regulatory agencies to ensure we generate efficiently, distribute efficiently, and make it affordable for Ghanaians; one of the things we are doing is that for the next four years, we have told Ghanaians that we do not want 'dumsor' and it is the VRA's mandate to ensure that 'dumsor' is a thing of the past."

The VRA Board Chair, Mr. Kofi Tutu Agyare, in his inaugural speech

expressed gratitude for his appointment and the opportunity to serve the nation and on behalf of his colleagues accepted the challenge thrown to the Board by the Sector Minister.

He said the Board would collaborate effectively with all key players in the Energy Sector in ensuring that a sustainable business plan is instituted for the distribution of power at reasonable prices across the country, adding that, "challenges identified in the power generation sector would require urgent attention. We would work towards ensuring the transformation of the Volta River Authority", he stated.

VRA BIDS FAREWELL

TO THREE RETIRED DIRECTORS

Michael Danso, CA&ER, Accra



The Chief Executive and DCE, Services join the former directors to cut a cake.

farewell party has been organized in honour of three immediate past directors of the Volta River Authority (VRA) who retired this year from active service having attained the statutory retirement age of 60 years.

They include; Mrs. Ellen Bannerman-Quist, former Director,

Legal Services Department, Dr. (Mrs.) Rebecca Acquah-Arhin, former Medical Doctor, VHSL, and Ing. Johnson Hlordjie, former Director, Environment & Sustainable Development Department.

The send-off party was to celebrate the three past directors for their selfless service and contributions to the overall growth of the Authority. In a short speech, the Chief Executive, Mr. Emmanuel Antwi-Darkwa commended the three past directors for distinguishing themselves in their various fields of endeavor as they brought skill and professionalism to the job to ensure the progress and development of VRA.

The Deputy Chief Executive, Services, Dr. (Mrs.) Irene Stella Agyenim-Boateng, and former colleagues of the retired staff in their optional speeches, solidified the bonds and deepened existing relationships to create lasting memories.



DCE, Services and the retired directors doing a 'bend down low' dance.

VRA MAKES PROFIT FROM FRP IMPLEMENTATION

Michael Danso, CA&ER, Accra

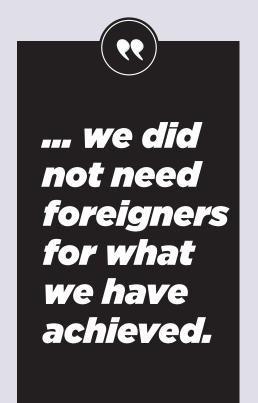


Members of the Council of State being sensitised on a project.

The Deputy Chief Executive), (Engineering and Operations) (DCE, (E&O)), Ing. Emmanuel Dankwa Osafo of the Volta River Authority (VRA), has disclosed that the Authority has seen some revenue boost after registering a loss of over \$1 billion five years ago.

According to him, the overall improved financial performance was made possible through the successful implementation of the three-year Financial Recovery Plan (FRP) by Management to stem the fiscal challenges that affected the operations and administrative expenses of the Authority years ago.

"We did this through the assistance of local workers; we did not need foreigners for what we have achieved", the Deputy Chief Executive told members of the Council of State, when they visited the T3 thermal plant at Aboadze as part of their three-day tour to the Western Region.



The Council members were at the T3 plant to apprise themselves with processes that would lead to repowering of the plant to generate electricity to feed the national grid and, discussed issues pertaining to the energy sector.

Ing. Osafo said, "VRA is eager to sustain the successes chalked from the strategic financial recovery program, which started from 2017 to 2020. I, therefore, appeal to the Government to continue to support local institutions in the energy sector so that at the end of the day, the profits would remain in Ghana."

Touching on the T3 plant, he said the Ministry of Energy on behalf of Government formulated the Takoradi Thermal Power Station Expansion Project (T3) as part of a national strategy for electricity supply sufficiency in the short to medium term.

He said in 2006, a contract was signed between the Ministry of Energy and the Canadian Commercial Corporation, the contracting agency of the Canadian government for the development and implementation of a 132 megawatts Thermal Power Station in Takoradi on a turnkey Engineering, Procurement and Construction basis."

The Chairman of the Council of State, Nana Otuo Siriboe II, on behalf of the rest of the members, commended VRA for the initiative that enabled it to stop running at a loss. "I am an engineer myself and have worked with VRA before, but I am impressed with the organization's success story."

He gave the assurance that the Council would convey its findings on the T3 and challenges in the energy sector to the President for prompt solutions.

CAIP POLICY TURNS

THERMAL GENERATION DEPARTMENT AROUND

Michael Danso, CA&ER, Accra



Ing. Edward Ekow Obeng-Kenzo

finances and improving our operations and efficiencies, we had to tweak the Management approach of the thermal business", Ing. Edward Ekow Obeng-Kenzo, told the VRA News in an interview.

He added that, "there were issues with running the Gas and Steam turbines at the Takoradi Thermal Power Station (TTPS), so we had to sit and strategize, and came up with a new approach under the 'BRAISE' (NEW VRA) strategy to help us own and understand the business." Out of the CAIP, he said, Management developed three thematic areas to make the department Purpose Driven, Performance Oriented and Principles Led.

Ing. Obeng-Kenzo said with the help of these sub-themes, the department is fully enlightened about the thermal generation business and its dynamics, which has helped to improve operational downtime and maintenance schedule of the T1 plant. "Formerly, a unit comes down for a two-day maintenance schedule but runs into weeks and months but that has changed now."

In addition, he said, "we had to make some procedural changes in the use of the Enterprise Access Management (EAM) to make people more accountable for the work they do and report properly. With the support of Management of VRA, we were able to sail through and that is what caused the change we are witnessing today."

He mentioned that, "We have also done a bit of change in the organizational structure with more focus on the Technical Section who are ensuring the maintenance and operations of the units with strict monitoring by the Compliance Cell under the Operations & Performance Unit, to make sure the Maintenance and Operations staff are working according to policies and procedures."

The Director noted, "The whole of 2020, the T1 plant was operated at halfcombined cycle mode, without any challenges. In December 2020, one of our units, which had a challenge, was resolved, so, by January 2021, we had a full combined cycle operation which had eluded the department for the past years."

He said the Operations and Performance Unit of the Technical Section are closely monitoring the performance of the Plant and their subsystems to ensure they are

operating efficiently and effectively, adding that, "the performance of the plant is just as good as TICO and any of the IPPs out there, and we believe that we can sustain the combined cycle operation at Aboadze and our simple cycle operations in Tema and Kpone."

Relocation of AMERI On a related subject, Ing. Obeng-

→ Contd. on pg.14

anagement of the Thermal Generation Department has rolled out the Collective Ambition Improvement Plan (CAIP), a strategic policy to prioritize and refocus the business of thermal generation to maximize profit and compete favorably with Independent Power Producers (IPPs).

The CAIP policy and regulatory scheme espoused by Management of the Department, has occasioned a robust change and rapid growth in the Operations and Maintenance (O&M) and administrative processes of the department.

"The utilization of the thermal asset was very low so based on the corporate 'BRAISE' strategy of turning around our



...by January 2021, we had a full combined cycle operation which has eluded the department for the past years.

VRA PROCURES NEW FIRE TENDER

John Chobbah &, Pictures by Linda Appiah & Stephen Abakah



Ing. George Appiah handing over a symbolic key to the VRA fire team.

n pursuance of business sustainability and the protection of the recently retrofitted Kpong Generating Station (KGS) against any form of fire, the Volta River Authority (VRA) has procured a stateof-the-art fire tender for firefighting.

It is one of the best fire tenders in the world, designed with high end specifications and built with the latest technology by Rosenbauer International, Austria. This is to be used for firefighting at KGS and within the VRA Township in Akuse.

The fire tender, which costs 385,000 Euros, equivalent to \$443,000 at current exchange rate, is built to fight various ranges of fire. The tender is fitted with a 6,000-liter water and 500-liter foam holding tanks. At a pressure of 10bar, the pump can deliver 3,500 liters of water or foam per minute.

In handing over the fire tender to VRA, Mr. Chris Torkonoo, the Chief Executive of Christork Industries Limited, Ghana, stated that their Industry had earlier supplied three (3) similar tenders, which are still in good working condition at VRA's Thermal Plants (TTPS, TTPC and KTPS).

He further disclosed that "the current tender is designed to perform better than the previous three (3) because it has higher and better specifications and the most current technology in the world that can deliver at the speed of a Rolls Royce "jet engine".

Mr. Torkonoo added that Rosenbauer International is a well acclaimed company with five factories located on different continents of the world and known for building the best fire tenders globally. He said as part of the procurement process, a functional and maintenance training is being scheduled soon for staff of the Authority who would be operating and maintaining the tender.

He handed over a symbolic key, the truck keys and the owner's manual to Ing. George J. K. Appiah, a Manager in the Procurement Department. Present were Mr. Isaac Doe, Traffic Officer and Daniel Kpajal, the Fire Officer of the Technical Services Department.

Also present were; Isaac Dede-Bamfo, Procurement Department, John Chobbah, Environment and Sustainable Development Department, Augustine Asiamah, Sefah Asare and Samuel Teve Mensah all of the Technical Services Department, Jerome Doe, Thermal Generation Department, as well as Joseph Afriyie Nyankom of the Ghana National Fire Service.



The Fire Tender

ELECTRO-VOLTA HOUSE GETS 60.23KWp SOLAR CAR PARK

Michael Danso, CA&ER, Accra



The 20 Bay Solar car park.

he Volta River Authority's efforts to be a leader in the global climate change agenda and contribute to the Sustainable Development Goal of ensuring affordable and clean energy, has seen another boost with the construction of a 60.23kWp Solar Car Park at the Electro-Volta House, Head office of VRA in Accra.

This also forms part of the Authority's vision to install rooftop solar PVs on its institutional and residential buildings to increase and diversify its generation capacity.

The initiative, which ties in with the Government of Ghana's idea to install solar PV modules on institutional buildings, will also reduce VRA's internal consumption of electrical energy from the national grid and make it available for other consumers.

Shedding more light on the project to the VRA News in an interview, Manager, Project Management of VRA, Ing. Isaac Bedu said the first of these institutional rooftop solar installations was the 79.90kWp Cafeteria Rooftop Solar PV Project at the VRA Head office in Accra, which was completed in 2019.

He said the Solar Car Park project, which has an installed capacity of 60.23kWp, has been tied in with the Cafeteria Rooftop Solar PV project of 79.90kWp to bring the total installed capacity of VRA's rooftop solar installations to 140.13kWp.

"The project is designed such that a portion of the power generated from the solar modules during the day is stored in lithium ion batteries, which powers the lighting system at the car park at night and the rest of the power is used by the Electro-Volta house", he noted.

According to Ing. Bedu, the solar project, which was executed by ELECNOR SA in collaboration with VRA is made up of Solar Module Capacity of 365Wp, a Polycrystalline Solar Module and has an Inverter Capacity of 50kWp, manufactured by SMA of Germany.

This is a grid-connected system and for safety purposes, is always designed to be off when the grid is off. However, the lighting system at the car park has been designed to be on batteries. As such, the lights at the car park will light up in the absence of the grid. In addition, the electricity consumption of the Electro-Volta house will be reduced by 7% with the installation of this plant.

VRA SUPPORTS UESD WITH LAPTOP COMPUTERS

Michael Danso, CA&ER, Accra



Dr. (Mrs.) Agyenim-Boateng presenting one of the laptops to Mrs. Agyepong.

he Volta River Authority (VRA) has presented seven brand-new Hewlett-Packard (HP) branded laptop computers with accessories to the University of Environment and Sustainable Development (UESD) at Somanya to advance the teaching and learning of computer science and information technology.

The donation of the high-powered laptop computers estimated at a cost of GH¢ 78,000, is expected to improve research, access to Information, organization of records, data collection, and flexible tutoring in the university.

Presenting the items on behalf of the Chief Executive, at a short ceremony at the school's campus at Somanya, the Deputy Chief Executive, (Services), Dr. (Mrs.) Irene Stella Agyenim-Boateng, said VRA was pleased to support the university as part of its Corporate Social Responsibility (CSR) policy and

operational core value of adding value to lives.

She said, as an organization that has sustainable development embedded in its operations, VRA showed keen interest in supporting the institution to provide the needed skills development in environmental sustainability to its students. "Management of VRA believes the UESD has a great potential in harnessing the talents of the youth and I am optimistic that the usage of the laptops, will go a long way to impact positively on the work of the university and the students in particular", she stated.

She said the mandate of the university, which is to train students in the areas of environmental sustainability and development, is very crucial to the country's development and called on corporate bodies to offer sponsorship and support to enhance the efforts of the Management of the university.

Dr. (Mrs.) Agyenim-Boateng said, considering VRA's all-encompassing business model, she envisaged several areas of collaboration between the two institutions that would yield positive results of mutual benefit.

She told the gathering that VRA which turned 60 years on April 26 this year, had evolved from its core mandate of power generation from hydro, thermal and solar energy to diversified non-power operations such as mechanized farming, hospitality management, water transport, healthcare delivery and schools management.

The Vice-Chancellor of UESD, Professor Eric Nyarko-Sampson commended VRA for the gesture and called for the sustenance of the partnership that would be of mutual benefit to both institutions. "Contributions from both academia and industry have the tendency to ensure that students churned out have well-rounded knowledge in the prevailing environmental".

The Registrar of UESD, Mrs. Mary Abena Agyepong noted that the university, which was inaugurated on August 5, 2020, has a vision to become a leading university in teaching, learning and dissemination of knowledge related to developments in environment and agro-business, and create knowledge through research for national development. She said the school admitted its first batch of 77 students last year with a staff population of 294.

VRA SHUTS DOWN GT12 AT KTPS FOR MAJOR INSPECTION

John Chobbah &, Pictures by Linda Appiah



Removal of the Combustion Pot

anagement of the Kpone
Thermal Power Station
has shut down Gas
Turbine No. 12 (GT12)
for a mandatory Type
"C" Inspection to be undertaken by
General Electric (GE) International
Incorporated, Ghana.

The works involve the disassembly of the Unit package, inspections of the internal Hot- Gas-Path, calibration of critical devices and equipment, replacements of major parts and components, NDT testing of all internal rotating and static components, and maintenance works on the turbine set and its auxiliaries. The GT main upper casings will be removed, combustor chamber removed, the turbine rotor will be taken out and main parts would under-go a thorough visual and if necessary specialized inspection.

According to the Director, Thermal Generation SBU, Ing. Edward Obeng - Kenzo, the major maintenance works is geared towards the sustainability of the plant, and would create an avenue for the scheduled replacement or repair of parts, much of which were identified during the preceding Type A and Type B Visual

Inspections. The Type C inspection for GT12 is scheduled for a month after which it is expected that the Unit will be restored into service.

He outlined the main objectives for the Type C Hot-Gas-Path inspection to include detailed assessment of the condition of gas turbine Hot-Gas-Path parts and auxiliaries, replacements of most components, few repairs where necessary, and servicing of monitoring devices. The Hot-Gas-Path parts form the primary components for the gas turbine train and experiences high temperatures as a result of the combustion process hence the need to investigate the conditions of the parts for replacement to sustain reliable operations of the Unit.

Ing Obeng - Kenzo said the inspection is also aimed at assessing the rotor condition, carrying out a visual inspection of the compressor, recalibrating, adjusting, replacing or repair of parts and correction of instrument settings as per the agreed work scope. It also involves the implementation of upgrades as per the agreement between VRA and GE, as well as reporting on

issue of a gas turbine generator condition, including recommendations for future operation and maintenance.

He said during the Type C Hot-Gas-Path inspection, all individual counters of the Operating Data Counter (ODC), which record the status of the actual interval, would be stored in the ODC and the ODC will be manually reset in order to count the values during the period up to the next Type C Hot-Gas-Path for record and later reference prior to restarting the gas turbine after the Hot-Gas-Path Inspection.

The Plant Manager, KTPS, Ing. Darlington A. Ahuble, disclosed that the current Type C-Inspection on GT12 is being implemented by a team of GE and VRA personnel on site. He said the team is being led by General Electric International Inc.-Ghana, who will provide Project management, technical direction and commissioning of the Unit. The Type C outage scope includes: mobilization and site preparation, disassembly of the gas turbine, inspection of gas turbine, carrier cane inspections and/or replacements per schedule, inspection of auxiliary systems, gear box inspection, Electric generator Binspection, re-assembly of the gas turbine, start-up and commissioning and demobilization.

Ing. Ahuble explained that there are three (3) different types of scheduled maintenance Inspections: Type A Visual Inspection, Type B Visual Inspection and Type C Inspection. The intervals for these types of inspection is generally based on the calculation of Equivalent Operating Hours (EOH) for the gas turbine. The typical schedule for the inspections are: 6,000 EOH for a first type A inspection, 12,000 EOH for type B inspection, 18,000 for the second A inspection and 24,000 EOH for the type C inspection.

He said the Type A visual inspection

→ Contd. on pg.10

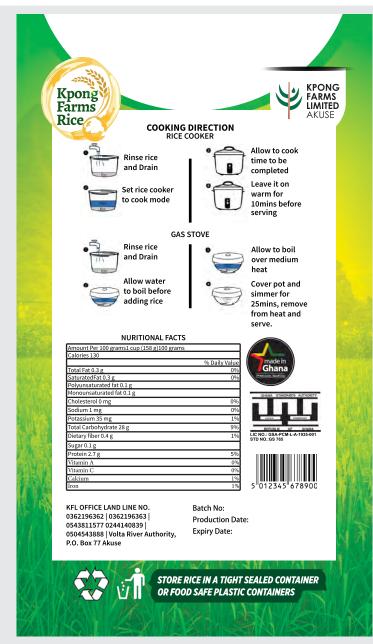
→ Contd. from pg.9

involves a scheduled check on the gas turbine set; focusing on inspecting Hot-Gas-Path parts in the gas turbine, while the Type B Visual Inspection includes a Type A visual inspection plus additional checks on the auxiliaries, the controls, and the protection and monitoring system including their settings.

Ing. Ahuble mentioned that KTPS commenced commercial operations in June 2016 with the Units running on Distillate fuel oil, until sufficient natural gas was made available in the Tema enclave for the Units to be commissioned to operate using natural gas. It is, therefore, timely to execute the Type C Inspection to guarantee safe and reliable operation of the Unit.



The Kpone Thermal Power Plant Gas Turbine Units





PWALUGU MULTIPURPOSE DAM PROJECT (PMDP) SITE ADVISORY COMMITTEE INAUGURATED



Ing. Kwaku Wiafe facilitating a presentation on the project.

he Site Advisory Committee for the Pwalugu Multipurpose Dam Project (PMDP) has been inaugurated to serve as a central body to review, evaluate, approve and acquire the proposed land area for the government toward the construction of the Pwalugu Multipurpose Dam.

The committee is made up of representatives from various governmental institutions and statutory bodies such as the Lands Commission, Land Use and Spatial Planning Authorities (LUSPA), Ministry of Food and Agriculture, Municipal and District Assemblies, North East and Upper East Regional Office of Stool Lands, Northern Electricity Distribution Company (NEDCo), civil society organisations (CSOs), among other relevant stakeholders.

The Coordinating Director at the Upper East Regional Coordinating Council, Alhaji Mohammadu Azonko in his

opening remarks underscored the importance of land to the implementation of the PMDP and thus urged the committee to attach some urgency to their activities to avoid delays. He also stressed proper record keeping for future reference.

"I have no doubt in my mind that experts from diverse institutions and bodies hereby represented to serve on this committee will give off their best by providing useful recommendations to ensure the proper acquisition of the land for use by the state" he added.

The PMDP team, led by Mr. Kwaku Wiafe, briefed the committee on project specifics and features, actions taken by the project team so far with regard to the Environmental Impact Assessment (EIA) and Resettlement Action Plan, and Livelihood Enhancement Programmes.

The Acting Director of Public & Vested Land Division (PVLMD), Ms. Mabel Yemidi, during her presentation assured the committee that due diligence will be done when it comes to implementation of the State Land Act 1036 (2020) law to avoid litigation and other related land issues in the future.

Commendation

The Executive Secretary of the Lands Commission, Alhaji Daud Sulemana Mahama commended the Volta River Authority (VRA) for leading the implementation of the gamechanging dam project and facilitating the establishment of the committee, adding: "I wish to encourage VRA to continue with the stakeholder engagements to ensure that the views of all affected persons are sought and considered in the implementation of the project."

He appealed to the committee to attach urgency to the work and challenged them to collaborate with stakeholders. "This is the first acquisition Lands Commission is engaging in since the reenactment of the State Land Act 1036 (2020) and so we will want this to be a landmark acquisition that will set the benchmark for other acquisitions to follow" he added.

Reconnaissance survey

On Thursday, July 15, 2021, the committee undertook a reconnaissance survey to study the specified land area for the dam site and become acquainted with operations on the ground toward the acquisition of the land.

They proceeded to the dam site at Kurugu, where they inspected survey pillars planted by the lands commission in demarcated areas, as well as the temporary workers' camp, and met with the Chief and people of Kparikpiri, a project-affected community that will be resettled.

VRA HOLDS MAIDEN MEETING WITH VGLA

Nathaniel Ekue Mensah & Success Asiedua, CR/CSR, Akosombo



Ing. Osafo (3rd from left), and other Stakeholders in a group photograph.

stakeholder consultative engagement has been held between the Volta River Authority (VRA) and members of the Volta Gorge Land Owners Association (VGLA) to renew partnership towards the protection and preservation of the shoreline of the Volta Gorge Basin.

The meeting, which was addressed by the Deputy Chief Executive (DCE), Engineering and Operations (E&O) of VRA, Ing. Emmanuel D. Osafo, was the first time a high-level management member of VRA was present to share ideas with the custodians and

traditional landowners of the Volta Gorge area.

Addressing members, Ing. Osafo urged them to collaborate with the Authority in its quest to finding lasting solution to prevalent issues that confront them especially, on compensation and environmental management of the Volta Gorge Protection area.

He said one of the many ways of achieving the above would be for the parties to strengthen partnership going forward, while exchanging relevant information on matters of interest to ensure that the Authority is well informed to address issues of environmental management.

The Overlords of Akwamu, Anum and Boso-Gua Traditional Areas unanimously raised concerns about the need for the committee to strengthen ties with the Traditional Areas. They spoke about issues of mutual benefit that bothered on environmental management of the Volta Gorge Protection area and compensation to traditional landowners among others.

The VGLA serves as the advisory committee to the Authority on issues concerning strategies being adopted by the VRA towards the implementation of its Volta Gorge Protection Programme, as well as help foster partnership with the traditional authorities, Asuogyaman District Assembly and other key stakeholders of the Volta Gorge area.

The membership of the VGLA advisory committee is made up of the Deputy Chief Executive, Engineering and Operations, Director, Environment and Sustainable Development Department, Director, Real Estate and Security Department, Paramount Chiefs of Akwamu, Anum, and Boso-Gua Traditional Areas and a representative each from the three Traditional Areas.

VRA MOURNS CYNTHIA AGLAH

Michael Danso, CA&ER, Accra

anagement and Staff of the Volta River Authority (VRA) demonstrated their unflinching love to the family of the late Mrs. Cynthia Aglah, when they showed up in their numbers at her final funeral rights held on October 2, 2021.

The burial service, which took place at the Adonai International Ministries (AIM) church auditorium at Community 12, Tema, saw tributes pour in from her husband, children, family, siblings,



church, as well as the VRA. These various tributes reflected the meaningful life the late Mrs. Cynthia Aglah had led and the relationships she had built while alive.

Reading VRA's tribute, Mr. Foster Opare, a Human Resource Officer, of the Human Resources Department, described the late Cynthia Aglah as "a Staff who was a determined visionary, accommodating, goal-oriented and a caring person who loved life and all that it offered."

"You were just like a candle, full of light and comradeship. You were confident with a rare sense of composure, especially during difficult and challenging times,

→ Contd. on pg.13

→ Contd. from pg.12

always exhibiting a calm and cheerful disposition in all your undertakings," it added.

For representatives from VRA, the funeral service proved a moment of deep mourning and sorrow that rivaled the disbelief that fell on the Authority the day the news broke of the passing of Mrs. Aglah.

Affectionately referred to as Mama Cee or Cee, Mrs. Aglah joined VRA on April 1, 1997 as a Contract Staff. Two years later, she was confirmed as a permanent staff (March 1, 1999). Through hard

work, commitment and tenacity of purpose, she rose to the rank of Principal Information/Publicity Officer in the Corporate Affairs & External Relations Unit, a position she held until her untimely demise.

Delivering the sermon at the service, Most Rev Dr. Richard J.D Ahiagbedey, Founder and Presiding Bishop of the Adonai International Ministries (AIM) Church, read scriptures from Ecclesiastes Chapter 12 and Psalm 90 to resonate the need to make informed and definite choices on where to spend eternity while we are alive.

Though gone, Mama Cee will forever be remembered by her colleagues and friends, especially the VRA Ladies Association, for her warmth and commitment to duty.

The late Cynthia Aglah is survived by a husband and four children.

VRA, VRALA COMMEND HAJIA ANISA AS THE NEW SADR LAJNA IMAILLAH OF GHANA

Linda Appiah, CSR, Kpone



Hajia Anisa (middle) flanked by Ms. Stella Dey and Mrs. Lily Essah (right).

he Volta River Authority and VRA Ladies Association (VRALA) have jointly conveyed a heartfelt congratulatory message to Hajia Anisa Nasirudeen-Idrissu, on her appointment as the new Sadr Lajna Imaillah of Ghana (President of the women's wing of the Ahmadiyya Muslim Community in Ghana).

The message was contained in a congratulatory letter dated June 7, 2021

and jointly signed by Dr. (Mrs.) I. Stella Agyenim-Boateng, Deputy Chief Executive, (Services) and Ms. Stella Dey, National President of VRALA. The letter described Hajia Anisa, Nasirudeen-Idrissu as "a Lady of noble cause raising the image of the VRA and VRALA."

It read further that, "As the President, you are considered a role model to all the Muslim women in the Ahmadiyya Muslim Community in Ghana who will be looking up to you for support and empowerment. The VRA Ladies Association share some of your objectives and is ready to collaborate with you for national development during your term of office."

It added, "We trust that you will keep striving throughout your tenure for the progress of your women's group. Always remember the sky is not even the limit for you. Your hard work has paid off. We are so proud of you for attaining this high office."

Hajia Nasirudeen-Idrissu who works as a Principal Accounting Assistant with the Finance Department of VRA, would be responsible for the welfare of all Muslim women in the 27 zones of the Ahmadiyya Muslim Association.

Lajna Ima'illah commonly known as Lajna (The handmaidens of Allah), is an auxiliary organization of Ahmadiyya Muslim Women's Association in the Ahmadiyya Muslim Community, established in 1922 in India as an empowered women's organization.

PWALUGU MULTI-PURPOSE DAM TO BE COMPLETED IN 3 YEARS – DAVID PRAH

Michael Danso, CA&ER, Accra



Mr. David Prah

he Senior Government and Public Relations Officer, on the Pwalugu Multi-Purpose Dam Project (PMDP), Mr. David Prah has dispelled the impression that work on the project has failed to meet its completion timelines as announced by President Nana Addo Dankwa Akufo-Addo during the sod-cutting ceremony in November 2019.

According to him, President Akufo-Addo's timeline of 15 months was to prepare the

site for actual construction, which will begin in November 2021 and take three years to complete. "The President was not saying that in 15 months the project will be completed. The President was talking about all the processes that we need to go through before the actual dam construction takes place because you are talking about 11,000 hectares of land," he stated.

Mr. Prah who made this known to Emefa Apawu on News Night on Joy FM monitored by this reporter, said the actual civil construction would begin between November and December this year and would last for about three years.

Issues on the completion of the project surfaced in the media space in the latter part of August 2021, when SONABEL Energy issued an official update on the annual spillage of the Bagre and Kompienga dams in Burkina Faso, having hit spillage levels.

The PMDP, which has been touted as "the single largest investment ever made in the Northern part of Ghana," and estimated to cost US\$993 million, would consist of a Hydro-Solar hybrid system of 60 MW Hydro Power and 50 MW Solar Power. It is expected to hold the excess water spilt from the Bagre Dam in Burkina Faso when completed, to avert the perennial flooding which affects some residents in the Upper East, Northern and North East regions.

Mr. Prah said the duration for the project from 2020 is scheduled for four years. "The dam itself covers 360 kilometers square and eight districts. Currently we are undertaking land acquisition and demarcation, and we are almost through with the hydro component. We are now at the irrigation site, which is West Mamprusi."

→ Contd. from pg.5

CAIP POLICY TURNS THERMAL GENERATION DEPARTMENT AROUND

Kenzo made it known that Management of VRA in collaboration with its counterpart from the Ghana Grid Company (GRIDCo), have written to advise the government to relocate the AMERI Plant to Kumasi for seamless transmission of power to the northern part of Ghana and export to Burkina Faso.

According to him, this would improve the voltages, stabilize the grid and ensure efficient power transmission in the middle belt of the country (especially Kumasi). "We need a generating plant in the middle part of the country so we decided to

relocate AMERI to Kumasi, since the generators are mobile, they can easily be moved to that part of the country. It will guarantee at least 250MW of power, which is 'big' enough to support the middle and northern parts of the country and help with power export to Burkina Faso."

"We are hoping that by the end of this year, the units would be moved, then come first quarter of next year, we will start operating the units which will be fully done by VRA as one of our assets," he noted.

T3 to be repowered

Ing. Obeng-Kenzo said aside from that, soon, the T3 plant would come on board. "We are carrying out asset evaluation on T3 with Ernst and Young (an Accounting firm) to enable us to go out into the open market for a private partner to repower it. Relatively, he said, feasibility and technical evaluations of the KTPS plant have been completed. "The financials are being looked at and we are hoping that latest by next year, we would start the combine-cycle construction of KTPS as well."

VRA BEEFS UP INTERNAL SECURITY WITH NEW RECRUITS



Surveyor Adomako Mensah inspecting a guard of honour

s part of the Volta River Authority's revised hiring process for security personnel, a total of 24 internal security trainees have been recruited to augment VRA's security system.

The new recruits were absorbed into the mainstream VRA security system following their successful completion of an eight-week standard training in Basic Security at the Naval Training Command at Nutekpor, near Sogakope in the South Tongue District of the Volta Region.

At a colourful passing-out ceremony organized in honour of the new recruits, Director, Real Estates and Security, Surveyor Adomako Mensah who addressed the parade on behalf of the Deputy Chief Executive, Services, Dr. (Mrs.) Irene Stella Agyemin-Boateng, said the occasion was important because it signified VRA's commitment to upholding and fulfilling its national and international obligations of incorporating world-class security in its operations.

He stated that, "It is also an opportunity to offer yet another platform to exhibit and reaffirm the longstanding

collaboration between VRA and the Ghana Navy as key stakeholders in ensuring the security of our people and Ghana's energy assets."

He said VRA's power generation sources have been diversified beyond Hydro and Thermal into Renewable energy as well. For this reason, he said, VRA's operational locations are widespread so the security obligations of the Authority had become cardinal priority and a key determinant for sustained operations.

"The fulfilment of the security expectations of the Authority require,

among other things, security personnel who are well trained to world-class standards, to provide and enforce adequate and appropriate security services", he stated.

He commended the graduands for completing their training program successfully, adding that, "there is no doubt the components of your training have equipped you with the requisite knowledge, skill and confidence to be able to effectively discharge your duties as security staff of VRA.

Lieutenant Commander Frederick Kutsoati who represented the Commanding Officer of the Naval Recruit Training School, said the basic security program was designed to present the trainees several opportunities to acquire both theoretical knowledge and practical experience in some areas of paramilitary operations and security.

He said the various topics taught included: voice procedure, physical training, leadership, swimming, firefighting, naval drill, physical security and investigations and the use of non-lethal weapon. According to him, "the training was facilitated by experienced instructors who have transformed these trainees into strong, bold and disciplined men and women."

Awards were presented to four of the trainees who excelled during their training program with Master Samuel Kwao emerging as the overall best trainee. He received the Chief Executive's Award for Overall Best Graduand as his prize.



Master Kwao (2nd left) and the other award recipients.

PROJECT RISK MANAGEMENT

PROJECT EXECUTION RISKS PART 2

The Corporate Risk Management Unit

Introduction

e continue with our discussion of Project Execution risks that was started in our last article, where some key risks associated with project execution activities were deliberated on, and some solutions proposed. The risks identified in the previous article were Uncontrolled Scope Variations Resulting in Scope Creep, Inadequate/Ineffective Project Execution Risk Management and Unfair and Inequitable allocation of risks in a project. Discussed below are further project execution risks:

Not Accommodating Change Requests/Incorrect Handling of Progressive Elaboration

The project team, sometimes, in their quest to control scope and deliver the project within budget and time, tends to be glued to the original scope and are not opened to any change request. Rejecting all change requests made by stakeholders is one major risk. "Change", they say, is the only constant in the world today. Due to rapid changes in the regulatory environment, market conditions and clients' needs; competitive factors and organizational priorities can change with speed. These may compel changes to an entire product idea or certain features of the product at very short notice.

Sometimes, the need for change is usually discovered as the project is being implemented. The initial project plan may have been improperly done or there may be ambiguity, due to unknown aspects of the undertaking, at the time of the initial planning. At the execution stage, the Project Team may discover that the original estimates were not

accurate, or the Project Sponsor or Customer may realize that, despite their best efforts to thoroughly document the Project Scope, the product being produced is not exactly what they need. Incorrect handling or neglecting to obtain and address relevant emerging information in project execution could spell the doom of the project and/or its intended purpose.

Proposed Solution - Establish and use an elaborate integrated change management/control process and a well-represented Change Management/Control Committee as a mechanism to initiate, record, assess, approve, and resolve all relevant change requests to the project.

The project manager must first review the change requests, determining the associated cost, to ensure it is necessary and reasonable and communicate same to key stakeholders. The right change control process must then be followed, to approve or reject the change request.

Project Delays

Project delays could arise from factors, such as inadequate attention to items on the project's critical path, unforeseen circumstances, unclear specifications causing developers, in construction projects, to start work late, the project team not adhering to the project plan, wrong estimation of time and risks crystallization. Other causes are scope changes, technical challenges, environmental issues (e.g. bad or unfavourable weather conditions, including heavy rain and flooding), strikes, government pressure, , disease outbreaks (e.g.

Covid-19 pandemic), material procur remember not mismanagement/challenges, etc. These factors could lead to costly delays and the effect is mostly budget overrun.

Proposed Solution: The Project Manager must keep a regularly updated log of factors that introduce potential delay, closely monitor them, and take proactive steps to prevent them from occurring or manage them as and when they occur. He must also determine and pay attention to the items on the project's critical path and plan properly by carrying out effective risk management.

Delay/Non-Availability of Funds for Smooth Project Implementation

Financial challenge has been isolated for special emphasis as a key risk that cause delay or failure of projects. At the execution stage, the risk of unavailability of funds or delay in accessing funds for the project becomes rife. This may be due to ineffective project cash flow planning, project sponsor having cash-flow challenges or losing interest in the project and therefore starving the project of funds.

Proposed Solution — Establish and confirm a reliable source(s) of funding for the project. The project manager must ensure regular review and update of the cash flow plan, be in close contact with the project finance team, the procurement team and the project financier concerning funds for the project. Fallback plans in the event of irregular flow of funds must

 \rightarrow Contd. on pg.17

be established. There should also be adequate contingency allowance to cover the increase in material costs, due to inflation.

Limited engagement/ Uninvolved stakeholders

Non or inadequate involvement and/or update of key stakeholders on projects under execution can cause conflict, dissatisfaction, and possibly outright rejection of the project. Chances for optimization of project outputs and outcomes are enhanced by effective engagement of stakeholders and consideration of their feedback.

Proposed Solution:

Stakeholder engagement is crucial to project success. The project manager must consistently maintain effective collaboration between the project team and the project stakeholders. He must keep all the project stakeholders updated of relevant issues affecting the project and ensure that they appreciate the vision of the project. On a regular basis, he must communicate with, and engage all key stakeholders, using the stakeholder communication and engagement plan, developed at the planning stage, to keep them updated and take their feedback throughout the project, for them to actively participate in shaping the project.

Ineffective Site Supervision and/or Monitoring of Project

The execution phase is the most drain on the resources in the project life cycle, especially in engineering projects. The Project Manager should therefore monitor and control the project activities to ensure achievement of the project goals. Ineffective supervision of project execution almost invariably yields to all the "sins" of project implementation i.e., budget overrun, time slippages, regulatory and contractual compliance defaults, sub-quality outputs and subsequent poor project outcomes.

Proposed Solution: Project supervision must be effectively planned, resourced, and managed. It is important to track the project's progress continuously and ensure that the milestones and deliverables stick to the project schedule. For this reason, comprehensive project controlling, and monitoring activities must start concurrently with the project execution. There should be constant site visits and supervision, to ensure that everything falls into place according to the overall project execution and quality plan.

Compromising on Quality

Quality issues are common in construction projects. This could be due to the following:

Absence of Quality Control System and Policies

Lack of quality policies and system governance, in a project or not abiding by them can lead to serious structural integrity issues. safety of the structures and construction workers.

Use of Low-Quality Materials Leading to Sub-Standard Deliverables

Quality of materials used on the project may be compromised. Using lowquality materials in construction projects guarantees poor durability, serious safety issues and complications, which will lead to huge costs and even reputational damage.

-Lack or Ineffective Project Audit

Regular and effective independent review/audit of Projects at all stages is essential for project success. Auditing processes help ensure that all relevant risks affecting the project are addressed, to improve the chances of the project objectives being achieved. There are many types of project audits; these include quality audits, preselection audits, value-for-money, continuous and look-back audits. Audit helps to minimize to acceptable levels, adverse issues that affect projects, after completion.

Proposed Solutions

a. Establish quality control system
Establish quality control system to

ensure that client's expectations are translated into the deliverables, based on acceptable quality standards. Test the deliverables and ensure that they meet the acceptance criteria. Quality control should be performed throughout the course of the project. Some of the activities and processes that can be used to monitor the quality of deliverables, ensure their compliance with quality standards, and identify ways to improve project performance, are described below. The Project Manager and Project Sponsor should decide which are best suited to their specific project environment.

- ■Conduct Peer Reviews the goal of a peer review is to identify and remove quality issues from a deliverable as early and as efficiently as possible. A peer review is a thorough review of a specific deliverable, conducted by members of the project team, who are the day-to-day peers of the individuals who produce the work. The peer review process prolongs the overall Project Schedule, but in many project situations the benefits of conducting a review far outweigh the time considerations.
- Use Quality Checklists both the Project Manager and Project Team members can create and make use of various checklists to be sure that no relevant item is overlooked, while a product is being developed. Checklists may be simple hardcopy lists of "things to do," or may be generated using more formal, electronic-based tools. In either case, a checklist should be comprehensive and detailed enough to ensure that the resulting product or deliverable has been built to the level required to meet quality standards.
- Maintain and Analyse the Project Schedule this activity should never be taken lightly, regardless of the size of the project. The primary mechanism to measure quality of the schedule is to update the Project Schedule on a regular basis, while keeping a close watch on the timeline and budget. If the project timeline or

→ Contd. on pg.18

→ Contd. from pg.17

budget are not on track, the Project Manager must determine why and take immediate action to remedy the problem.

b. Conduct Project Audits – key goal of a project audit is to ensure that the Quality Assurance activities defined in Project Planning are being implemented and to determine whether quality standards and materials being used for the project are being met. Ultimately, audit is to provide assurance that the project objectives would be achieved within the budget, set timelines, quality standards, safety, and other compliance requirements. Audits should be performed on a regular basis, depending upon the size and duration of the project. At a minimum, it is recommended that an audit be performed

at the end of each phase, and at least once during Project Execution and at the end of the project. The audit process must note what is being done well, identify real or potential issues, and recommend ways for improvement. The audit could be initiated by the sponsor.

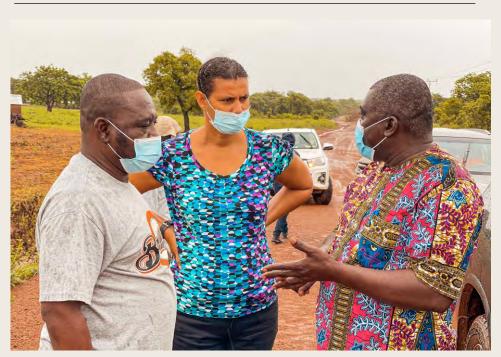
Conclusion

Project execution stage is the fourth stage in the VRA project life cycle and its purpose is to complete the work defined in the Project Management Plan, to meet the project's objectives. The project plan is executed throughout the project execution stage. Materials and resources are procured, the project is produced, and performance capabilities are verified. Weaknesses

could result in scope creep, delays in the project activities, decrease in quality, funding problems, etc. However, proper risk analysis and management, a well-established change control process to handle change requests and scope creep, effective cash flow planning and management, quality control systems, proper engagement and effective c o m m u n i c a t i o n w i t h k e y stakeholders, intensive monitoring and project audits can help overcome or minimize most of these and enhance project success.

Watch out for the next episode, covering project closure and project impact evaluation!

VRA LEADS EPA ON RECONNAISSANCE VISIT TO PMDP PROJECT AREA



The reconnaissance mission would lay the groundwork for the EPA to conduct a public hearing.

team from the Volta
River Authority (VRA)
and the Environmental
Protection Agency
(EPA) led by Mr.
Jonathan Hagan,
Sustainability Manager on the Pwalugu

Multipurpose Dam Project (PMDP), has undertaken a reconnaissance mission to the PMDP site and resettlement communities.

The purpose of the visit, which ran from July 12-16, 2021, was for the

EPA to inspect the project site and ascertain the level of community knowledge on the project. This is the start of the EPA review of the Environmental Impact Assessment (EIA), which will ultimately lead to the issuance of an environmental permit for the project. The Environmental Assessment Regulations (1999), LI 1652, regulation 17, enjoins the EPA to hold public hearings when a project triggers any of the following: far reaching environmental implications; when the project requires resettlement of persons; and when there is a public outcry.

The reconnaissance mission lays the groundwork for the EPA to conduct a public hearing that brings together stakeholders, especially Project-Affected Persons (PAPs) on matters including project impacts and how VRA intends to mitigate these impacts.

Addressing the Talensi Municipal Assembly, Mr. Kwabena Badu Yeboah, Director of Environmental Assessment and Audit at the EPA stated that "the public hearing forms part of the review of the PMDP's Environmental Impact Assessment (EIA) that was submitted by VRA to the EPA." The environmental permit

would be issued after the concerns and comments of stakeholders and projectaffected persons have been gathered and integrated into the EIA.

He added that the reconnaissance mission therefore was needful since it ensures that "the EPA understands the terrain and the area where this project will take place, so that when we do the review of the EIA, we will be able to make an informed decision.'

The team engaged the six (6) resettlement communities - Gubeo, Suhuluya, Kparikpiri, Digaare and Kulunga in the Upper East Region, and Nungu in the North East Region – and inspected the main and weir reservoir areas during the visit.

Personnel from the EPA who joined the visit commended VRA for their avid efforts in ensuring that locals understand what the project means to them as project-impacted persons. Mr. Jonathan Hagan, Manager Sustainability on the PMDP, assured the EPA that VRA is committed to adhering to best practices as regards the mitigation of project impacts on the physical, biological, economic and cultural environment.

VRA HEALTH SERVICES GETS NEW MEDICAL DIRECTOR

Nathaniel Ekue Mensah, CSR & Community Relations/Akosombo



Dr. Omari Yeboah

r. Alexander Kwabena Omari Yeboah has been appointed the Medical Director (MD) for the VRA Health Services Limited (VHSL).

Prior to his appointment, Dr. Omari Yeboah was the head of Specialist

Training, Department of Obstetrics and Gynaecology at the Greater Accra Regional Hospital with responsibilities of developing strategies to attract medical doctors with the right attitude for specialist training in Obstetrics & Gynaecology.

He was the team lead in the development of the current (2021) manual for training of specialist in the Obstetrics & Gynaecology Department of the Greater Accra Regional Hospital.

Practicing as a Senior Specialist, he was also responsible for coordinating the training of medical doctors and medical specialists at the department as well as coordinating the activities of trainers and trainees to ensure effectiveness and efficiency of residency training in Obstetrics & Gynaecology.

At the congregational awards of the University of Ghana Medical School in 2003, Dr. Omari Yeboah won 3 awards (Best student in Gynaecology, Best male student in Obstetrics & Gynaecology and Best student in Clinical Pharmacology). He is a member of the Ghana College of Surgeons (MGCS) and a fellow of the West African College of Surgeons (FWACS).

He also holds an Executive Masters of Business Administration (eMBA) in Entrepreneurship from the University of Ghana Business School (UGBS), Master in Public Health (MPH) from the Ghana Institute of Management and Public Administration School of Public Service and Governance, and certificates in Health Administration & Management (HAM) and Occupational Health and Safety (OHS).

With this rich background, the new Director of Medical Services is poised to provide strategic management for the operationalization of the VRA Health Services Limited as a profitable business. He is also expected to provide leadership within the Authority's health subsidiary while ensuring that the vision and mission of the subsidiary is achieved.

"I am happy to be part of the VHSL team and I desire to bring efficiency in the operations of this subsidiary to improve on our revenue whiles ensuring that quality health care to our clients is not compromised", he indicated.



UNDERSTAND AND MITIGATE YOUR HEALTH RISK

Dr. Emmanuel Sowah

hile life expectancy has passed the 70year mark in most developed countries, it remains below 65 in most developing countries. Currently in Ghana, life expectancy is about 64.42 years, but the Healthy Life Expectancy in Ghana, which is the number of years one is expected to live productively is averagely 58 years. In the greater part of the 20th century death in the developing world was attributable mainly to the high prevalence of infectious diseases like malaria. tuberculosis and later on, HIV/AIDS. The past few decades, however, have seen a sharp increase in the prevalence of noncommunicable diseases (NCDs) (diseases which are not infectious) in developing countries. Heart disease, stroke, cancers, diabetes, chronic respiratory diseases and other noncommunicable diseases (NCDs) cause tens of millions of deaths per year, the majority of which occur during the most productive years of life. NCDs reduce economic output

and prevent people around the world from living lives of health and wellbeing.

Almost two-fifths of the global population aged 18 and over is considered overweight, with more than half a billion (11% of men and 15% of women) considered obese. Obesity is not just an issue for adults. As of 2015, 42 million children under the age of five were considered overweight or obese. Obesity is linked to poor health outcomes, increasing the likelihood of developing NCDs including cancers and diabetes, and conditions including obstructive sleep apnoea and osteoarthritis.

The diagram below compares the causes of death in Ghana for 2009 to that of 2019. From the fifth position in 2009, stroke (a cardiovascular disease) moved up to become the second commonest cause of death in Ghana whilst ischemic heart disease moved up from seventh to fifth position.

It is important that we get a grasp of the factors that have contributed to this shift from infectious to noncommunicable disease for us to appreciate the need for us to adopt healthy lifestyles.

WHY THE UPSURGE OF NONCOMMUNICABLE DISEASES?

One may ask why these diseases have seen this upsurge in recent times. There are two main reasons. Firstly, due to the significant drops in mortality from infectious diseases achieved through global effort in the past few decades, traditional societies known to be characterized by a predominantly young population have transformed into ones with a dominance of middle age and elderly people. The result is that more people live long enough to start experiencing these diseases, which are more prevalent in older people (WHO 2002).

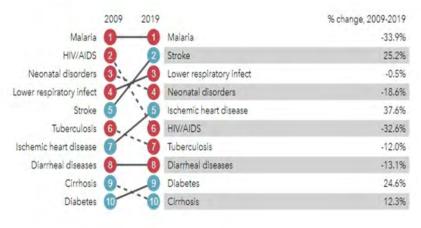
There are both developmental factors and lifestyle factors underlying the upsurge in noncommunicable diseases in the developing world.

What causes the most deaths?

Communicable, maternal, neonatal, and nutritional diseases

Non-communicable diseases

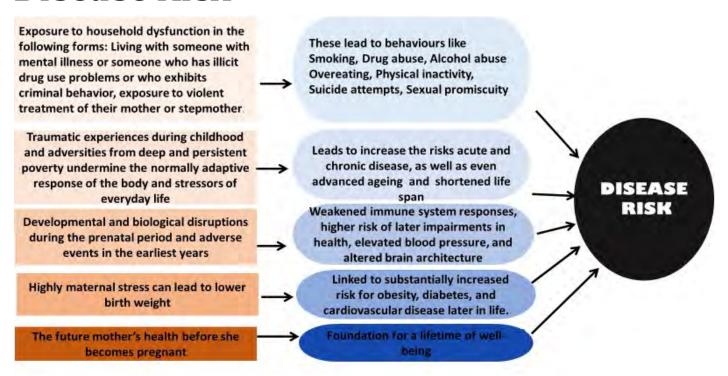
Injuries





DEVELOPMENTAL FACTORS INCREASING RISK OF NONCOMMUNICABLE DISEASES

Disease Risk



Preconception Health

Researchers have shown that a child's health can be affected not just by the mother's health and lifestyle during pregnancy, but also before the child is conceived. Definitions of the preconception period vary from 3 months before conception to a minimum of 1–2 years before the initiation of any unprotected sexual intercourse that could possibly result in a pregnancy.

Entering pregnancy with excess weight places the mother at higher risk of complications such as hypertension, gestational diabetes (diabetes in pregnancy), and high weight of the unborn child. The child has a higher risk of obesity. Similarly, undernutrition before pregnancy (being underweight or having vitamin, minerals and other micronutrient deficiency) can lead to adverse outcomes such as low birth weight and intrauterine growth restriction, neural tube defects, and preterm delivery. Poor nutrition in both mother and father in the preconception period can affect foetal development with long-term consequences for the next generation.

Evidence also suggests that smoking, high alcohol and caffeine intake before pregnancy all have an impact on the development of an unborn baby.

Maternal Health in Pregnancy

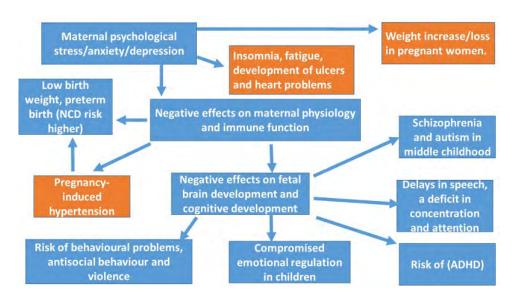
It is obvious from the table above that significant stress, anxiety or

depression in a pregnant woman has negative consequences for her baby.

Low birth weight, preterm birth as well as higher risk of mental illness such as antisocial behaviour, poor emotional regulation, and delays and deficits in speech, concentration and attention, are some of the possible consequences.

Studies have indicated that a rapid weight gain in infancy is related to an increased risk of obesity during childhood and later in life. Emerging data indicate that being born small for gestational age (SGA) and rapid infant catch-up growth may play a significant role in the risk of developing type 2 diabetes (T2DM) and the metabolic syndrome (MS)

Maternal health in pregnancy



many years later in life especially when fast growth in SGA infants is promoted by nutrient-enriched feeding formula. Through breastfeeding for 3-6 months this risk can be reduced. The impact of these perinatal T2DM and MS risk factors may be more important than genetics in some parts of the world, including low-income countries.

Adverse Childhood events

Adverse Childhood Events (ACEs) refer to three specific kinds of adversity children face in the home environment—various forms of physical and emotional abuse and neglect, which have a direct impact on children, and household dysfunction, which has an indirect impact. Household dysfunction includes the following:

Living with someone with mental illness

Living with someone who has illicit drug use problems or who exhibits criminal *behavior*

Exposure to violent treatment of their mother or stepmother.

These conditions during childhood are capable of disturbing the neurobiological systems that guide physiological and behavioral responses to stress, potentially for the remainder of an individual's life, setting the stress response system on a "short fuse". This can permanently increase the risks of acute and chronic disease, and even a shortened life span, by causing the body to respond abnormally to the challenges and stressors of everyday life.

The more ACE types that individuals reported, the greater their risks of the following health-harming behaviours:

Physical inactivity (promotes obesity and diabetes)

Overeating (promotes obesity, high cholesterol and diabetes)

Alcohol (increases risk for liver cancer)

Drug abuse

Smoking (increases risk for lung and other cancers)

Sexual risk taking (increases risk for Hepatitis B, which is linked to liver cancer, cervical cancer).

These behaviours are adopted as means to cope with the anxiety, depression, anger, and stress associated with living under these conditions, as they provide temporary relief from mental distress or bring some mood elevation of sorts. To the degree that the behaviors are found to be effective as coping devices, they would tend to be used all the time. The result is that, the more ACEs experienced, the greater the chance of poor outcomes later in life, including dramatically increased risk of heart disease, diabetes, obesity, depression, substance abuse, smoking, poor academic achievement, time out of work, and early death.

Lifestyle Factors

It is obvious from the foregoing that most people, especially in the developing world are at risk of noncommunicable diseases from factors arising even before they were conceived, during pregnancy and in the upbringing.

Research has however shown that irrespective of the risk, there is a lot we can do as individuals to mitigate this risk and to manage the impacts of these diseases on us.

In spite of what many people think, research has shown that those who adopt a healthy lifestyle tend to be healthier, appear younger and live longer. The components of this healthy lifestyle are:

- 1. Sound nutrition
- 2. Keeping weight under control
- 3. Regular physical activity
- 4. Regular and adequate sleep
- 5. Avoidance of tobacco and avoidance (or moderation) of alcohol
- 6. Improving on psychological well being

In the next article, we will examine how to use these to mitigate our disease risk through changes in our lifestyle.

VHSL ACQUIRES

NEW DIAGNOSTIC EQUIPMENT

Nathaniel Ekue Mensah, Community Relations & CSR/Akosombo



The new X-Ray machine.

As part of efforts to improve healthcare delivery to staff and the general public, Management of the Volta River Authority (VRA) has procured an X-ray and Ultrasound Scan machines for use by the Akosombo Hospital.

Speaking to the VRA News after a short ceremony to officially take over the new equipment from the supplying company, the Medical Director of the VRA Health Services Ltd. (VHSL), Dr. A Kwabena Omari Yeboah said the facilities were procured by Management as part of its aggressive plan to resource its facilities within the Authority's operational areas.

According to Dr. Omari Yeboah, the number of reforms currently being rolled out at the Akosombo Hospital and the various clinics would help position the VHSL as the preferred health care provider in the country.

He was hopeful the new equipment would help the Authority achieve its objective of establishing a world-class diagnostic center across its various health facilities in Akosombo, Akuse, Accra and Aboadze.

"The X-ray and the Ultrasound Scan machines are invaluable interventions more especially in this era of COVID-19. X-ray must be conducted before a doctor can diagnose a patient of a disease, whereas; the ultrasound scan has a cross-functional use especially in obstetrics and gynecology operations," he said.

Dr. Omari Yeboah indicated that as part of the new direction of positioning the VHSL to become a viable enterprise and remain profitable, the rest of its clinics in Accra and Aboadze are expected to benefit from the ongoing retooling agenda to make them more profitable.

Mr. Emmanuel Cobbinah, the Managing Director of AFRIMED Medical Supplies, the suppliers of the new medical equipment said as part of the contract, staff at the X-Ray Unit at the Hospital were taken through series of training to ensure that they effectively and efficiently operate the new equipment.

"Aside our staff training the staff of the X-Ray Unit on how to operate the equipment, they would also be on standby to quickly respond to any call to assist in managing any issue," he noted.

Mr. Charles Kwabla Dagadzie, of the X-Ray Unit of the Hospital, conducted the team round the new equipment explained and noted that the machines were digital and the X-Ray in particular has the 'droc' system which stitches the various body parts to one after the X-Ray is carried out.

Mr. Dagadzie noted further that the equipment also has the mini bug system, which connects about four stations to a consortium and adjustable features to suit emergency cases. "The ultrasound scan has 3D and 2D features which makes both equipment facile and versatile to work with," he disclosed.



Dr. Omari Yeboah (1st left), receiving a document from the suppliers to mark the official handover of the equipment.



Come Partner us to make a Huge Difference!

Our Mission:

The Volta River Authority exists to power economies and raise the living standards of the people of Ghana and West Africa. We supply electricity and related services in a reliable, safe and environmentally friendly manner to add economic, financial and social values to our customers and meet stakeholders' expectations.

OUR VALUES

- Accountability
- ☼ Commitment
- Trust
- The Integrity
- Teamwork >

VRA SUSTAINABILITY PLAN

INCULCATING PRIVATE SECTOR MINDSET IN PUBLIC SERVICE DELIVERY





VRA ... We Add Value To Lives

IN THE NEXT ISSUE:

- ♦ The Chief Executive's Staff durbar
- ♦ Safety Awareness Day celebration
- ♦ End-of-year messages

Please send your concerns, questions, congratulatory messages, issues, worries, suggestions, etc., to corpcomm@vra.com

For further information/enquiries, contact Corporate Affairs & External Relations Unit, Corporate Office. Tel: +233 302 664941-9 Ext. 252, 236 & 453 PLC 724252/413/309/453. Also visit www.vra.com