

Kinshasa under water: blame anarchic urbanization

NSC holds its 56th Ordinary Session

**The exploitation of methane gas
and CO₂: an economic solution for
the DRC**

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radiological safety and security**



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Science and resilience in the face of challenges



Professor Pius MPIANA TSHIMANKINDA
NSC President,

The relationship between science and resilience in the face of challenges is profound and essential, as science offers crucial tools and knowledge for understanding, anticipating and overcoming the obstacles that human beings face on a daily basis.

The floods that hit the city of Kinshasa from April 4 to 5, 2025 highlighted the vulnerability of the capital of the Democratic Republic of Congo (DRC) to the combined challenges of anarchic urbanization, climate change and infrastructure failure. Against this backdrop, science, research and technological innovation are proving to be indispensable tools for strengthening the resilience of the people of Kinshasa and preventing future disasters. Scientific research plays a decisive role in understanding the phenomena that cause flooding.

In-depth studies on the hydrology of the Congo River basin, flood risk modelling and analysis of the impacts of climate change are essential to anticipate extreme events and develop effective adaptation strategies. With this in mind, a researcher went out into the field to understand the root causes of these floods.

Indeed, the devastating floods that hit the city of Kinshasa on the night of April 4 to 5 have suddenly become part of our daily lives, leaving no scientist indifferent. The Ndjili River, which burst its banks, was a stark reminder of our city's vulnerability to extreme weather events. Likewise, the article "Kinshasa under water: anarchic urbanization points the finger"

highlights the disastrous consequences of uncontrolled urban growth and a crying lack of appropriate infrastructure, and raises the question: is this a natural disaster or a catastrophe foretold?

Technological innovation also offers promising solutions for strengthening Kinshasa's resilience to challenges such as flooding. The development of early warning systems, the use of sustainable building materials and the introduction of intelligent drainage systems are all examples of technologies that can help protect our infrastructure and our populations.

However, flood resilience can only be achieved through collective and coordinated action. Scientists, political decision-makers, civil society players and citizens must work together to implement sustainable solutions adapted to our context. This is an opportunity for the Sciences and Technological Innovations Bulletin (STIB) to call for a general mobilization to make science and innovation the pillars of our resilience. We need to invest in research, support innovation and promote a culture of prevention to build a safer, more sustainable future for the city of Kinshasa and the country as a whole.

Contributing to the construction of this universe of knowledge on science and resilience in the face of challenges, STIB once again highlights in this issue the decisive role of science and innovation in resolving the challenges facing our nation. It also explores fundamental questions, such as "The mystery of water and meals: when should we really drink? A question

which, beyond its apparent simplicity, reveals the irrefutable importance of scientific research for our health and well-being, underlining the salutary role of water, beyond its destructive capacity when poorly controlled.

This issue also takes a look back at the 56th ordinary session of the NSC, held on March 26, 2025. A moment for reflection and exchange, essential for guiding our country's scientific policy and strengthening the role of research in the DRC's development.

This issue of STIB bears witness to the diversity and relevance of the subjects addressed by our scientific community. We hope it will arouse the interest of its readers and help to shed light on the issues facing our nation. Through this newsletter, the National Scientific Council reaffirms its commitment to promoting science and innovation to help build a more sustainable and prosperous future for the DRC.



Activities of the Minister of SRT

Exploiting methane gas and CO2: an economic solution for the DRC

« The DRC's ambition is to exploit methane gas and CO2 as an economic alternative to the military solution to the war raging in the east of the country », revealed Professor ZEKA MUJINGA from the University of Lubumbashi, on a mission to Kinshasa.

This will rationalize the processing of Coltan, iron and tin ores, which are highly coveted by several countries. It should be noted that this structured exploitation could provide an economic solution to the war raging in the east of the DRC, apart from the military option*

being led by the Minister of Scientific Research and Technological Innovation, with the aim of enhancing the value of the Congolese intelligentsia. The team working on this project is supported by COMHYDEV, a center that has been developing hydrocarbon valorization for over 29 years.

The merit of the Congolese project lies in the exploitation and valorization of carbon dioxide from Lake Kivu, with a view to revitalizing the DRC's petrochemical industry.

Professor ZEKA MUJINGA points out, however, that several factors are handicapping the exploitation of methane gas following the liberalization of this sector to takers. He reassures us that the successful completion of the steps currently underway will enable us to acquire a much-needed gas block.

This researcher places great emphasis on the need to industrialize the east of the country, based on the Gécamines model.

He salutes the efforts made by Minister Gilbert KABANDA KURHENGHA, a rare gem who believes above all in scientific research as the foundation of sustainable development in the Democratic Republic of Congo. He wishes this exceptional statesman every happiness.

Communication Unit of the Minister of SRTI



Professor ZEKA MUJINGA of the University of Lubumbashi

This active researcher, who took part in the first Congolese Scientific Genius Forum organized in 2023 in the capital by the Minister of Scientific Research and Technological Innovation, H.E. Gilbert KABANDA KURHENGHA, asserts that recent statistics show that CO2 is four times more exploitable than methane gas in a thermal power plant. Professor Zeka Mujinga points out that the aim is to obtain a thermal power plant to facilitate the industrialization of Eastern DRC.

Note that CO2 is a greenhouse gas that is released unchanged into the atmosphere, where it causes environmental problems. *And as the DRC shares Lake Kivu with Rwanda, the gas belongs to both nations. The country that exploits it benefits from this resource and can take it for itself," explains the researcher.

The DRC is called upon to bring this vital project to fruition, the fight for which is

NSC holds its 56th Ordinary Session

The National Scientific Council (NSC), under the direction of Professor Pius Mpiana Tshimankinda, held its 56th ordinary session on Wednesday, March 26, 2025 in the Master José Mpanda Kabangu conference room of the Research Center in Human Sciences "RCHS", thus respecting the schedule established at its 55th ordinary session on December 18, 2024.

During this session, ten items made up the agenda. These were :

1. **Speech by the President of NSC:** After welcoming the members of the NSC, he presented all the activities carried out between January and March 2025, in particular the admission of two professors to the Congolese Academy of Sciences (ACCOS), the distribution of several vehicles to research institutions, including four Toyota Fortuner jeeps, allocated to the NSC Cabinet, the SRTI General Secretariat, the Chemical, Biological, Radiological and Nuclear Excellence Center (CBRNEC) and the Institut National pour l'Étude et la Recherche Agronomiques (NIASR), a Mazda pick-up for the Permanent Secretariat of the Public Procurement Unit at SRTI, and 30- and 60-seater buses for the Geographical Institute of Congo (IGIC), NIASR, the General Secretariat at SRTI, the Permanent Secretariat of the NSC and the Geologic and Mining Research Center (GMRC), etc.
2. **Adoption of the minutes of the 55th ordinary session of September 18, 2024:** the minutes were adopted with amendments made by NSC members.
3. **Record of decisions and recommendations of the 55th ordinary session of September 18, 2024:** this record was examined with a fine-tooth comb, and the heads of the Research Institutes were urged to inform the managers and staff in their areas of its content, in particular the conditions for promotion to a higher grade. etc. ;
4. **Functioning of the Research Institutes during the intersessional period:** each Research Institution reported on the activities carried out during the intersessional period. In addition, the heads of the Research Institutes were asked to present the missions assigned to each of them in advance, when they

spoke.

5. **Reports from the Commissions set up by the NSC:** the three commissions set up presented their reports, the first responsible for preparing the November 10, 2025 Science Day, the second for issues linked to artificial intelligence and the third recruited for specific bonuses for SRTI staff.;
6. **Adoption of the organizational frameworks for the Water and Environment Research Center (WERC) and the Specialized and Technological Support Service (SEMATECH):** members deferred adoption of these organizational frameworks for these institutions to the 57th ordinary session.
7. **Budget forecasts for 2026:** the Research Institutes have received instructions for the transmission of these documents. He was also informed of the availability of budget allocations for the first quarter of 2025. ;
8. **Allocation of chapters for the book " Scientific Research:** from its origins to the present day ": NSC members showed their willingness to write this useful book for the scientific research sector: one of the highlights was the announcement of the preparation of this book, which will describe the history of scientific research in the DRC. The NSC has launched this project, which will require the contribution of resource persons working in research institutions;
9. **Examination of nomination and promotion files:** nomination and promotion files submitted on time were analyzed by the NSC. The Heads of Research Institutes were asked to inform their staff of the conditions for appointment and promotion, the constituent elements of a dossier, the procedure for submitting dossiers, the examination of dossiers at each ordinary session, the presentation of complete files, etc.
10. **Miscellaneous:** nine items were included in the miscellaneous agenda, including

the development of an outline for research plans and programs, the number of staff in a liaison office, the management of buses handed over to Research Institutes, the management of the strike, the scientific contribution of Research Institutes to the war, the sending of projects to the public procurement unit, the creation of leaflets listing the services offered by Research Institutes, and the date of the next meeting :

The President of the NSC, Professor Pius MPIANA TSHIMANKINDA, encouraged research centers and institutes to support the "Bulletin Sciences et Innovations Technologiques", as well as the "Congolese Review of Science, the latter already being indexed in several online databases, including Google Scholar, Zenoob, Crossref, orcid, World of Journals, Open Access, Academic Ressource Index, Semantic scholar, Ajol, Mirabel, JPPS, scientific Journal impact factor, WOPI.

As a reminder, the NSC brings together members from the Presidency of the Republic, the Prime Minister's Office, Ministries and Heads of Public Research Institutions. This body holds four ordinary sessions a year, at which essential points are put on the agenda and discussed to ensure the smooth running of the Research Institutions. The next ordinary session will be held in June 2025.

**Jean-Luc BALOGIJE SELENJE/RCMD/Bunia
and Consort BELESI/NSC**



Members of the NCPIR Management Committee (Executive Secretary, Mr. Alfred Ngangura and Vice-President, Prof. Odette KABENA)

Echoes of Research Institutions

NCPIR women raise awareness for sustainable radiological safety and security



Photo of DYFERSCO/NCPIR women at the April 10, 2025 conference

The Women's Dynamic of the National Committee for Protection against Ionizing Radiation (DYFERSCO/NCPIR) organized a scientific conference on April 10, 2025 in Kinshasa on the theme: "NCP women's involvement in sustainable radiological safety and security: a commitment to protecting people and the environment in the DRC from the illicit exploitation of raw materials".

The day brought together experts, managers and NCPIR staff to discuss the challenges and solutions associated with radiation protection and the empowerment of women in this strategic sector. Three speakers led the conference: Professor Odette KABENA, Vice-President of NCPIR, Mr. NGANGURA Amisi Alfred, Executive Secretary and Ms. Patience KYAKIMWA CHAUSIKU, CNPRI executive.

The first speaker, Professor Odette KABENA, Vice-President of NCPIR, addressed issues relating to the rights, equality and empowerment of women in the technical and strategic sectors.

In her introduction, the speaker stressed

the need to promote the meritorious career paths of women, avoiding the logic of quotas, so as to reinforce their credibility in a sector historically known as masculine. She called for concrete empowerment of women through access to resources, specialized training and decision-making positions.

Before concluding, Prof. Odette KABENA made it clear to participants that the women of the NCPIR must be at the heart of strategic activities and decisions, drawing on their technical skills.

In conclusion, she called for women's individual and collective commitment to fighting for their legitimate rights, both in working life and at the NCPIR.

The second speaker, Executive Secretary NGANGURA Amisi Alfred, focused on leadership for nuclear safety and security.

He provided a conceptual clarification of the difference between safety (protection against accidents), nuclear security (protection against malicious acts) and enlightened leadership.



NCPIR Vice-President Prof. Odette KABENA presenting her paper at the conference on April 10, 2025

Executive Secretary NGANGURA encouraged NCPIR women to become a pillar of safety and security in their professional environments. The third speaker, Madame Patience KYAKIMWA CHAUSIKU from NCPIR, focused on the involvement of NCPIR women in sustainable radiological safety and security.

She advocated the inclusion of women in monitoring, inspection and radiological risk management activities. She illustrated her remarks with the challenges faced by women in the mining areas of the DRC, particularly in the East, and showed how their active presence in monitoring mechanisms contributes to the protection

of people and the environment.

Her speech also highlighted the environmental and health impacts associated with the illicit exploitation of mining resources, calling for greater involvement of NCPIR women.

The day ended with interactive and constructive exchanges, followed by the declamation of a moving poem by

Madame Henriette BITOTA, highlighting the role of women inspectors as guardians of safety, and words of encouragement from the President of DYFERSCO/NCPIR, Madame Nathalie MULAJ'A, and the President of DYFERSCO/SRTI, Madame Annette MUJINGA. The former praised the women's commitment and called for greater inter-institutional collaboration. The latter supported NCPIR's efforts to promote female excellence.

She stressed that the future of nuclear safety and security in the DRC depends on strengthening female leadership, enhancing women's skills and promoting inclusive cooperation within institutions.

**MULAJ' AMUSAS Nathalie/NCPIR
and Christian MAZONO/NSC**



At the time of Innovation

DRC and Trident Digital Tech join forces to transform the national digital identity

The Democratic Republic of Congo (DRC) is taking a major step forward in its digital transformation by collaborating with Trident Digital Tech, a Singapore-based high-tech company, to deploy a national digital identity system. The partnership aims to modernize public administration, strengthen data security and boost financial inclusion in the country.

On March 15, 2025, in Kinshasa, the Minister of Posts, Telecommunications and New Information and Communication Technologies, H.E Augustin KIBASSA MALIBA, launched the validation phase of this collaboration. He underlined the government's commitment to integrating this technology into public and private services, launching a national awareness and training program, improving technological infrastructures with sovereign cloud systems and secure data centers, and promoting local innovation by supporting startups and digital players to strengthen the digital ecosystem.

Trident founder and CEO Soon Huat Lim, highlighted the transformative potential of this secure digital identity solution. He said it will reduce identity fraud and cybercrime; revolutionize public administration by reducing bureaucracy and increasing transparency; accelerate financial inclusion by offering millions of unbanked citizens access to digital banking and payments; facilitate student identification, e-learning and academic verification in education; and enable better access to healthcare through secure medical records.

The project is expected to create over 30,000 direct and indirect jobs in digital technology, cyber security, administration and services. It also aims to increase financial inclusion by 40%, enabling millions of people to access banking and digital services, and to reduce administrative delays by 50% to improve the efficiency and accessibility of public services.

This initiative is part of the DRC's Horizon 2025 National Digital Plan, reflecting the vision of the President of the DRC to make the country a major digital player in Africa. Minister KIBASSA emphasized that this project represents a revolutionary step towards better governance, greater inclusion and enhanced transparency, serving as an essential foundation for the country's economic transformation.

afriqueitnews.com

Reflections of our researchers

Land reclamation in the Kinshasa plain, the case of the Bahumbu district in Kimbanseke

Environmental disturbance is increasing all the time, so that in addition to the environmental phenomena that we all know and experience: deforestation, erosion, drought, bush fires, silting; other phenomena are emerging, such as land reclamation.

The land uplift in question is neither the result of the internal thrust of magmas (molten underground rocks with a temperature of ± 2000 degrees Celsius), nor the result of plate tectonics in collusion or subduction, nor also the result of glacial melting, as the Kinshasa plain is not historically a glacial zone; but it is the result of the poor management of household waste.

It's an environmental phenomenon that's imperceptible in the short term, but which generally manifests itself after around thirty years, and the occupation of the Kinshasa plain, precisely in its eastern part, where residents dispose of their household waste by burying it in the ground along the avenues, has encouraged it. This is the case in the Bahumbu district of Kimbanseke, where the average height of the land has already reached 0.6 meters on Avenue Weyi, Zobia and Mikazu.

The consequences of rising ground are manifold. They include, with supporting figures or images, according to the avenues mentioned above.

I. Avenue Mikazu is located between Avenue Kanza and Zobia, in the Bahumbu district. Cracking and leaning of the boundary wall. In image 1, the yellow stain of ochre sand, coming from the depth, gives evidence of a large 4m² hole, where household waste has recently been buried on Avenue Mikazu. This is the process by



Image 1

which the land is raised. At this point, the soil has already risen to a height of 0.66 metres, exerting pressure and causing the boundary wall to crack and lean inwards.

Cracking of the newly rebuilt wall. The image above also concerns Mikazu Avenue, and is a recent capture of the area where the boundary wall shown in the previous figure was leaning, and which has now been rebuilt. Even though the wall has been rebuilt without any masonry errors, the same causes produce the same effects. The new wall's resistance to leaning has given way to cracking under the pressure



Image 2

exerted, unceasingly, by the raising earth.

II. Avenue Zobia is located between Avenue Mbinza and Mikazu in the Bahumbu district. A high visibility of the land raising. Image 3 shows undeniable evidence of land reclamation by burying household waste on Avenue Zobia. Here, land reclamation traps the plots or blocks and prevents the gates from being opened from the outside.

III. Avenue Weyi is located between avenue Bitadi-Tadi and avenue Makungu. The channel created to evacuate water from flooded plots.



Image 3

Image 4 shows the trapped plots and the outward opening of the gates, prevented by the raising of the land. Plots with closed depressions are subject to severe flooding, in the event of rainfall

of 20 millimetres or more in 20 minutes. The same figure shows the channel created by the inhabitants of Avenue Weyi, which opens onto the left gutter of the asphalt road known as the Second Republic Way. It's the drainage channel for flood waters from plots of land.



Image 4

Without the collective good will to dispose of household waste far from their living environment, or without a viable government program extended to the outskirts of Kinshasa, the consequences will worsen to the point where downstream residents will be threatened with abandonment of their plots as a result of increased intra-parcel flooding, accompanied by silting when the walls of parcel fences collapse.

Constantin KODIAWILA YINGA
Research Associate at CIG



Flooding in the DRC: a threat to the well-being of the population

Flooding is a major problem in the DRC, and one that is becoming increasingly acute. Here, the months are defined by the rainy and dry seasons. The dry season lasts around 3 months (between mid-May and September), while the rainy season lasts around 8 to 9 months (between September and mid-May) each year.

This seasonal pattern can be explained by the DRC's position in relation to the equator. The Intertropical Convergence Zone (ITCZ), otherwise known as the meteorological equator, often passes over the DRC's skies, bringing excessive rain, strong winds and high temperatures. As a result, the country is prone to flooding.

These disasters threaten not only the soil, which supports life, but also the health and well-being of the population, as they have enormous economic, social, health and environmental consequences. Floods have a major impact on human activities in the affected areas, as well as on biodiversity.

Part of the fauna can be washed away by rainwater, and vegetation can be uprooted. Floods cause considerable damage, not to mention prolonged submergence of property and water pollution.

The most sudden floods are the most dangerous for people's safety, because they leave no time to evacuate flood-prone areas. During a flood, the current of water is a real danger that can sweep away people and/or damage property.

However, both vegetation and animals are capable of surviving this kind of event and recovering naturally after a few years. Difficulties for users may persist after the flood. Some communication routes, especially roads, remain cut off after rainfall. This makes life difficult for users, who will have to wait until they are repaired. Certain activities, such as agriculture, which accounts for 60% of the country's economy, are often affected.

Agricultural areas under water can suffer major losses (crops destroyed, livestock drowned, etc.). These disasters expose the population to epidemics, as some households lack sanitary facilities and prefer to defecate in the open air. In addition, unmanaged garbage can cause disease, and water pollution is the main impact of flooding on the environment.

Rising water levels in residential, industrial and agricultural areas lead to contamination by pathogens. Water pollution can also threaten human safety, particularly if hazardous substances are carried away by the waters, potentially coming into contact with people. The DRC has already faced eleven episodes of the Ebola virus epidemic, as well as many other water-borne diseases, such as cholera, diarrhoea, bilharzia, dracunculiasis and giardiasis.

Some health and safety hazards only become apparent once the water has receded. There have also been reports of contamination in drinking water distribution networks, and of infections in homes

that are no longer healthy. Generally speaking, poor water quality can be detrimental to all the uses to which it is put.

It is therefore important to better understand their causes in order to develop preventive measures and control techniques to counter or limit them. Although rainfall is the natural cause, human activities remain the main cause of flooding in the DRC. These include the lack of water pipes in certain neighborhoods, the clogging of water pipes by rubbish, and anarchic construction.

However, it is also important to adopt a global 3P approach, including prevention, forecasting and protection, and to consider slowing down run-off to avoid excessive flooding.

To achieve this, environmental players and the authorities must implement effective policies:

- The population of the DRC needs to be educated about good citizenship;
- The organization of awareness campaigns promoting environmental education;
- The revision of the country's cadastral plan, with rainwater channelling or guidance planned before subdivision;
- The creation of a National Meteorology and Hydrology Agency (ANMH). Mr. Jean-Louis EBENGO, meteorologist and forecaster, pointed out that the National Meteorological and Hydrological Societies (SNMH) play an important role in preventing the risk of natural disasters.

In the DRC, METELSAT, the only national meteorological and satellite remote-sensing agency, has no radar for reporting damage. The most effective way to prevent flooding is to redevelop or restore the National Meteorological and Hydrological Agency. This will make it possible to prevent certain events, thanks to daily

or seasonal forecasts provided in real time. In view of this worrying situation, devices such as retention basins need to be installed to control stormwater runoff. These basins need to be properly sized, taking into account local references. However, prevention remains the best solution in

all cases, as many households find themselves without roofs after heavy rains. Prevention is better than cure.

Tanya YEME MUAMBA



Kinshasa under water: blame anarchic urbanization

Kinshasa, the capital of the Democratic Republic of Congo, has once again been hit by devastating floods, with 43 people killed, 46 hospitalized and 2,956 affected, according to an official communiqué issued by the Minister of the Interior, Jacquemain SHABANILUKOO, on Tuesday April 8, 2025. Torrential rains hit Kinshasa and the province of Kongo Central on the night of Friday April 4 to Saturday April 5, 2025, reaching up to 1.5 meters in places and wreaking enormous havoc.

Behind these recurring catastrophes lies an alarming reality: the city's chaotic urbanization. Explosive population growth, uncontrolled urban sprawl and obsolete drainage infrastructures turn every rainstorm into a nightmare for thousands of Kinshasa residents.

Kinshasa, an ever-expanding megalopolis, is seeing its population grow exponentially. This unbridled demographic growth is leading to rapid and often anarchic urbanization. Construction is multiplying, often in high-risk areas such as low-lying areas and flood zones, due to a lack of adequate urban planning. Urban sprawl, meanwhile, nibbles away at green spaces and water infiltration zones, exacerbating runoff.

Kinshasa's drainage network, often inadequate and poorly maintained, struggles to evacuate rainwater. Accumulated garbage in drains and rivers obstructs the flow, turning streets into raging torrents.

The absence of adequate sewage systems in many neighborhoods also contributes to water stagnation, creating disease outbreaks and unhealthy living conditions. The occupation of flood-prone areas and river banks exposes populations to an increased risk of flooding. Deforestation and the destruction of wetlands reduce the absorption capacity of soils, increasing runoff. Soil erosion, exacerbated by deforestation, leads to clogged drains, further aggravating the situation.

Climate change, with the increasing frequency and intensity of rainfall, is putting a strain on the city's already fragile infrastructure. Extreme weather events, such as the heavy rains forecast for April and May, are likely to turn entire neighborhoods into disaster zones. Added to this is the lack of compliance with building standards.

There are solutions to this alarming situation. It is urgent to draw up and implement a sustainable urban development plan,

integrating flood risk management. It is also crucial to invest in the rehabilitation and extension of the drainage network, as well as in waste management. Strengthening building regulations and controls, promoting reforestation and raising public awareness are also essential. A multi-dimensional approach is needed.

Flooding in Kinshasa is the result of a combination of factors, of which anarchic urbanization is a central element. Only an integrated, multidimensional approach can solve this problem and protect the population. It's time to act so that Kinshasa ceases to be synonymous with flooding and becomes a city resilient to the challenges of the 21st century.

Jean-Luc BALOGIJE SELENGE,

Researcher at RCMD-Bunia



The mystery of water and meals: when should you really drink?

The question comes up again and again, fuelling dinner table conversations and debates between friends: should you drink water before, during or after meals? As is often the case, science provides an nuanced perspective, far removed from preconceived ideas and dogmas..

Before meals: a slimming and digestive ally ?

According to the experts, a glass of water before dinner could well be the secret to a dream figure. Water fills the stomach, providing a feeling of satiety that limits overindulgence. It also prepares the digestive system to receive food, making the body's work easier.

But be careful not to overdo it! Too much water could dilute the gastric juices essential for digestion. But rest assured, this risk remains minimal for most of us.

During the meal: a helping hand for swallowing ?

A few sips of water during a meal can make swallowing easier, especially if the food is dry or difficult to swallow. What's more, water helps break down food, thus aiding digestion.

But here again, moderation is the key. Drinking large quantities of water during a meal can cause an unpleasant feeling of fullness and, in some cases, dilute gastric juices.

After the meal: hydration first!

Drinking water after eating aids digestion by helping food to progress through the



digestive system. It's also an excellent way of staying hydrated, which is essential to our well-being. The only downside is that acid reflux sufferers may experience an exacerbation of their symptoms.

So, when should you really drink?

Science is clear: there are no hard and fast rules. The key is to stay hydrated throughout the day, listening to your body's signals. Thirst is a reliable indicator, so don't hesitate to quench your thirst as soon as you feel the need.

And if you have specific digestive problems, don't hesitate to consult a health professional. He or she will be able to advise you on the best way to hydrate,

depending on your situation. Water is our ally, at any time of day! So don't wait any longer to make it your best friend.

Jean-Luc BALOGIJE SELENGE

Researcher at RCMD-Bunia



Read for you

Mangroves and aquatic species disappear in Muanda

«*The city of Muanda, a coastal jewel of Kongo Central, is losing one of its most precious treasures, the mangroves, through the anarchic felling of forests," declared environmentalists in Muanda.*

According to them, the uncontrolled felling of these unique forests not only threatens the region's ecological balance, but also causes the alarming disappearance of certain aquatic species in the Atlantic Ocean. An environmental tragedy unfolding before everyone's eyes, amidst almost universal indifference.

They believe that mangroves, fascinating plants resembling natural fortresses rooted in salt water, play a vital role in the marine ecosystem. They are not only bulwarks against coastal erosion, but also nurseries for fish, crustaceans, and many other marine organisms. Yet, in Muanda, they are undergoing massive and uncontrolled felling.

A local elected official, speaking on condition of anonymity, revealed that the very officials supposed to protect these ecosystems are themselves implicated in their destruction. "Some people exploit mangroves for commercial reasons, and there are persistent rumors that they are even used to produce highly prized aphrodisiacs," he murmurs. If the mangroves had a voice, they would cry foul, he added.

The alarm bell

Experts say the felling of mangroves is an ecological disaster. These plants are not just simple trees, but veritable "life support stations" for numerous aquatic species.

They believe that the destruction of mangroves leads to a chain of disastrous consequences: declining fish stocks, loss of biodiversity, and even worsening the effects of climate change. "Mangroves absorb up to 4 to 5 times more carbon dioxide than other forests."

Environmental activist and fisherman from NSIAMFUMU, near Muanda, Josué TCHIKAYI, believes that mangrove roots provide shelter for fish and shellfish. According to him, without them, these species are left to their own devices and gradually disappear.

Threatened biodiversity

In fact, the Atlantic coast of Muanda is home to four types of mangroves, of which the two main species, "Irizofera Arase-Moza" and "Avicenia," are particularly valuable. Josué TCHIKAYI points out that these plants are adapted to specific environments: one thrives in permanently wetlands, while the other prefers unstable soils. But their survival is currently under severe strain.

These mangroves are not only vital for marine wildlife, they also directly influence the water quality of the Atlantic

Ocean. "The mangrove roots, with their slightly salty taste, filter and purify the water. Without them, the entire ecosystem becomes unbalanced," warns TCHIKAYI.

Save the mangroves

However, Muanda doesn't need empty promises or flowery speeches. She needs concrete action. If nothing is done, the mangroves will continue to disappear, taking with them the fish, shellfish, and many other species that depend on this ecosystem. And ultimately, an entire region will be condemned to struggle with poverty, famine, and climate disasters.

"Mangroves are not just plants. They are life. Let's protect them before it's too late," concludes this environmental activist with a hint of hope in his voice. But time is running out. And the mangroves are calling us. Who will answer?

All Grands lacs et Christian MAZONO



Vodacom bets on satellites to connect rural Africa

Vodacom, one of Africa's leading telecommunications operators, sees satellites not as a threat, but as a strategic opportunity to expand its network coverage and improve access to telecommunications services on the continent.

Vodacom Group Chief Technology Officer Dejan Kastelic highlighted that satellite

service providers such as Starlink represent an opportunity to improve connectivity, particularly in hard-to-reach rural areas. With this in mind, Vodacom announced its intention to collaborate with companies specializing in low-Earth orbit (LEO) satellites, including Starlink and AST SpaceMobile, to fill coverage gaps in its African network. These partnerships aim to leverage satellite services to provide

high-speed mobile connectivity in remote areas, thereby helping to bridge the digital divide.

Afriqueitnews.com



FGI: Towards an inclusive and secure Internet in the DRC

The Democratic Republic of Congo (DRC) hosted the fifth edition of the National Forum on Internet Governance (FGI) on April 4, 2025 at the Palais du Peuple in Kinshasa.

The Forum's theme was "Strengthening Digital Governance for an Open and

Secure Internet in the DRC." The meeting brought together key stakeholders in the digital sector, including representatives from the government, private sector, civil society, and international partners.

In his address, the Minister of Posts, Telecommunications, and Digital Affairs,

Augustin Kibassa Maliba, emphasized the importance of close collaboration between all stakeholders to successfully achieve the country's digital transformation. He stated that the Congolese government is committed to pursuing structural reforms aimed at making digital

technology a pillar of economic and social development by implementing a national strategy focused on accessibility, digital sovereignty, and innovation.

The forum provided a platform for multi-stakeholder dialogue to address the challenges and opportunities related to digital governance in the DRC. Discussions focused on topics such as internet access in rural areas, cybersecurity, ar-

tificial intelligence, and the legal framework for telecommunications and digital technology. Panel discussions were organized with the participation of experts and decision-makers, aimed at promoting an inclusive and secure internet for all Congolese citizens. Among the dignitaries present were National Assembly President Vital Kamerhe and National Assembly Telecoms Subcommittee Chairman

Emmanuel Ompeta, demonstrating the importance attached to internet governance and the country's digital transformation.

Christian MAZONO and afriqueitnews.com



DRC: Target of 25,000 tonnes of corn, a step towards food security

« *The Democratic Republic of Congo is taking a significant step in its quest for food security. The National Service (NS) is targeting a production of 25,000 tonnes of maize for this agricultural season, marking a notable leap forward compared to the 16,000 tonnes harvested during the previous season," declared Lieutenant-General Jean-Pierre KASONGO KABWIK, Commander of the National Service, during the launch of the season's harvests on March 26, 2025 in Kinshasa.*

This exceptional achievement stems from the tireless efforts of the National Service and their agricultural initiatives centralized at the Kaniama Kasese farm. Located in the strategic areas of Greater Katanga and Greater Kasai, this farm already demonstrated its impact last year. Indeed, with the 16,000 tons of corn produced, the DRC was able to meet food demand in particularly vulnerable regions, thus avoiding disastrous shortages. The Kaniama Kasese farm now symbolizes one of the pillars of the national strategy to strengthen food self-sufficiency.

In 2024, another major breakthrough was achieved thanks to the President of the Republic, Head of State, His Excellency Mr. Félix Tshisekedi, who inaugurated the National Service trains in Lubumbashi. This rail infrastructure plays a key role in the transportation of agricultural equipment and crops. It ensures efficient logistics, transporting corn products to major consumption centers and strengthening the economic capacity of the regions involved. Beyond the figures, this initiative illustrates a clear political will to make agriculture a cornerstone of national economic development. The Congolese agricultural sector, often underestimated, is being given a spotlight with this record-breaking production ambition. By linking agriculture, logistics, and the economy, the National Service offers an inspiring model for other African countries facing similar food security challenges.

This historic leap in production is part of a global context where food security is becoming a major concern. The DRC's proactive approach through bold projects, such as the National Service's agricultural and railway infrastructure, demonstrates its commitment to tackling food crises

sustainably.

However, the challenge of maintaining this level of production cannot be overlooked. Resource optimization, rigorous management, and resilience in the face of climate change will be necessary to sustain these results. Congolese citizens, increasingly aware of the importance of these initiatives, eagerly await the tangible benefits of these efforts on their daily lives, whether in terms of more affordable prices or the benefits of employment in the agricultural sector.

This remarkable progress shows that the DRC, with the right infrastructure and a clear vision, can position itself on the African scene as a model of successful agricultural management and exploitation. It remains to be hoped that this record production of 25,000 tons of maize will become the new standard and pave the way for a prosperous era for the country.

Radio okapi and Congo quotidien

PUBLIC-SECTOR RESEARCH CENTERS AND INSTITUTES IN THE D.R. CONGO

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|---|--|
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| <p>GRC (Geophysical Research Center) <i>Objective: To provide the country with a national geophysical observation network, for the global study of the internal behavior of the earth in the DRC.</i> <i>Address: 44, Av. de la démocratie, C/ Gombe(within GMRC); E-mail:tondozi@gmail.com; Tel: 0854426228</i></p> | <p>MDRC (Multidisciplinary Development Research Center /Bunia) <i>Objective: To carry out operational research in the north-east of the DRC in the fields of applied linguistics, African cultures and applied sciences.</i> <i>Study of nature, fauna, flora and protection of endangered species.</i> <i>Address: BUNIA/ITURI; E-mail: Kermwathomas@gmail.com; Tel: 0997717070</i></p> |
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| <p>NCPIR (National Committee for the Protection of ionizing Radiation) <i>Objective: - Regulatory authority for protection against the dangers of ionizing radiation in the DRC management of radioactive sources of radioactive materials such as uranium.</i> <i>Address: 4675, Av. Colonel Ebeya, Immeuble Quitus 2ème niveau; Email: Flory1963@gmail.com; Tel: 0816684665</i></p> | <p>GVO (Goma Volcanological Observatory) <i>Objective: Prevention of volcanic risks by monitoring volcanoes and Lake Kivu.</i> <i>Kivu; Management of natural risks; scientific research.</i> <i>Address: 142, Avenue Du Rond Point ; Quartier Les Volcans ; Commune de Goma ; Ville Goma; North-Kivu; E-mail: mavotulu@gmail.com; Tel: 0998584734</i></p> |
| <p>AEC (French Atomic Energy Commission) <i>Objective: To carry out, promote and coordinate scientific and technical research in various fields of science and industry, concerning the use of atomic energy and space research.</i> <i>Address: UNIKIN building; E-mail: Steve.muanza.kamunga@gmail.com; Tel: 0808643248</i></p> | <p>WERC (Water and Environment Research Center) <i>Objective: To serve as a training and research center focusing on water and environmental management.</i> <i>To propose solutions to problems that could arise around water. Create a national network of Congolese scientists and researchers to analyze and disseminate information on the impact of climate change in the DRC. Promote education and the right to the environment.</i> <i>Address: 44, Comité Urbain C/ GOMBE; E-mail: ngelipatience@gmail.com; Tel: 0818105625.</i></p> |
| <p>CGI (Congo Geographic Institute) <i>Objective: Production of the base map of the DRC at a scale of 1/50,000 and its derivatives.</i> <i>Address: 106, Blvd du 30 Juin, C/Gombe; E-mail: Fidele.balibuno@unikin.ac.cd; Tel: 0974449240</i></p> | <p>RCSARP (Research Center for the Selection and Adaptation of Ruminants and Pigs) <i>Objective: To carry out studies and research in the field of ruminant and pig breeding</i> <i>Address: 45, Av. Lumumba, Q/de la gare, LUPUTA/ KASAI-ORIENTAL; E-mail: tshamalagabriel@gmail.com; Tel: 0851817370</i></p> |
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| <p>AFRC (Agro-Food Research Centre/Lubumbashi) <i>Objective: To identify processes for processing and preserving basic local agricultural products.</i> <i>To improve the quality of imported or locally produced foodstuffs by applying approved standards and quality control.</i> <i>Help the technological development of the existing agro-industry by providing them with technical assistance wherever possible.</i> <i>Address: 1, Av. Président ILEO, Q/CRAA, C/Lubumbashi; E-mail: Julesnkulu@gmail.com; Tel: 0997131002</i></p> | <p>MIPRC (Matadi Interdisciplinary Pedagogical Research Center) <i>Objective:--Information science.</i> <i>Address: The buildings of the Matadi Higher Pedagogical Institute; Tel: 0896501462</i></p> |

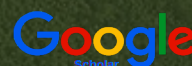
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3. supervising the financial management of research centers and institutes
4. approving the budgets of the Research Institutes and Centers and submitting them to the Minister for Scientific Research for approval
5. approving the organic regulations of the Research Institutes and Centers;
6. . proposing to the Minister for Scientific Research the appointment and promotion of scientific and administrative personnel.

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